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The World Bank

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Report No: ICR00004888

IMPLEMENTATION COMPLETION AND RESULTS REPORT

TF 0A0184; TF01661

ON A

GRANT

IN THE AMOUNT OF SDR7.79 MILLION

(SDR5.24, SDR2.55 MILLION, RESPECTIVELY)

(US$7.2, US$3.5 MILLION, RESPECTIVELY)

TO THE

Volta Basin Authority (VBA)

FOR THE

Volta River Basin Strategic Action Programme Implementation Project (P149969)
February 10, 2020

Water Global Practice
Africa Region

CURRENCY EQUIVALENTS

Exchange Rate Effective Aug 31, 2019

Currency unit =	SDR
SDR0.73 =	US$1
US$1.37 =	SDR1

FISCAL YEAR
July 1 to June 30

Regional Vice President:	Hafez M. H. Ghanem
Country Director:	Deborah L. Wetzel
Regional Director:	Ede Jorge Ijjasz-Vasquez
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Task Team Leader(s):	Seydou Traore, Sanjay Pahuja
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ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
CAS	Country Assistance Strategy
CIWA	Cooperation in International Waters in Africa
CPF	Country Partnership Framework
CSO	Civil society organization
DAF	Direction of Administration and Finances
ERR	Economic rate of return
ESMF	Environmental and Social Management Framework
GEF	Global Environment Facility
HYCOS	Hydrological Cycle Observing System
IA	Institutional Assessment
ICR	Implementation Completion and Results Report
IRR	Internal rate of return
ISR	Implementation Status and Results Report
IUCN	International Union for Conservation of Nature
IW-Learn	International Waters Learning Exchange and Resource Network
IWRM	Integrated Water Resources Management
M&E	Monitoring and evaluation
MTR	Mid-Term Review
NBA	Niger Basin Authority
NPV	Net present value
NFS	National Focal Structure
O&M	Operation and Maintenance
OMVS	Senegal River Basin Authority
PAD	Project Appraisal Document
PCU	Project Coordinating Unit
PDO	Project Development Objective
PSC	Project Steering Committee
RICAS	Regional Integration and Cooperation Assistance Strategy
SAP	Strategic Action Program
SONABEL	Société Nationale d'électricité du Burkina Faso
TDA	Transboundary Diagnostic Analysis
TOR	Terms of reference
TTL	Task Team Leader
UNDP	United Nations Development Programme
VBA	Volta Basin Authority
VSIP	Volta Basin Strategic Action Program Implementation Project
WMO	World Meteorological Organization

TABLE OF CONTENTS

DATA SHEET

BASIC INFORMATION

Product Information

Project ID	Project Name
P149969	Volta River Basin Strategic Action Programme Implementation
Country	**Financing Instrument**
Western Africa	Investment Project Financing
Original EA Category	**Revised EA Category**
Partial Assessment (B)	Partial Assessment (B)

Organizations

Borrower	Implementing Agency
Volta Basin Authority (VBA)	Volta Basin Authority (VBA)

Project Development Objective (PDO)

Original PDO

The proposed global objective is to improve the capacity of the VBA for transboundary water resources management.

PDO as stated in the legal agreement

The proposed global objective is to improve the capacity of the Recipient for transboundary water resources management.

FINANCING

	Original Amount (US$)	Revised Amount (US$)	Actual Disbursed (US$)
World Bank Financing			
TF-A0184	7,200,000	5,135,415	2,358,269
TF-16611	3,500,000	2,934,990	1,979,795
Total	**10,700,000**	**8,070,405**	**4,338,064**
Non-World Bank Financing			
Borrower/Recipient	240,000	240,000	78,446
Total	**240,000**	**240,000**	**78,446**
Total Project Cost	**10,940,000**	**8,310,405**	**4,416,510**

KEY DATES

Approval	Effectiveness	MTR Review	Original Closing	Actual Closing
21-May-2015	17-Dec-2015	13-Nov-2017	31-Aug-2019	31-Aug-2019

RESTRUCTURING AND/OR ADDITIONAL FINANCING

Date(s)	Amount Disbursed (US$M)	Key Revisions
15-Jan-2019	4.19	Change in Results Framework Change in Components and Cost Cancellation of Financing Reallocation between Disbursement Categories

KEY RATINGS

Outcome	Bank Performance	M&E Quality
Unsatisfactory	Moderately Unsatisfactory	Modest

RATINGS OF PROJECT PERFORMANCE IN ISRs

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US$M)
01	20-Mar-2016	Satisfactory	Satisfactory	1.27
02	28-Sep-2016	Satisfactory	Moderately Satisfactory	1.28
03	14-Apr-2017	Moderately Satisfactory	Moderately Satisfactory	1.45
04	06-Nov-2017	Moderately Satisfactory	Moderately Unsatisfactory	2.32
05	10-May-2018	Moderately Satisfactory	Moderately Unsatisfactory	3.06
06	03-Dec-2018	Moderately Satisfactory	Moderately Unsatisfactory	3.84
07	29-May-2019	Moderately Unsatisfactory	Moderately Unsatisfactory	4.38
08	30-Aug-2019	Moderately Unsatisfactory	Moderately Unsatisfactory	4.43

SECTORS AND THEMES

Sectors

Major Sector/Sector	(%)
Agriculture, Fishing and Forestry	**39**
Other Agriculture, Fishing and Forestry	39
Public Administration	**22**
Other Public Administration	22
Water, Sanitation and Waste Management	**39**
Other Water Supply, Sanitation and Waste Management	39

Themes

Major Theme/ Theme (Level 2)/ Theme (Level 3)	(%)

Private Sector Development	**18**
Regional Integration	18
Environment and Natural Resource Management	**82**
Environmental policies and institutions	28
Water Resource Management	54
Water Institutions, Policies and Reform	54

ADM STAFF

Role	At Approval	At ICR
Vice President:	Makhtar Diop	Hafez M. H. Ghanem
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I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

A. CONTEXT AT APPRAISAL

Volta Basin Context

1. **The Volta River Basin is shared by Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, and Togo (annex 7, map 1).** The basin covers an area of about 400,000 square kilometers, mainly in Burkina Faso and Ghana, which have 43 percent and 42 percent of the total basin area, respectively. Togo has 6 percent of the basin area, while Benin, Côte d'Ivoire, and Mali have smaller shares. The basin's population was about 20 million in 2002; at the time of project closure the basin population was about 30 million. Its regional economic impact is substantial, based on such ongoing and planned development plans as (i) irrigated agriculture in Burkina Faso and northern Ghana; (ii) hydropower generation at the Akosombo, Kpong, and Bui dams (Ghana) and at the Bagre and Kompienga dams (Burkina Faso); and (iii) domestic and industrial water supply for urban centers including Accra (capital of Ghana) and Ouagadougou (capital of Burkina Faso). The electricity generation capacity at Akosombo and Kpong dams are 1,020 megawatts and 160 megawatts, respectively.

2. **At appraisal agriculture was the main economic activity in the Volta basin.** Although it is the principal employer and key engine for growth in the basin, agriculture was also the leading cause of deforestation, land degradation and consumed the most water. Agricultural production was also the principal cause of erosion and loss of topsoil, siltation of water sources, and pollution. The sector is characterized by low productivity and limited use of irrigation technology. While the Volta basin has strong potential for growth and development in its riparian countries, widespread risks to the environment, water sources, and basin ecosystems could curtail this potential. Burkina Faso, Ghana, and Togo, for example, rank high among African countries most exposed to risks from multiple weather-related hazards. For example, in the last 20 years, Ghana has experienced seven major floods.[1] Institutional or governmental challenges throughout the region include inadequate public knowledge, lack of institutional capacity, and gaps in policy or lack of implementation.

3. **Pressing goals in the Volta River basin include the following:**
   - Improving management of water resources, factoring in climate variability and change.
   - Restoring favorable social and environmental conditions through improved land and water resource practices.
   - Increasing incomes through increased agricultural productivity and related water resources activities.
   - Supporting cooperation and stakeholder participation to strengthen institutional capacities for sound decision-making and political and economic stability.
   - Addressing increasingly competitive water uses and trade-offs.

Volta Basin Authority Context

4. **The Volta Basin Authority (VBA) was established on January 19, 2007 by the basin's six riparian countries with the financial assistance of donors; the VBA Convention came into force in August 2009.** The VBA's mandate is to "promote permanent consultation tools among the basin's stakeholders; promote the implementation of Integrated Water Resources Management (IWRM) and the equitable distribution of

[1] Ghana experienced major floods in 1991, 2007, 2008, and 2010.

benefits; evaluate planned infrastructure developments that impact the water resources of the basin; develop and implement joint projects and works; and contribute to poverty reduction, sustainable development and socio-economic integration of the sub-region."[2]

5. **Before the formation of the VBA, countries managed water resources around common issues on a bilateral basis as dictated by the nature of the tributaries of the Volta River**. For example, Burkina Faso and Ghana share flow data to manage hydroelectric power production. Cooperating entities include the Société Nationale d'Électricité du Burkina Faso (SONABEL)—the National Electricity Company; the managing authority at the Bagre Dam in Burkina Faso; and the Volta River Authority (Ghana), which manages electricity production at Ghana's Akosombo Dam. The bulk of water resources in the basin is generated in the humid and sub humid regions, which are mostly in Ghana. As a result, the basin lacks the drivers that result in negotiation among countries sharing a transboundary river. An example is collaboration around shared and jointly developed infrastructure as is the case in the Senegal River Basin.

6. **The VBA had limited capacity and financial resources.** The VBA Executive Directorate comprised of only five technical staff members, plus ancillary and support staff. The VBA faced the challenge of inconsistent financial support from the member states, although member states made efforts to pay their dues and arrears.

7. **At appraisal, donor support was critical for the functioning of the VBA.** Since its formation, in addition to the support it receives from the member states, the VBA has been supported by donors. Supported activities included implementation of diagnostic studies, capacity building, and research in some areas of Integrated Water Resources Management.[3] In 2012 the Global Environment Facility (GEF) financed the Volta Basin Transboundary Diagnostic Analysis (TDA). Based on the TDA, a Strategic Action Programme (SAP) was developed. The SAP recognized that the basin's environmental and water challenges stem from physical constraints and problems related to the governance, use, and management of ecosystems at regional, national, and subnational levels. The SAP informed the design of the Volta Basin Strategic Implementation Program (VSIP) project, which aimed aims to improve the capacity of the VBA for transboundary water resources management.

8. **At appraisal, the VBA had a strong mandate on paper but still had to demonstrate its impact on the ground and its utility to the member states.** It lacked well-structured internal procedures for administrative and financial management. Furthermore, the VBA did not have an effective communications framework to ensure the flow of information among member states and stakeholders. The VBA also lacked a Water Charter which would lay the legal foundation for establishing roles and responsibilities of riparian countries regarding water resources use, exchange of information, and the position of the VBA with respect to the institutional landscape of the basin. A water charter would also strengthen the underpinning of VBA to promote coordinated and harmonized water policies in the Basin.

Rationale for World Bank Involvement

9. **The Bank's commitment to supporting regional integration building on lessons learned was evident through the Regional Integration Assistance Strategy (RIAS) for Sub-Saharan Africa (2008).** The third priority of the strategy - Coordinated interventions to provide regional public goods - focused inter alia on (a)

[2] See www.abv.int .

[3] Development partners that have supported the VBA include the African Development Bank (AfDB), the Global Environment Facility (GEF), the International Union for Conservation of Nature (IUCN), the United Nations Development Programme (UNDP), the World Bank, and the World Meteorological Organization (WMO).

improving management of shared water resources and (b) raising agricultural productivity (including research and knowledge-sharing on likely implications for sub-Saharan Africa of climate change and assistance in developing mitigation strategies). In its efforts to support transboundary water resources management the Bank continues to support River Basin Organizations in the West Africa region. The Bank supports the Senegal River Basin Authority (OMVS) and the Niger River Basin Authority (NBA), with ongoing operations in the Senegal River Basin and the Niger River Basin respectively.

10. **The Bank conducted an institutional assessment (IA), whose development objective was to strengthen the capacity of the VBA to fulfill its mandate**. The IA was designed to cover internal regulations, political economy analysis, organizational structure and key organs of the VBA, consultation, and monitoring and evaluation (M&E), and propose recommendations for improvements. In 2015, the Bank supported the VBA to build its capacity for transboundary water resources management and to implement the SAP actions. The project was financed by two trust funds, the GEF and Cooperation in International Waters in Africa (CIWA), in the amount of US$10.7 million. The project was the World Bank's first support to the VBA. The project was approved in May 2015 and became effective in December 2015. At the time of implementation, it was the largest project ever executed by the VBA.

Theory of Change (Results Chain)

11. **The project aimed to improve the capacity of the VBA for transboundary water resources management.**

- **Activities.** As shown in Figure 1, the planned activities show the logic of the project interventions. The underlying logic was that (i) training during the Water Charter development and development of communication strategy and plan processes; (ii) implementation of priority actions selected from the SAP in targeted locations (see Map 1 in Annex 7 for selected locations); and (iii) strengthening the capacity of the VBA to effectively assume its mandate would result in increased capacity of the VBA for transboundary water resources management. The actions were aimed at demonstrating the benefits of transboundary actions on the ground, such as reforestation, riverbank restoration, and small-scale irrigation to address environmental concerns affecting the quality and flow of water resources. Implementation of the actions would contribute to mobilizing member states around VBA effectiveness.
- **Intermediate results.** The project activities were expected to lead to (i) a validated Water Charter; (ii) dialogue; and (iii) six sub-projects under Component 3, one per country. The implementation of the six activities under Component 3 was expected to directly benefit local populations (selected locations are shown in Annex 7, map 1).
- **Outcomes.** The project development objective (PDO) outcomes focused on improving the capacity of the basin authority for water resources management.

12. **Bank-executed Institutional Assessment:** The Project Appraisal Document (PAD) states that the design of interventions for capacity building would be influenced by the outcome of an IA carried out as a Bank-executed activity during project preparation in 2014–15. Due to delays, the IA was implemented with project activities in 2016 and 2017. It was completed in mid-2017.

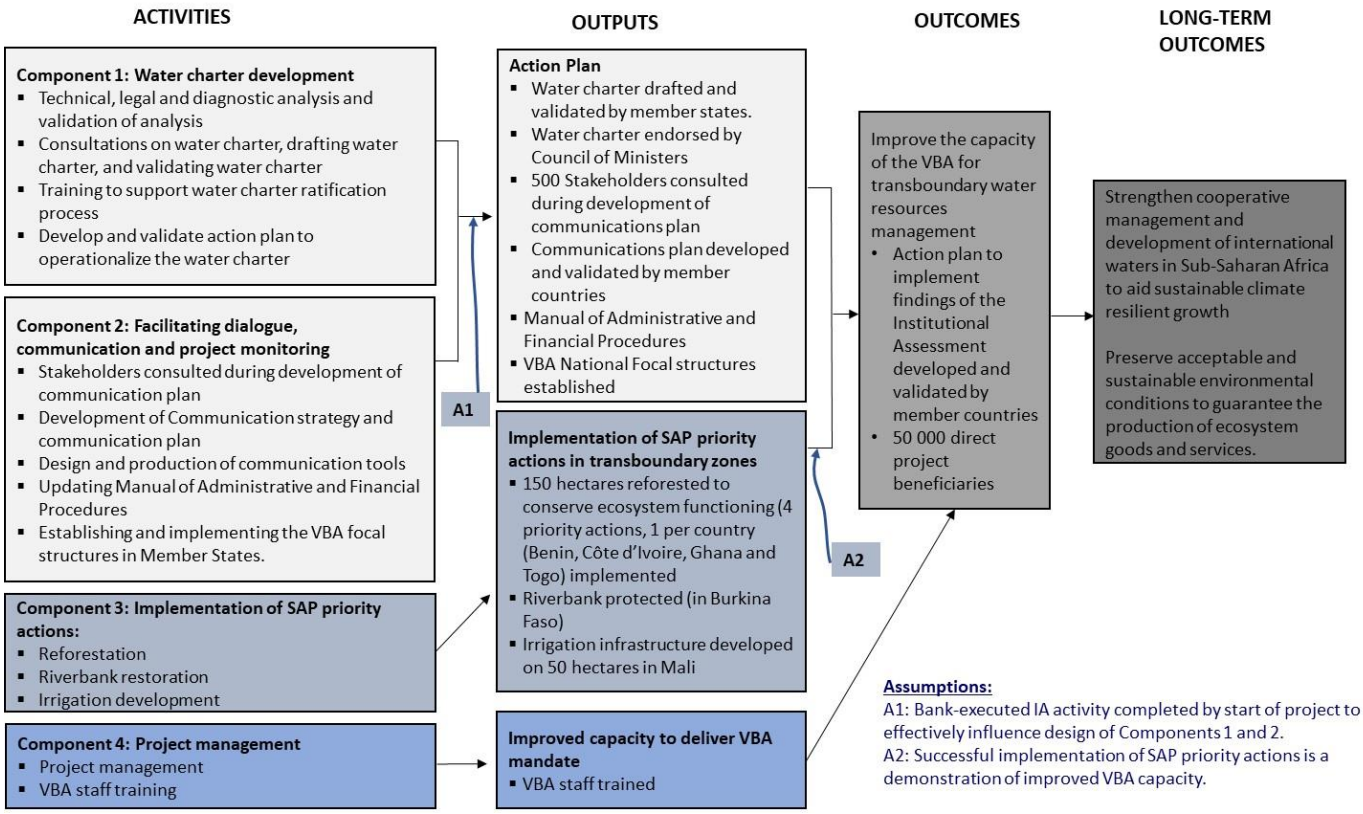

Figure 1. Theory of Change (Results Chain)

Project Development Objectives

13. **The project development objective was to improve the capacity of the recipient for transboundary water resources management.**[4]

Key Expected Outcomes and Outcome Indicators

14. The PDO was measured through the indicators in Table 1:

Table 1. Project Development Objective Indicators

Outcome	Indicator	Indicator definition
Improved capacity of the recipient for transboundary water resources management.	Action plan to implement findings of the IA developed and validated by member countries	The indicator monitored the degree to which recommendations of the IA were integrated into the trainings and capacity building activities of the project.
	50,000 direct beneficiaries	The beneficiaries were defined as those whose livelihoods would improve as a result of implementation of the priority actions in the Volta basin.

Note: IA = institutional assessment.

[4] The PAD states project development objective as "to improve the capacity of the VBA for transboundary water resources management". The PAD further outlined that the project set to accomplish its objective through institutional development activities to address the main weaknesses of the institution highlighted above and implementation of priority actions of the Strategic Action Programme to lead to direct environmental and livelihoods benefits.

15. **The action plan in paragraph 14 "monitored the steps taken by the VBA through the project towards strengthening of the institution."** The indicator monitored the degree to which the recommendations of the IA were integrated into the trainings and capacity building activities of the project. As the IA was designed to identify weaknesses and gaps in the VBA, it was assumed that the integration of the IA recommendations would have direct impact on the VBA's capacity for managing transboundary water resources management"[5].

16. **The project aimed to reach 50,000 direct beneficiaries.** In the PAD, direct beneficiaries were defined as those whose livelihoods would improve as a result of implementation of the priority actions in the Volta basin. The underlying assumption was that direct benefits to the affected communities would increase stakeholder awareness of and ownership of the VBA at national level.

Components

17. **The project had four components:** (i) Water Charter development for the Volta River Basin; (ii) Facilitating Dialogue; Communication and Project Monitoring; (iii) Implementation of Strategic Action Programme (SAP) Priority Actions; and (iv) Project Management.

18. **Component 1: Development of Water Charter Development for Volta River Basin (US$1,992,000).** Component 1 focused on the development of a Water Charter that would specify roles and responsibilities of riparian countries with regard to water resources use; strengthening the underpinning of VBA to promote coordinated and harmonized water policies in the Basin; and defining guiding principles for improved water resources development and management for the basin such as better integration of IWRM where transboundary resources are concerned. The Water Charter would (i) facilitate dialogue and cooperation between member States in the planning and implementation of programs and projects that affect water resources; (ii) strengthen solidarity and promote sub-regional integration and economic cooperation between Member States; (iii) specify the regulations for utilization of water resources of the basin; (iv) specify the regulations on the preservation and protection of the environment, especially those relating to water quality; (v) strengthen collaboration on flood management and define the modalities for exchanging hydro-meteorological data and flood information; and (vi) define the modalities for participation of water users in decision making on management of the water resources of the Volta basin.

19. **The development of the Water Charter consisted of three phases:**

- **Phase 1.** Technical, legal, and institutional diagnostic analysis.
- **Phase 2.** Drafting the Water Charter (development, validation, approval, and adoption of the charter).
- **Phase 3.** Extension (advocacy, information), ratification of the Water Charter, and preparation of draft texts for implementation.

20. **Component 2: Facilitating dialogue, communication, and project monitoring (US$1,260,000).** The objective of Component 2 was to strengthen the VBA's communication system to enable it to effectively carry out its mandate. In order to effectively carry out its coordination role, the Strategic Plan for the period 2015-2019 recommended that VBA establish communications mechanisms targeting the basin's various stakeholders, and facilitate exchange of information and data on environmental, water resources and monitoring of planned and ongoing projects in the Basin. This component would address the gaps left by actions of the VBA Observatory and other avenues. It was planned that the component would include

- A stakeholder assessment as part of the development of the Communications Strategy and Plan;
- Supporting activities related to participation in the International Waters Learning Exchange and

[5] Annex 1, PAD (page 31)

Resource Network (IW-Learn);
- Developing a communication strategy, setting the main orientations and communication procedures of the VBA and a communication plan to operationalize the communication strategy;
- Establishment and capacity building of VBA National Focal Structures (NSF) in the member states; and
- Strengthening Human Resources management within the VBA.

21. **Component 3: Implementation of SAP priority actions (US$6,898,000).** This component aimed to implement selected priority actions of the SAP of the Volta River basin. Six priority actions would be implemented. The component was designed to support the development of projects that lead to improvements in water quality, flows and ecosystem services. Initial selection of actions was done based on their transboundary nature, criteria for which was developed through consultation with the VBA. Additional consultations with the VBA and the VBA national Focal Points, as well as representatives of local agencies and organizations led to the final choices for priority actions to be implemented under the VSIP project. The actions are listed in Table 2. The list includes actions across Components A and B of the Volta River Basin SAP, integrating measures that directly address physical stresses, related to human capacity, governance, knowledge and livelihood in maintaining the environment. Priority actions for the project include (1) restoration of flows through river bank rehabilitation, (2) reversal of vegetation degradation through reforestation, and (3) enhancing of agricultural practices through water-conserving techniques.[6] The detail for the priority actions are outlined as sub-components 3.1 – 3.3 below. The budget for the priority actions (component 3) included the budget for feasibility studies for the priority actions; consultations; capacity building and awareness-raising at the national and local levels, and M&E.

Table 2 SAP actions, priority actions, environmental quality objectives, and countries of implementation

SAP action	Priority action	Environmental quality objectives	Country
A.2	To protect all the springs that contribute to the permanent flow of the Mouhoun River	Sedimentation in five key hotspots is reduced by 20 percent by 2025	Burkina Faso
A.3	To develop irrigation infrastructure in the Sourou Basin	Water optimized among primary users (domestic, agricultural, ecosystems and hydroelectric power) so they receive sustainable supplies[a]	Mali
B.4	To design and implement a regional programme for the protection and restoration of the river banks and gallery forests upstream of Lake Volta	Critical ecosystem functions conserved, restored, and managed for sustainable use in at least five selected areas	Côte d'Ivoire
B.4	To design and implement a regional programme for the protection and restoration of the river banks and gallery forests upstream of Lake Volta	Critical ecosystem functions conserved, restored, and managed for sustainable use in at least five selected areas	Ghana
B.7	To preserve and restore ecosystems of the Pendjari-Oti region	Critical ecosystem functions conserved, restored, and managed for sustainable use in at least five selected areas	Benin
B.7	To preserve and restore ecosystems of the Pendjari-Oti region	Critical ecosystem functions conserved, restored, and managed for sustainable use in at least five selected areas	Togo

Note: SAP = Strategic Action Program.
a. In the SAP document this action is further described as "Action A.3 targets Mali, looks at controlling flood waters in the Sourou Basin with the double effect of protecting local communities from flooding and enabling them to use conserved water for irrigation in agriculture."

[6] The reforestation action would be implemented in Benin, Côte d'Ivoire, Ghana, and Togo.

22. Subcomponent 3.1. Reforestation: Implemented in Benin, Côte d'Ivoire, Ghana, and Togo, this activity built on priority actions based on SAP actions B.4 and B.7, addressing degraded forest ecosystems in these countries. The target intervention areas in Benin and Togo were the mountainsides and near riverbanks of the Pendjari-Oti. In Ghana and Côte d'Ivoire, the target intervention areas were in the Black Volta sub-basin. These four priority actions were designed to contribute toward conservation of critical ecosystem functions of the Volta through rehabilitation of degraded forest ecosystems in designated sites.

23. Subcomponent 3.2. Riverbank protection: Designed to be implemented in Burkina Faso, this activity corresponded to SAP action A.2 and was designed to address challenges related to the diminishing water levels of the tributaries of the Mouhoun River in Burkina Faso.

24. Subcomponent 3.3. Development of market gardens in Mali: Corresponding to SAP action A.3, this subcomponent was to develop small market gardens using water conserving techniques and showcasing alternate forms of irrigation applicable for the Sahel.

25. **Component 4: Project management (US$790,000).** This component aimed to strengthen VBA's management and internal processes. This component financed activities related to the strengthening the management and internal processes of the VBA. This component also provided support to the Project Coordinating Unit (PCU) to implement the project. It thus financed costs relating to fiduciary management, monitoring and evaluation of the project's results, technical reporting and audits, additional consultants for the PCU, and operating costs such as meetings, workshops, travel expenses and training to assure project implementation according to standards acceptable to the World Bank.

B. SIGNIFICANT CHANGES DURING IMPLEMENTATION (IF APPLICABLE)

26. **The project was restructured in January 2019 following the recommendations of the Mid-Term Review (MTR) in November 2017.** The MTR recommended project restructuring to reduce the scope of the six sub-projects of Component 3 to more achievable targets and to align these targets with the project closing date. The slow pace of implementation in the first two years of implementation (2015–17) necessitated the restructuring. Four key changes were made:

- Change in results framework
- Change in components and cost
- Cancellation of financing
- Reallocation between disbursement categories

Revised PDOs and Outcome Targets

27. At restructuring in January 2019, the PDO remained unchanged.

Revised PDO Indicators

28. With the restructuring a change was made to PDO indicator 2, the number of direct beneficiaries. The number of direct beneficiaries was significantly revised downwards from 50,000 to 6,000 to align the indicator with the scaled down actions.

Revised Intermediate Results Indicators

29. The wording of the intermediate indicator 2 of Component 3 was revised from "surface area forested" to "areas protected against deforestation." However, the wording in the results framework has remained "surface area reforested" (See Table 3).

Table 3. Indicators after restructuring

PDO: To improve the capacity of the VBA for transboundary water resources management				
PDO level results indicators	**Unit of measure**	**Baseline**	**Target before restructuring**	**Target after restructuring**
Indicator 1: Action plan to implement findings of Institutional Assessment developed and validated by member countries	Yes/no	No	Yes	Yes
Indicator 2: Direct project beneficiaries	Number	0	50,000 20% women	6,000 20% women
Intermediate Results				
Intermediate result (Component 1): Water charter development for Volta River Basin				
Intermediate result indicator 1: Water Charter drafted and validated by member states.	Yes/no	No	Yes	Yes
Intermediate result (Component 2): Facilitating dialogue, monitoring, and project development				
Intermediate result indicator 1: Number of stakeholders consulted during development of communications plan	Number	0	500	500
Intermediate result indicator 2: Communications plan developed and validated by member countries	Yes/no	No	Yes	Yes
Intermediate Result (Component 3): Implementation of SAP actions				
Intermediate result indicator 1: Number of priority actions implemented in Volta basin transboundary zones	Number	0	6	6
Intermediate result indicator 2: Surface area reforested (ha)	Number	0	150	200

Note: IA = Institutional Assessment; PDO = project development objective; SAP = Strategic Action Program; VBA = Volta Basin Authority.

Revised Components

30. **The specifications of the priority actions were scaled down to align with the remaining project implementation time.** In Burkina Faso, riverbank protection would still be implemented, but on 5 kilometers instead of 10 kilometers. In Mali, the project would finance the provision of material supplies and training to 90 farmers to improve productivity instead of developing 50 hectares of irrigation. The changes made are indicated in

31. Table **4**.

Table 4 Changes to Component 3 Actions after Restructuring

	Priority action	
Country	**Before restructuring**	**After restructuring**
Burkina Faso	Rehabilitation of riverbanks (10 km)	Rehabilitation of riverbanks (5 km)
Benin	Reforestation[a]	Protecting forests on selected watershed areas[b]
Côte d'Ivoire	Reforestation[a]	Protecting forests on selected watershed areas[b]
Ghana	Reforestation[a]	Protecting forests on selected watershed areas[b]
Togo	Reforestation[a]	Protecting forests on selected watershed areas[b]
Mali	Irrigation development (50 ha)	Supporting small market gardens by providing basic furniture and training to improve productivity in the context of Sahel (90 farmers)

a. Reforestation over a total of 150 hectares in the four countries where reforestation would be carried out.
b. A total of 200 hectares would be protected in the four countries.

32. **Project cost was reduced as a result of scaled down scope and cost of Component 3 activities.** The reduction in scope resulted in project cost reduction of US$2.629 million, leaving US$4.268 million for implementation of the six sub-projects.

33. **Partial cancelation of grant.** Due to changes in Component 3, the restructuring included a partial cancellation of the Component 3 budget by US$2,629,595 and reallocation between disbursement categories (see Table 5).

Table 5 Grant Allocation by Component before and after Restructuring

U.S. dollars

	Appraisal			Counterpart funds[a]	After restructuring			
Component	**Total grant (US$, millions)**	**GEF grant (US$, millions)**	**CIWA grant (US$, millions)**	**Counter-part funds***	**CIWA grant (US$, millions)**	**GEF grant (US$, millions)**	**Total grant (US$, millions)**	**Total grant (% change)**
Components 1 and 2	3.13	1.18	1.95	n.a.	1.95	1.35	**3.30**	**6**
Component 3	6.60	5.40	1.20	n.a.	0.74	3.39	**4.13**	**-37**
Component 4	0.77	0.33	0.20	0.24	0.24	0.40	**0.64**	**-16**
Subtotal	***6.90***	***6.90***	***3.35***	***0.24***	***2.93***	***5.14***	***8.07***	***-23***
Contingencies	0.45	0.30	0.15	n.a.	0	0	0	..
Grand total	**10.94**	**7.20**	**3.50**	**0.24**	**2.93**	**5.14**	**807**	**-26**

Note: CIWA = Cooperation in International Waters in Africa; GEF = Global Environment Facility; n.a. = not applicable; .. = negligible.
a. Counterpart funds did not change with the grants' revision at restructuring.

Rationale for Changes and Their Implication on the Original Theory of Change

34. **The changes set more achievable targets for the project within the project implementation time frame.** The rationale for change is explained below:

- **Component 3 activities were scaled down to align activities with remaining project implementation time.** In Benin, Côte d'Ivoire, Ghana, and Togo, the project would no longer finance reforestation, but instead finance the protection of trees in selected areas and awareness raising among the local population on the potential impacts and risks of deforestation (desertification, erosion of riverbanks) over a maximum area of 200 hectares. The modified activity would entail strengthening the capacity of civil society organizations (CSOs) for the development of the watersheds through training and organization of the stakeholders' forums; delimiting and signaling protected areas; preparing and installing information boards; raising the awareness of school children in relation to the protection of the environment; and training populations in preservation and protection of protected areas in the four countries. The implementation time required for this activity was aligned with the remaining project implementation time.
- **Stabilization of riverbanks in Burkina Faso.** The sub-project in Burkina Faso would still finance the stabilization of 5 kilometers of the riverbanks of the Kou River, a tributary of the Mouhoun River.
- **Irrigation support to smallholder farmers in Sourou subcatchment in Mali.** Instead of developing 50 hectares of irrigation to support smallholder farmers' efforts to develop vegetable crops in the Sourou subcatchment, the Mali sub-project would now provide capacity building and materials support on best agricultural practices to 90 smallholder farmers to improve the productivity of small farms. The reduction in scope followed recommendation of the feasibility study to meet the project's deadline.
- **Reduction of direct beneficiaries from 50,000 to 6,000.** With the scaling down of the six actions to make the project objective more achievable, the number of direct beneficiaries were reduced from 50,000 to 6,000.

II. OUTCOME

A. RELEVANCE OF PDO

35. **Rating: High**

Assessment of Relevance of PDOs and Rating

36. **The project objectives are strongly aligned with the objectives of the Volta River basin strategic plan (2015–19).** The project focus includes strengthening the VBA institutional framework, strengthening the VBA's communication system, and restoration of flows. These objectives are aligned with the VBA strategic plan, especially strengthening the legal framework of the Volta basin, implementation of IWRM, adapting the VBA's resources to the implementation of the strategic plan, and enhancing communication. The project is fully aligned with the CIWA objective of strengthening cooperative water resources management and development to enable sustainable, climate resilient economic growth in the region. With the aim to strengthen the institutional capacity of the VBA, the project is consistent with the objectives of the IW-Learn focal area. The project was informed by a previous GEF-financed project, Addressing Transboundary Concerns in the Volta River Basin and its downstream coastal area, which outlined the SAP. Building on the SAP the project design was in line with the GEF 6 programming strategy, IW 1 – to catalyze sustainable management of transboundary water systems by supporting multistate cooperation through foundational capacity building

leading to the outcome on political commitment, shared vision, and improved governance for joint management of transboundary water bodies. The project was also relevant for IW 2 outcome on catalyzing investments to balance competing water uses in the basin and enhance multi-state cooperation, leading to Outcome 4.1 on increased ecosystem security and sharing of benefits on a basin scale underpinned by adequate legal and institutional frameworks for cooperation. With its focus on transboundary cooperation and information exchange among basin countries, the project remains relevant for the current GEF 7 programming.

37. **The project is aligned with the World Bank's country partnership frameworks for the basin countries.** It is aligned with the water area of Benin Country Partnership Framework (FY2019–FY2023) and the Systematic Country Diagnostic Development priority 3, building resilience to economic and climatic shocks. Togo's Country Partnership Framework (CPF) (FY2017–FY2020) Focus Area 3 is Environmental Sustainability and Resilience. Pillar 4 of this focus area is promoting sustainable management of the territory, the environment, and living standards. The project is also aligned with the World Bank's RIACS strategic priorities for the Africa region as outlined in the RIACS (FY2018–FY2023).[7] These include collective action and the need to deal with public goods and externalities from the management of transnational water resources; natural disasters and adapting to climate change; resilience to shocks; strengthening the continent's resilience to climate change impacts on its natural and physical capital, as well as human and social capital; and sustainable management of transboundary waters.

38. **Rating: The overall relevance of the project development objective is High.** The PDO remains relevant because the project has sought to improve the capacity of the VBA—a regional institution—to manage shared water resources and implement actions to restore flows.

B. ACHIEVEMENT OF PDOs (EFFICACY)

39. **Rating: Modest**

Assessment of Achievement of Each Objective and Outcome

40. **Achievement of the PDO was assessed using data from the project's results framework.** The assessment focuses on the project's two PDO outcome indicators. The two indicators are:

- Action plan to implement findings of institutional assessment developed and validated by member countries.
- 50,000 direct beneficiaries, 20 percent female.

41. **The PAD describes the PDO indicator 1 as "the action plan monitored steps taken by the VBA through this project towards strengthening of the institution."** The indicator was designed to monitor the degree to which recommendations of the Institutional Assessment (IA), which will be carried out during development of the Water Charter, are integrated into the trainings and capacity building activities of the project. As the assessment will identify weaknesses and gaps in the VBA, its integration will have a direct impact on the VBA's capacity for managing transboundary water resources management.

42. **The first step of the project was carrying out a legal and institutional diagnostic analysis**. The analysis aimed to address bottlenecks in the application of laws and regulations; overlaps and conflicts of jurisdiction

[7] Supporting Africa's Transformation: Regional Integration and Cooperation Assistance Strategy for the period FY18–FY23.

between administrations and entities responsible for the management of water resources; and aspects of customary rights related to the traditional management of water resources. Workshops were held to validate the analysis. Second, the VBA consulted on the Water Charter and drafted the Water Charter. Next, the VBA held national and regional workshops to validate the Water Charter. Finally, they had the Water Charter endorsed by the VBA Council of Ministers. Officials were then trained to support the Water Charter ratification process and develop three appendixes for implementation of the Water Charter. Under Component 2, the project developed the VBA communication strategy and held a regional validation workshop in Bamako, Mali. During the development of the communication plan, 500 stakeholders were consulted.

43. **The Bank-executed IA was delivered nearly two years after start of project activities—in June 2017—as opposed to before project start.** Due to the late delivery of the Bank-executed IA, the IA did not directly inform the VBA action plan. However, the action plan developed by the VBA is largely aligned with recommendations of the IA.[8] While the Bank-executed IA was under development, the VBA initiated activities under Components 1 and 2 on development of the Water Charter, development of communication strategy and plan, and associated trainings.

44. **The Volta basin action plan developed by the VBA is aligned with the findings of institutional assessment.** The recommendations from the Bank-executed IA include

- Adopting a more pragmatic approach for the VBA, given that (i) transboundary processes are complex and it takes time for member states to engage, and (ii) it takes time for the Executive Directorate to build capacity. As such, it is essential to revisit the scope, structure, and role of the authority to define a strategic position with political appeal for member states' renewed commitment.
- Providing strong guidance on the VBA's geographical scope (basin and sub-basin levels) and sectoral scope (water resources and environment) to impact how VBA bodies are constituted and how they work together to fulfil the VBA mandate.
- Improving the VBA's technical, administrative, and fiduciary capacity; financing means; partnerships; and tools.
- Adapting management efforts to the complex basin structure characterized by a hydrography dissimilar to other basins, after which the VBA was modeled. This complexity makes it challenging to identify a niche for the VBA, including interventions that are critical for the establishment of VBA legitimacy. As such, it is important to focus efforts in areas where the VBA can be useful and efficient for member states that provide the financial means for VBA interventions. Member states need to agree on which mandates are more critical for VBA and how they are to be operationalized in the most effective manner.
- Revisiting the scope and roles and adjust the means accordingly, including technical, administrative, and fiduciary capacity; financing means; partnerships; and tools.
- Building a strong analytical base on which to base interventions. This includes a thorough assessment of the transboundary issues facing the basin, clearly outlining the risks, interests, benefits, and costs for each member state.

45. **The VBA action plan has three axes: ratification of the Water Charter; implementation; and communication** (awareness raising about the Water Charter content). Responsibilities for activities in the VBA action plan were assigned, an implementation schedule established, and indicators for monitoring progress

[8] The IA was designed to be implemented from 2014–15 so that the findings would inform the project.

were assigned to each activity. The timeline for implementing the action plan is 2019 to 2026. Actions carried out in 2019 as part of the VSIP, such as the action plan for ecosystem management, were validated during country training workshops on ecosystem management.[9] The study on strengthening the VBA NFSs was also completed and validated. In addition, a Water Charter was prepared and validated by the VBA expert committee and endorsed by the VBA Council of Ministers. Endorsement of the Water Charter by the VBA Council of Minister's is a significant achievement. This step is not always easy to achieve and takes a long time in other transboundary basins. The VBA also prepared three annexes of the Water Charter required for implementation: (i) duties, composition, organization, and functioning of the organs created by the Water Charter; (ii) the prior notification of planned measures; and (iii) the procedure for producing, collecting, exchanging, and utilizing data and information. These annexes are important for operationalization of the Water Charter.

46. **The VBA anticipates that the Water Charter will be adopted by heads of state in 2021**, the likely date of the next heads of state meeting (see action plan). An alternative process for the adoption—the rotating signature option—is also in the action plan. Under Component 2, the project developed the VBA communication strategy and plan, established NFSs, and implemented the VBA human resources capacity study. These actions address the recommendations of the IA and contribute to the institutional strengthening of the VBA. As the action plan is implemented, activities such as developing a water resources allocation model (activity A2.3.4 in action plan) will contribute to providing tools (as recommended by the Bank-executed IA) to the VBA.

47. **PDO indicator 2 is 50,000 beneficiaries.** The project aimed to reach 50,000 direct beneficiaries with benefits generated through implementation of six priority actions in the basin, one per country. Direct beneficiaries were defined in the PAD as those whose livelihoods would improve as a result of implementation of the priority actions in the Volta River basin. Direct benefits to these affected communities would increase stakeholder awareness of and ownership of the VBA at national level. Due to delayed start of feasibility studies and issues related to the capacity of the VBA, the priority actions were not implemented by the MTR. The number of beneficiaries was substantially reduced to 6,000 (20 percent female) when the actions were scaled down. After restructuring, due to a combination of security and capacity reasons, the VBA could not implement the six priority actions. Only feasibility studies for the SAP priority actions were completed and validated nationally; they are available for the VBA and countries to use with other projects.

48. **The project did not have direct beneficiaries resulting from implementing the SAP priority actions.** However, the project implemented capacity building exercises, mostly workshops. The training of the 200 CSOs in the basin countries (at least 30 CSOs per country were trained) on ecosystem management is expected to result in reduced deforestation in the basin through enhanced awareness campaigns. While the beneficiaries are not quantified, the basin population and those beyond the basin will benefit directly from this action as ecosystem services (for example, hydrological regulation) will be enhanced. The several training workshops by the project can result in benefits to the basin because of improved awareness on the impacts of deforestation on flows, water quality, and water availability. The awareness can catalyze action to reduce deforestation, benefiting several thousands of people in the basin and beyond who depend on the Volta River basin for livelihoods, energy, and water. The project and results framework did not reflect these benefits and beneficiaries. Also, the completed feasibility studies for the priority actions have potential application in future

[9]Validation of the ecosystems management aspect of the action plan was carried out during workshops in 2019. The workshop dates were May 20–24 for Mali; May 27–31 for Burkina Faso; June 11–15 for Côte d'Ivoire; June 11–15 for Togo; July 1–5 for Benin; and July 15–19 for Ghana.

VBA projects or national projects.

49. **Under Component 4, the project improved capacity of the VBA to deliver its mandate.** The manual of administrative and financial procedures was updated. Through the project, NFSs were established in each member country. The NFSs are formal channel between the VBA and the line ministries responsible for water in the countries. The NFSs will facilitate VBA interventions.

50. **The achievement of outcome indicators is indicated in Table 6.**

Table 6. Achievement of Outcome Indicators

Indicators		Original target	Revised target	Achievement	Rating
Action plan to implement findings of IA developed and validated by member countries	Yes/no	Yes	n.a.	Yes	High
Number of direct beneficiaries	Number	50,000	6,000	0[a]	Negligible

Note: CSO = civil society organization; IA = Institutional Assessment; n.a. = not applicable.

a. The project had beneficiaries resulting from trainings, such as the ecosystems management training of 200 CSOs in the basin countries (at least 30 CSOs per country trained); and training on the Water Charter ratification process. These trainings are likely to result in wider basin-level impacts including restoration of ecosystem services such hydrological regulation; reduced erosion and improved water quality. These benefits will extend to several thousand beneficiaries in and out of the basin who depend on the basin's water resources for example for livelihoods and energy.

Justification of Overall Efficacy Rating

51. **The overall efficacy rating is Modest.** The project achieved the action plan, despite the late delivery of the recommendations of the Bank-executed IA. The VBA designed a pragmatic action plan for operationalization of the Water Charter. However, the project achievement rate for the target related to the second PDO outcome of 50,000 beneficiaries (significantly revised downward to 6,000 at restructuring) was negligible. While there were no direct beneficiaries, the training workshops by the project will result in benefits to the basin as a result of the awareness on impacts of deforestation on flows and water availability in the basin. Also, the completed feasibility studies for the priority actions have potential application on follow-up VBA projects or national projects. It is anticipated that there will be direct beneficiaries of the project actions in the long term.

C. EFFICIENCY

Assessment of Efficiency and Rating

52. **Project Efficiency Rating: Negligible**

53. **The project was designed to be implemented by a single institution, the VBA, with direct involvement of national institutions responsible for water resources management in the six riparian countries represented by the VBA national focal points.** This mechanism aimed at ensuring coordination between the VBA and the countries. A simple design was used because this was the first World Bank-financed project to be implemented by the VBA. Such a design would enable capacity building and at the same time contribute to establishing a strong institution with adequate fiduciary systems.

54. **With the simple design, the project disbursed only 39 percent of the approved budget and 51 percent of the revised budget.** Despite delays at the onset of the project due to the security situation in Ouagadougou, Burkina Faso, Components 1 and 2 were delivered within the approved budget. Component 2, however, was delivered for 41 percent of the approved budget. Component 3 was not delivered, although 18 percent of the budget allocated for the component was spent on feasibility studies for the Component 3 investments. Inadequate capacity of the VBA (particularly for procurement and safeguards), delays in implementation of feasibility studies for the priority actions, the security situation in Mali, and requirements for resettlement in Burkina Faso resulted in non-implementation of the Component 3 investments and non-disbursement of 72 percent of the budget allocated for the component. The delays in the first year and the lengthy period (14 months) between MTR and approval of restructuring in January 2019 (when Component 3 activities were temporarily stopped) constituted close to 50 percent of project duration; these are some of the reasons for non-implementation of Component 3 priority actions.

55. **The economic and financial analysis (EFA) conducted at the design stage and presented in the PAD was based on the infrastructure associated with Component 3, a component whose activities were ultimately not implemented.** Benefits arising from Components 1 and 2, for example, the Water Charter and capacity building as a result of training workshops, while essential for transboundary water resources management, were not factored in the EFA at appraisal.

56. **The quantifiable outcomes expected after the completion of selected priority actions planned under Component 3 were not achieved.** The outcomes were anticipated from irrigation, agroforestry, and other income generating activities. The project activities were no longer deemed achievable under the remaining time frame of the project, which led to cancelled activities and a lack of achievement. Therefore, the efficiency is considered Negligible.

57. **An alternative impact assessment approach can be used for assessing the overall efficiency ratings of the project at closing.** It considers the implemented activities and costs incurred. This approach highlights the positive project outcomes from Components 1 and 2: the Water Charter, communication strategy and plan, and an action plan validated by the member countries. The Volta River Basin countries validated the Water Charter and three annexes. Other positive outcomes that resulted from project implementation are based on the robust platform created for (i) the future economic returns and (ii) the early warning systems for effective climate change risk management in the six VBA countries. While the benefits from reforestation, riverbank restoration, and irrigation development did not materialize, the project has achieved other results crucial for the management of water resources in the transboundary basin.

58. **The cost of development of the Water Charter, the communication strategy and plan, and an action plan show that Components 1 and 2 were implemented efficiently and within the planned budget.** There were no cost overruns for Water Charter development in Component 1, and the communication strategy and plan as well as action plan were delivered at a modest cost, 41 percent of the approved budget. The VBA Water Charter is now in an advanced process to become a legal instrument that specifies the actions to be taken for integrated water resources management in the basin. Endorsed by the VBA Council of Ministers, the Water Charter defines the roles and responsibilities of the riparian countries in the use of the water resources, strengthening the VBA's mandate to promote harmonious and coordinated water resources management in the basin. Once operationalized, the Water Charter will define the principles for sustainable IWRM, including principles about how water and ecosystems should be utilized and protected for the benefit of present and future generations.

59. **Finally, capacity building from workshops and shared information have boosted riparian trust and confidence, shaping the basis of transboundary cooperation.** The VBA has improved its approach to stakeholder communication, enabling enhanced dialogue among the basin countries and paving the way for improved water resource management and development in the basin in the long term. To facilitate knowledge sharing and use at the country level, the VBA has completed a study to establish and strengthen the capacities of NFSs. The project's complementary actions include training in international waters law, and the facilitation of training sessions as part of the process of adoption and ratification of the Water Charter.

60. **Efficiency is rated Negligible.** The basis of the EFA presented in the PAD was the Component 3 investments which were not implemented. The achievements of components 1 and 2 described previously notwithstanding, there remains a significant amount of engagement to operationalize the Water Charter and derive benefit from the processes initiated by the project.

D. JUSTIFICATION OF OVERALL OUTCOME RATING

61. **The overall outcome rating is Unsatisfactory.** The PDO is highly relevant whereas the project efficacy is Modest due to partial achievement of outcomes. The achievements with the Water Charter development and its endorsement by the Council of Ministers; communication strategy and plan development and validation, dialogue and capacity building efforts are recognized. However, following the PAD assumptions for the efficiency, the efficiency is Negligible due to the failure to implement priority actions under component 3.

E. OTHER OUTCOMES AND IMPACTS (IF ANY)

Gender

62. **The project was designed to benefit local stakeholders—including men and women—through the implementation of income generating activities.** The number of direct beneficiaries, initially 50,000 and substantially reduced at MTR to 6,000, would include at least 20 percent women. However, because activities relating to the strategic actions in selected catchments in the basin were cancelled, these goals were not achieved.

Institutional Strengthening

63. **Through support to the VBA, the Bank helped to strengthen the capacity of the VBA, particularly for financial management, safeguards, procurement, and communication.** The accountant and financial management specialist participated in a two-week training on financial management. The finance specialist received training in financial management and procurement procedures for World Bank–financed projects. This includes training in the optimal use of TOM2PRO software as well as training on the preparation of financial statements for donors, budget monitoring, dashboards and summary tables. These tools are generally applicable to most international finance institutions; the impact of the training will extend beyond the VSIP project. The project coordinator, who is also the director of the VBA Observatory, benefited from training in project planning, design, preparation, and implementation. The VBA team's experience and skills were enhanced; this will allow members to carry out their mandate more effectively.

Mobilizing Private Sector Financing

64. **Not applicable.**

Poverty Reduction and Shared Prosperity

65. **Component 3's planned actions could have resulted in sustained income-generating activities through the smallholder irrigation development and anticipated job creation with the anticipated works and reforestation activities.** The PAD states that "income generating activities planned under the project will, on the other hand, benefit many local communities, including women and would contribute to improving their livelihoods. Furthermore, these activities will provide rural and sub-regional markets with increased supply in products such as honey, rabbit, and vegetables thereby contributing to local food security." Because activities relating to the strategic actions in selected catchments in the basin were cancelled, the project has not fully achieved its objectives. Therefore, the project has not had a direct contribution to poverty reduction in the intervention area.

Other Unintended Outcomes and Impacts

66. **The VBA and some stakeholders have indicated that one of the outcomes of the project is the increased visibility of the VBA and its activities.** Before the VSIP project, the VBA was largely an unknown entity in its member countries. As a result of all the stakeholder engagements, sensitization workshops, setting up of the NFSs, and validation workshops for the Water Charter, the VBA and its function are better understood. Further, basin countries are more compliant with their contributions to the VBA.

67. **The VBA has achieved improved engagement with member countries with the extensive stakeholder consultations during the Water Charter and stakeholder strategy and communication plan development process.** The Executive Directorate has indicated that countries are more diligent now than before with payment of their contributions to the VBA. Countries that had been reluctant to pay contributions to the authority before the project have cleared arrears with the VBA.

68. **The uncertainty around activity continuation has resulted in loss of the project's institutional capacity.** With cancellation of activities, three staff members left the VBA; the legal specialist who was also the officer in charge of Component 1), the accountant, and the procurement specialist. At the time of the ICR mission, the officer in charge of Component 3 was preparing to join another regional river basin in 2019. Institutional capacity will need to be re-built in order for the VBA to effectively carry out its mandate.

III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

A. KEY FACTORS DURING PREPARATION

69. **For a four-year project, the project was designed with realistic objectives, but ambitious targets.** The four components—while designed and structured to be implemented as stand-alone components—have clear linkages. The results framework has some shortfalls, such as indicators that could have been revised (see section IV.A). Linked to some indicators were activities—particularly in Component 3—that are not the VBA's core business. The selected activities, while meaningful, pose implementation challenges from the basin perspective (for example, smallholder irrigation in Mali). While each of the sites has a direct transboundary element between two countries, in general, the sites do not fully demonstrate the importance of cooperation in transboundary water resources management. Transboundary and benefit-sharing issues identified as drivers for the need for cooperation could have been defined more clearly and linked to the priority actions chosen to ensure congruency between the mandate of the VBA and the actions.

70. **The project was not in an advanced readiness state for implementation.** Sites for the priority actions were not identified during preparation, and feasibility studies required for implementation of the six priority actions (Component 3) were not ready at the start of project implementation. The terms of reference (TOR) for the feasibility studies were also not prepared prior to project start. The budget for the feasibility studies was part of the Component 3 budget; as such, the feasibility studies could be carried out only early in project implementation. It was anticipated that the feasibility studies would be carried out early in the implementation phase to allow adequate implementation time for the actions. However, the procurement process was initiated more than six months after the start of project implementation. This delay is explained in part by the limited capacity of the VBA and also by inability of the Bank team to mobilize more intensive and timely implementation support.

71. **Project length was not commensurate with the nature of the project activities; the project could have been designed with a longer implementation period.** The project duration was short, given Component 3 actions that required feasibility studies. Four years was insufficient, especially because feasibility studies were not ready at the onset of the project, and they needed to be completed before implementation of the priority actions. Because these actions were important for the basin countries, enough time should have been allocated for feasibility studies and implementing the priority actions.

72. **As the objective of the project was to strengthen the capacity of the VBA for implementation of transboundary water resources management, it was decided that the PCU would comprise of VBA staff responsible for both project activities and their regular VBA activities.** The project funded consultants for the positions of procurement specialist and accountant. The VBA officer in charge of Component 3 (who, at project initiation, was also the Director of Planning and IWRM of the VBA) would be responsible for M&E for the project. The project coordinator and the technical specialists for Components 1, 2, and 3 were responsible for project tasks and their regular responsibilities for the VBA. While made to strengthen the capacity of the VBA, this implementation decision was detrimental not only to the achievement of project results but also to the VBA.

73. **The Bank's decision to not fund additional staff for the PCU was intended to enhance VBA capacity, but it became an implementation constraint.** This implementation model depended on the VBA recruiting consultants for the positions of safeguards and M&E specialists. However, with the VBA's operations funded through contributions from member states, the VBA lacked resources to recruit additional staff. Historically, some member countries have struggled to meet their obligations, sometimes partially meeting their obligations with delays. The risk associated with tasking the VBA with recruitment of safeguards and M&E specialists was high. The VBA did not recruit the safeguards and M&E specialist. Having these two specialists on the VBA team would have had positive impacts on the project implementation rate and achievement of objectives.

74. **Implementation arrangements.** The implementation mechanism was oversimplified for the project. The VBA did not have the requisite experience implementing Bank projects. The grant was the largest project budget the VBA had managed. Instead of creating a PCU, the Bank requested the client to form a PCU with VBA staff to ensure capacity building of the staff. Additional technical support, in addition to the procurement specialist and accountant, could have improved capacity.

75. **Risks and their mitigation.** At the time of project development, the VBA was a young institution, having come into existence only in 2009. At the time of project preparation, the overall implementation risk rating

was substantial, and mainly related to institutional capacity for implementation and sustainability, fiduciary, and political and governance factors. The structure of the multi-country project with infrastructure to be implemented at multiple sites in the basin presented a complexity that the VBA had limited experience in. The VBA's capacity needed to be enhanced significantly for effective delivery of the project.

B. KEY FACTORS DURING IMPLEMENTATION

(a) Factors Subject to the Control of the Implementing Entity

76. **The delays early on in project implementation cost the project implementation time.** The project became effective four months after signing. The project launch scheduled for December 2015 was postponed due to political instability in Burkina Faso. The project was eventually launched in Accra, Ghana, on February 16, 2016. The first PSC meeting took place after the launch, and the PSC approved the 2016 VSIP budget and work plan. Activity implementation started after the first PSC meeting, with about 36 months of project implementation time left—insufficient for Component 3 implementation.

77. **Implementation of feasibility studies for Component 3 actions early during project implementation took longer than anticipated.** With feasibility studies and key TOR for the feasibility not ready at the beginning of project implementation, the non-recruitment of key staff (M&E specialist, and environment and social safeguards specialists), and non-implementation of the M&E plan in the execution manual, the delayed start of activities would mark the onset of delays that lasted the entire project.

78. **Early in project implementation, the VBA's weak capacity was reflected in delays in procurement, which led to delays in initiation of activities.** The recruitment of consultants for the development of the Water Charter (Component 1) and the preparation of sub-projects' feasibility studies (Component 3) faced delays. The delays with the feasibility studies for Component 3 would have an impact on the implementation of the Component 3 priority actions that made up 60 percent of the project cost. VBA and project staff trainings (Component 4) were highly needed to address capacity gaps. Training was provided for VBA staff (Component 4) to address the capacity gaps. The training delivered over two weeks in Cotonou, Benin, appears to have had limited impact on the capacity of the VBA staff. Procurement, for example, remained a bottleneck for the project activities. Poorly written TORs and evaluations that required revision—often by the task team leader (TTL)—led to delays in implementation in finalizing processes.[10]

79. **The project faced delays in procurement, a reflection of PCU issues with project management and staff availability for the project in addition to other VBA activities.** The VBA staff were not dedicated to the project full time. Insufficient clarity in procedures on delegation of responsibilities and backup arrangements when staff were on mission or leave resulted in lengthy processes and delayed responses to Bank requests. The procurement specialist had significant procurement experience, but limited experience with and knowledge of Bank processes. The VBA did not plan adequately for procurement; procurement processes needed to be relaunched due to quality issues. Bank interventions included training (the procurement specialist attended two trainings). The Bank team organized training for all PCU staff to strengthen knowledge of World Bank procurement guidelines. However, capacity remained weak and was a key factor in project performance.

[10]See, for example, the memorandum of understanding for project implementation in Ghana, which shows the VBA's poor interpretation of the financing agreement.

80. **Other than the procurement specialist and the accountant, full-time VBA staff had to fulfill their responsibilities, while simultaneously carrying out the mandate of the VBA.** The project coordinator worked full time on on his regular VBA responsibilities. During the ICR mission, the VBA indicated that, the project coordinator spent 80 percent of his time on the VSIP. Similarly, the legal specialist who was the officer in charge of Component 1, and the officer in charge of Component 3 had other responsibilities executing the VBA mandate. The project design assumed the VBA staff had limited or no other work in addition to the VSIP project. One of the key issues for management attention in the third Implementation Status Report (ISR) is "all other project staff (coordinator and technical experts) are full-time VBA staff and cannot dedicate enough time to the project implementation."

81. **Implementation arrangements.** The project objective was to improve the capacity of the VBA for transboundary water resources management. The project aimed to achieve this through the implementation of priority actions from the SAP, with the PCU comprising VBA staff. With this approach, it was assumed that the capacity of VBA staff would be enhanced through learning by doing and training offered by the Bank. However, the training provided by the project was not sufficient to improve the implementation capacity of the PCU. Further, no additional adjustments were made in the support to the VBA to assist the VBA to further improve capacity such as additional technical assistance. As a result, the capacity to implement the project remained below what was expected, negatively impacting the pace of project implementation and achievement of results.

82. **The involvement of VBA focal points was critical for implementation of project activities and monitoring in the countries.** The PCU needed to involve the national focal points in the environmental and social screenings of priority actions and subsequent environmental and social studies. These activities needed approval by national authorities before sub-project execution began. The VBA included the responsibilities related to safeguards in the *protocole d'accord* for the implementation of sub-projects between VBA and the national governments. As a risk mitigation measure, training on environmental and social screenings and studies for VBA staff and national focal points would be organized. The Bank safeguard specialists would facilitate this process. However, although implementation of the priority actions through focal points was a practical choice, the capacity of institutions other than the VBA to manage funds under this project had not been assessed.

(b) Factors Subject to the Control of the World Bank

83. **Adequacy of supervision.** The Bank team had high TTL turnover; inadequate transition arrangements did not allow continuity and adversely impacted project implementation. The project had five TTLs in four years. The frequent TTL changes may have led to limited identification of opportunities and proactivity by TTLs because they would need to assess the project before making changes. An example is the capacity gap that was left unaddressed despite acute awareness by TTLs. High TTL turnover may have indirectly contributed to implementation challenges and delays. Given the poor capacity of the client, particularly for implementation of Component 3, adaptive implementation support by the Bank team would have benefited the VBA.

84. **Drawn-out restructuring process.** The restructuring process which started after the MTR in November 2017 and extended until January 2019, was lengthy and cost the project implementation time. The countries were invested in the priority actions, which represented investments and benefits to the local population, and did not easily agree with the decision to reduce the scope of Component 3. The prolonged nature of the restructuring led to the cancellation of activities that could have been carried out, such as support to smallholder farmers in Mali. This process partially contributed to the non-achievement of Component 3.

85. **Safeguards and M&E support through technical assistance to the VBA was necessary.** While the VBA was responsible for recruiting specialists to ensure completeness of their team, they could not do this because of budgetary constraints. Absence of these specialists negatively impacted implementation of Component 3 activities.

(c) Factors outside the Control of the Implementing Entity

86. **The security situation in Burkina Faso in November 2015 led to delayed project launch and start of activities.** Due to the security situation in Burkina Faso between November 2015 and January 2016, the project launch—supposed to be held in Ouagadougou, Burkina Faso—was delayed. The project launch was held on February 16, 2016, in Accra. Implementation of activities was delayed as a result. The first PSC meeting took place on February 19, 2016, after the launch. The PSC approved the 2016 VSIP budget and work plan. Activity implementation started after the first PSC meeting, with about 36 months of project implementation time left. This period was insufficient for Component 3 implementation.

87. **The security situation in Mali in 2019 led to the cancellation of the irrigation activities under Component 3.** The activity—providing capacity building and materials support on best agricultural practices to 90 smallholder farmers to improve the productivity of small farms—was abandoned due to the deteriorated security situation.

IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

A. QUALITY OF MONITORING AND EVALUATION (M&E)

88. **Rating: Modest**

M&E Design

89. **The project had a simple PDO – to improve the capacity of the recipient for transboundary water resources management.** The choice of indicators and the results framework could have been better aligned with the project outcome. The project had a mixed set of indicators, some with clear link to the PDO statement while others could not be clearly linked to the PDO. With PDO indicator 1, the action plan to implement findings of the Bank-executed IA validated by member countries has a direct bearing on the PDO. In contrast, PDO indicator 2, the number of direct beneficiaries (from the implementation the six priority actions), has limited direct bearing on the PDO.

90. **Intermediate results should fully capture the contribution of activities toward achieving the outcomes.** The Water Charter, communication plan, and stakeholders consulted are key elements of good transboundary water resources management. Monitoring and measuring these would indicate the extent to which the VBA's capacity would be improved as a result of project implementation. On its own, monitoring the number of priority actions and not more specific indicators linked to the actions—for example, flow restoration as a result of reduced deforestation—does not adequately capture the activities' contribution to the PDO. Further, the actions, while deemed to be in transboundary areas of the basin, could have been designed to be jointly implemented by the countries.

91. **After the restructuring changes, the results framework was not adequately updated.** At restructuring, the first intermediate results indicator, area reforested, was modified to "area protected due to awareness raising among the local population on the potential risks of deforestation." The indicator wording in the results framework remained "area reforested." The indicator wording implies that the project would still carry out

tree planting activities in Benin, Côte d'Ivoire, Mali, and Togo. The area increased from 150 hectares to 200 hectares. The project documents do not outline how the area would be measured. This indicator would have been difficult to measure and attribute to project activities.

92. **The project design was overly optimistic for Component 3.** The project targets for Component 3 were ambitious for a four-year project given the need for feasibility studies, nursery production for the trees, and development of an irrigation scheme. The M&E plan did not set realistic intermediate milestones, with most indicators being achieved in the final year of implementation. Realistic milestones earlier in project implementation would have provided a means of monitoring progress and early action.

M&E Implementation

93. **The VBA had no M&E specialist on its staff.** The PAD states that the Component 3 coordinator would be responsible for M&E during the project implementation. The VBA outlined an M&E plan in the project execution manual but did not fully implement the plan. A wider set of indicators is defined in the project execution manual,[11] accompanied by an elaborate plan for M&E that would involve the VBA national focal points in each country. The plan calls for quarterly M&E reports that would be produced for the project and shared with the line ministries in each of the member countries. However, the VBA did not have an M&E specialist to produce the reports.

94. **Challenges for M&E planning and implementation were due to the low capacity at VBA.** While the VBA tried to implement an M&E plan for their broader activities, staff did not have an effective plan for M&E, and M&E reports were not submitted. While ad hoc reports were produced and shared with the Bank team before implementation support missions,[12] the M&E plan outlined in the project execution manual was largely not adhered to for the greater part of the project duration.

95. **The weaknesses in M&E design related to the indicators could have been addressed during implementation, notably when the project was restructured.** However, the frequent TTL changes may have resulted in lack of action to adjust the indicators to better align them with the project objectives. For example, while the number of beneficiaries was substantially reduced at restructuring, this indicator could have been changed into a more easily measured indicator, for example one that would include beneficiaries of the numerous trainings and capacity building opportunities offered by the project.

M&E Utilization

96. **The M&E system was not consistently used to monitor actual versus planned progress and to adjust allocation of resources, which was critical to support the day-to-day project management.** The project team made effective use of M&E for activities that contributed to PDO indicator 1. There were several feedback validation workshops for outputs in the basin countries. The weakness was not using the plan outlined in the execution manual, which would have allowed the team to track progress, particularly for Component 3. The PSC met annually to approve work plans and make decisions as necessary. For these meetings the VBA provided status reports to the PSC. M&E reports did not influence project implementation. M&E influenced restructuring and some of the changes made when the project was restructured. However, M&E was not effectively used to change indicators that required aligning with the PDO, such as the priority actions in Component 3.

[11] Paragraph 9.3 in the project execution manual.
[12] From an interview with one of the project's five TTLs.

97. **The project did not use an M&E plan.** During the ICR mission, the ICR team discovered that the M&E of the project was carried out through ad hoc task tracking, with email reminders sent to the coordinator or consultant responsible for tasks to take the necessary action. The procurement specialist sent a monthly report to the Bank giving the status of all the contracts signed and under execution and those under preparation. The information included the percentage of the contract sum paid as well as perspectives on contracts not yet signed. This approach to M&E may have been adequate for the VBA to monitor progress of Components 1 and 2, but it lacked the robustness required for timely execution of Component 3 activities. This resulted in many delays of activity execution as documented in the ISRs and reflects the lack of achievement of Component 3.

Justification of Overall Rating of Quality of M&E

Rating: Modest

98. **M&E is rated Modest because of moderate shortcomings in the M&E system's design and utilization, and significant shortcomings in M&E implementation.** After restructuring, the results framework was not adequately updated to indicate changes to indicators. Although the project team did not make adequate use of M&E, they produced requested project updates and reported on results as required by the Bank. The M&E was not effectively used to inform both the VBA and project management of decision-making, especially for implementation of Component 3. The unsatisfactory implementation was compounded by the absence of an M&E specialist.

B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE

Safeguards

99. **The project was classified as Category B because it was anticipated that it would not generate significant environmental and social risks and impacts.** The Environmental and Social Management Framework (ESMF) and associated management plans were developed for the infrastructure and physical works activities to be financed by the project; however, these became redundant after restructuring halted these activities. To ensure the long-term sustainability of VBA-financed activities, VBA staff were supposed to receive training in environmental screening and design of environmental and social management measures. The agreed recruitment by VBA of environmental and social safeguards staff to support the project team was not conducted. The absence of safeguards (social and environmental) specialists—including after the Bank raised this issue at the MTR—continued to affect the implementation of Component 3, particularly the Burkina Faso action on riverbank protection that required a social evaluation.

Financial Management

100. **The VBA had adequate financial management arrangements in place.** They met the Bank's minimum requirements under OP/BP10.00. One position established for the PCU was for an accountant. Except for the final period between May and August 2019, the project had a Satisfactory rating for financial management throughout implementation. In the final six months of the project, the project accountant resigned from the VBA. The risk in the final six months of project implementation was associated with several commitments that were still active and the expenditures needed to be received and accepted by the closing date. Despite this, the financial audit was completed satisfactorily before the end of the grace period.

Procurement

101. **Procurement capacity was limited.** Assessment of Procurement Capacity and Risks at the appraisal stage indicated that the Director of Administration and Finances (DAF) was responsible for carrying out procurement for activities financed under VBA's budget. For funds received from external donors, VBA

nominates a coordinator who has overall responsibility of the project. The coordinator supervises TORs and technical specifications production and conducts procurement processes with the support of the DAF. The DAF and staff had limited knowledge of the Bank procedures, and key members of the evaluation committee lacked experience in Bank procedures.

102. **Five actions were implemented as risk mitigation measures:** (i) strengthening the DAF capacity by recruiting a procurement specialist with experience in Bank procedures; (ii) training conducted by the Bank procurement team for key members of the evaluation committee; (iii) using standard Bank bidding documents, requests for proposals, and evaluation reports; (iv) elaborating a project implementation manual, including administrative procedures regarding procurement processes; and (v) publishing all procurement notices in local and well-known newspapers in addition to the VBA website.

103. **The project experienced procurement delays from the onset.** These delays contributed to the failure to achieve project objectives because activities were not executed on time. Starting in 2016, issues related to delays in procurement as well as lengthy processes and time responses to Bank requests occurred. Despite the implementation of risk mitigation actions, including support from the Bank and hands-on training, the challenges of low capacity persisted throughout much of the project duration. Capacity issues manifested as, for example, poor quality of some procurement documents and processes—from TOR drafting to evaluation reports—and delayed disbursement and implementation. The quality issues seemed more critical with Component 3 activities. Contract processing for Components 1 and 2 seemed comparatively less affected.

104. **The procurement performance was marginally satisfactory during implementation due to delays, particularly for Component 3.** As noted at the MTR, the VBA benefited from activities targeted at strengthening its procurement capacity, yet procurement challenges associated with the priority actions remained unresolved during the last six months of project implementation. This situation was largely due to the workload of the Financial Management Specialist (FMS) performing this role after the procurement specialist left in March 2019. That month, the Bank and the VBA agreed on a highly ambitious action plan for Component 3 activities. Contracting was not concluded by the agreed deadline to enable the reforestation action to be implemented before the project closure date. This activity was subsequently not implemented.

C. BANK PERFORMANCE

105. **Rating: Moderately Unsatisfactory**

Quality at Entry

106. **The project was based on the VBA's priorities as well as member countries' development priorities, which remain highly relevant.** The project design built on an earlier GEF TDA. There were shortcomings in the design of actions for Component 3, some of which are not directly in the realm of transboundary water resources management. Component 3 (SAP priority actions) as designed was optimistic, and it overestimated the capacity of the VBA to implement the six priority actions spread out geographically (see annex 7, map 1, for the spread of priority action locations) in four years.

107. **Project design shortcomings that affected implementation.** Project design shortcomings that affected implementation and results include (i) a complex implementation plan and the assumed role of the VBA national focal points in the implementation of Component 3 actions and M&E reliance; (ii) the short project duration; (iii) the inadequate attention to M&E that contributed to poor timeliness and poor execution of the

project; and (iv) the risks of land acquisition and compensation with the riverbank restoration action in Burkina Faso that were not adequately planned for.

108. **The project was inadequately prepared for implementation of SAP priority actions in Component 3**. The locations for priority actions were identified in January 2015; three of the six sites including Mali were not visited. Implementation of the priority actions was dependent on feasibility studies that would be financed by the project and carried out early in project implementation. Feasibility studies were designed as part of the project, and the TOR for the feasibility studies was not prepared during project preparation or immediately following project signing. As a result, there was limited time to implement the feasibility studies and actions. The project lacked appropriate arrangements to ensure that the feasibility studies would be implemented on time. Further, the budget allocation for the irrigation development (50 hectares) in Mali, US$520,000, was likely inadequate for feasibility studies and development of irrigation.[13]

109. **M&E shortfalls included inadequately defined indicators.** Targets for some indicators were set to be achieved from the fourth year. Indicators to measure progress earlier in the project should have been included. The PDO indicator 1, direct beneficiaries, while important for the countries, is not the best measure for improved capacity to manage transboundary water resources.

110. **Risks were adequately identified for procurement and financial management, but not for implementation of the priority actions under Component 3.** The project made provision for consultants to support the VBA and develop capacity within the VBA. However, there was no provision (for example, consultants or technical assistance) to reinforce the capacity of the VBA to deliver the priority actions and address the resettlement and land acquisition issues in Burkina Faso.

Quality of Supervision

111. **Despite the challenges faced during project implementation (including capacity and implementation arrangements), the Bank team remained committed to supporting the VBA.** The team was actively engaged from project preparation to implementation. The collaboration between the VBA and the World Bank was both valuable and critical to the achievements of Components 1 and 2. The achievements of these components continue to contribute to transboundary water resources management efforts by the VBA. For example, the ongoing joint VBA and WMO project on flood early warning in the Volta River basin builds on the communications strategy developed under Component 2 of the VSIP project. The VBA faced challenges with the implementation of Component 3 investments. The Bank was not able to adequately meet the VBA's support needs for Component 3.

112. **Implementation support outlined in the PAD included at least one formal implementation support mission per year to the VBA, with additional visits as deemed necessary.** According to the PAD, country-based (Bank) team members would readily support the VBA as needed. A legal specialist from the region would assist with the design and preparation of activities related to Component 1 and would engage other specialists depending on the needs of the client and project implementation. Based on the financial management risk assessment (moderate), there would be one formal on-site implementation support mission per year during implementation; a review of transactions would be performed during that mission.

[13] Innocencio et al., (2005) compared costs for new irrigation schemes across sub-Saharan Africa. For new construction they found the average cost to be $14,445/ha, and hardware cost to be $10,475/ha (in 2000 prices).

113. **The Bank team carried out several implementation support missions and held video conference consultations with the VBA to assist with project objectives.** However, due to persistent low capacity, lack of safeguards support, and lack of a functional M&E, the challenges remained unresolved. The Bank team repeatedly flagged the capacity challenges, but no decisive action was taken until the MTR, when project restructuring was recommended. This decisive action addressed the challenges of the VBA and ensured that team members could adjust project activities and possibly achieve satisfactory implementation. The challenges remained with the reduced project scope, yet again no additional action was taken, and the project remained in problem status. During the ICR mission, the client mentioned the challenges were partly a result of inadequate staff complement. The Bank did not allow the VBA to recruit necessary staff under the project in addition to the two positions funded by the project, yet the client did not have sufficient funds in its budget to recruit staff on its own. The recruitment of a safeguards specialist and a functional M&E for the project was approved in August 2017. In November 2017, at MTR, activities of Component 3 requiring these specialists were suspended. Restructuring started in November 2017 and lasted until January 2019, which was an unusually long time. It became unnecessary to continue with the recruitment.

114. **The VBA's inadequate capacity was noted multiple times—at project formulation and during implementation (noted in ISRs).** The VBA's inadequate capacity was noted multiple times—at project formulation and during implementation (noted in ISRs). The implementation missions were not commensurate with the level of support required by the VBA especially for implementation of Component 3 investments. The slow rate of project implementation was accredited to the weak capacity of the client even though the VBA had negotiated with the bank for additional project staff positions, including that of the accountant. For Component 3, project implementation support was not adapted to challenges facing the client.

115. **High TTL turnover and inadequate transition arrangements did not facilitate implementation continuity and may have impacted project implementation negatively.** The project had five TTLs in four years. The frequent TTL changes may have led to limited proactivity by TTLs because they would need to assess the project before recommending changes. An example is the capacity gap that was left unaddressed—despite acute awareness by all TTLs. The VBA did not recruit a safeguards specialist or an M&E specialist due to financial challenges; this staff deficiency was left unaddressed.

116. **Supporting the VBA has had mixed outcomes due to a multitude of factors, including the complex political economy of stakeholder countries and limited capacity of a newly established organization.** Establishing basin authorities and achieving sound water resources management are lengthy processes and transitioning to sound water resources management takes several years. Ambitious targets for interventions require more than four years. They also require high levels of support, especially when supporting national structures are weak. The weak capacity of the client was partly due to the limited support of its member states. Financial contributions from the member states were delayed and at times partially paid. This adversely affected the hiring of the needed staff. While amplified Bank support to implementation could have possibly countered the client's weak capacity, enabling the client to make progress in implementing their first large project and first Bank project, it is not evident that this alone would have improved client capacity and project implementation.

Justification of Overall Rating of Bank Performance

117. **Bank performance is rated Moderately Unsatisfactory due to issues related to quality at entry and quality of supervision.** The shortcomings include (i) shortcomings in project design and limited proactivity and missed opportunities to make changes to project design during implementation; (ii) missed opportunities to

turn around the project through advising the client on alternative implementation options (such as project extension when the project implementation rating was still moderately satisfactory); and (iii) missed opportunities to address the low capacity at VBA despite acute awareness of the capacity gap.

D. RISK TO DEVELOPMENT OUTCOME

Risk: Significant

118. **The risk to the development outcome is significant due to the project objective being partially achieved.** The project objective was to improve the capacity of the VBA for transboundary water resources management. The rationale for implementation of project by VBA staff and not a PMU was to enhance the capacity of VBA staff. The project recruited a procurement specialist and an accountant. With the slow progress implementing feasibility studies (Component 3), curtailment of activities under Component 3 due to implementation delays, the capacity improvements that were intended were not fully realized. Also, the VBA closed the VSIP project with less capacity than at the start of the project and would need to build its capacity in order to sustain the momentum gained from implementation of the VSIP project.

119. **The impact of the Water Charter will be realized after its ratification and implementation.** The ratification and implementation of the Water Charter are processes beyond the control of the project; they will take place beyond the life of the VSIP project. While there are positive indications that the Water Charter will be ratified, the risk to maintain project outcomes is significant as the remaining processes depend on member countries' budget support.

120. **With the failure to achieve results from the Component 3 activities due to non-implementation, there is a risk that that the VBA and member countries will revert to business as usual regarding management of water resources.** Since the establishment of the VBA in 2007, basin countries have yet to realize tangible benefits of their investment in the VBA. With this project, the countries anticipated results from the project—in the form of actions on the ground—as a return on their investment in the VBA. With the priority actions of Component 3 unrealized, it remains unclear what steps the countries will take to operationalize the Water Charter, especially if additional budget support is required. Countries may focus on implementing national-level interventions and projects (such as forestry projects in Benin). In place of transboundary collaboration among the six member countries, the countries may continue with bilateral collaborations for infrastructure development and management, as exists with flood releases between the Bagre and Akosombo dams in Burkina Faso and Ghana, respectively.[14]

V. LESSONS AND RECOMMENDATIONS

Project Preparation

121. **The project was the first support by the Bank to the VBA; the capacity of the VBA staff for Bank project implementation needed to be significantly improved.** The project was designed to be implemented with existing VBA staff in four years. Given the low capacity of the client, lack of experience with World Bank projects, and limited budget to recruit an environmental specialist and M&E specialist, the four years for project implementation was ambitious. For successful project implementation, it is necessary to provide

[14] These arrangements existed prior to both the establishment of the VBA and the VSIP project.

enhanced support to clients such as the VBA.

122. **Because transboundary river basin interventions are complex, projects should be in an advanced preparedness stage at the start of implementation.** Inadequate preparation shortens implementation time because preparation extends to the early implementation period. The Bank should work with the borrower to ensure the identification of project sites, design and implementation of feasibility studies, and identification of key resources (such as safeguards specialists and budget for feasibility studies).

123. **In hindsight, the project design was overly optimistic in including infrastructure activities to be implemented in four years, through a basin governance framework, with a relatively young agency and without any feasibility studies conducted at project entry.** The first year of project implementation was an opportunity to adjust the project implementation approach and project duration. The political instability in Burkina Faso that led to the postponement and a change of venue for the project launch was another opportunity for the Bank team to advise the VBA to request changes to implementation time frame, some indicators, and implementation arrangements. The Bank could provide better oversight and advise the client accordingly when presented with opportunities to make changes.

124. **Transboundary river basin interventions are complex and yield results after long time frames because several countries must collaborate, and it takes a long time to reach consensus.** They require project duration that is commensurate with the basin structure and project complexity. Experience in transboundary basins elsewhere shows that long-term engagement is necessary for results. Longer intervention periods or adequate implementation times are likely to yield results because consultation is required to reach consensus among several countries. In the case of the Volta basin project, the goal of four years for interventions was optimistic, given the capacity and experience of the client. For river basin projects the Bank should work with the client to ensure that adequate time for project implementation is programmed. A phased approach to developing capacity of the river basin authority with tangible milestones is likely to yield results and strengthen the capacity of the river basin authority. The Bank could assist clients to develop phased projects to achieve intended objectives.

125. **For transboundary river basin projects, projects could be structured around regional and national axes, with countries implementing the national components and regional agency implementing the regional component.** This approach enables countries to galvanize their efforts on the national component, with increased ownership of the project at the national level.

126. **Accurate assessment of client capacity during project design leads to project design aligned with client capability.** The project design failed to consider that the VBA had limited financial resources and would likely fail to recruit the additional key specialists (for safeguards and M&E) required for successful implementation. As with the procurement specialist and accountant, the safeguards and M&E specialists should have been funded by the project.

127. **During project design key dates on the client's calendar should be identified, and key milestones aligned with the key dates to allow for rapid decision-making.** During project design the Bank needs to consider and buy in to the client's processes and align project milestones with the client's calendar to facilitate more proactive actions, such as restructuring. For the VSIP project, there was a three-month delay between the MTR recommendation for restructuring and the PSC meeting at which a client decision was reached. Aligning key project decision milestones, such as an MTR, with steering committee meeting dates and the

client calendar would have allowed faster decision-making regarding project restructuring.

128. **Regular meetings of the client decision makers should be planned to allow for agile decision-making.** For the Volta project, the PSC met annually, mostly to discuss and approve the work plan. The Bank should have worked with the client to include flexibility for meetings addressing key issues arising during implementation.

Project implementation

129. **Tailored interventions are necessary for successful project implementation.** It is necessary to provide a higher level of Bank implementation support, particularly for new clients with weak capacity. For the VSIP project, while the VBA procurement capacity improved over time, challenges persisted during the first half of project implementation. While the Bank supported the client through several trainings, more interventions may have been necessary to address the capacity gap. Weak capacity could have been mitigated by additional training and support through consultants or technical support. In addition, programming additional training in such a way that project activities are not interrupted builds capacity while at the same time ensuring progress with project implementation.

130. **Timely decision-making during implementation is necessary to achieve project objectives.** The Bank should consider all opportunities to restructure the project to ensure the achievement of objectives. Early on in implementation, it is crucial to capitalize on opportunities to restructure projects. The Bank could have used opportunities such as the security situation in Ouagadougou in early 2016 to restructure the project, adjust project design, and modify the results framework to make results more achievable.

131. **Adjusting implementation support to suit client needs may help clients with limited capacity to improve implementation performance.** High-intensity implementation support is vital for clients with limited capacity. Increased intensity of implementation support missions or video conference support provides the project team with the needed capacity support (such as for procurement, safeguards implementation, and general project management) to improve the rate of implementation and attainment of results.

132. **The right mix of skills on the implementation support team and collaboration, such as with the environment and disaster risk management teams, is essential for successful project implementation.** The mix includes critical skills such as safeguards, M&E, and environment and disaster risk management skills. The Bank team composition during implementation should have the right mix of technical skills to support clients during project implementation. During VSIP project implementation, the Bank team did not have a forestry specialist or an irrigation specialist, which resulted in delayed advice and no objections for TOR. The staff deficiencies also compromised the Bank's ability to adequately support the client. The task team could have requested the Bank management to provide the needed staff profile.

133. **It is essential to match the client's financing needs and the high ambition of the Bank to ensure incremental capacity building.** At appraisal, there is a need to assess the client's needs. If necessary, the Bank should assist the client to develop a multiphase project for the amount that the Bank is willing to make available to the client. A multiphase approach allows the client to focus on a smaller project initially while developing the capacity to implement larger projects.

134. **Provision of additional support should be considered for clients with limited capacity, such as the Bank-executed support in parallel with recipient-executed project** Additional support from Bank-executed

trust fund activities throughout the project duration is likely to provide the necessary support to the client and ensure achievement of results.

135. **Fewer TTL changes and adequate transition arrangements are necessary for implementation continuity and fewer interruptions to implementation.** High TTL turnover leads to delayed action because each new TTL must familiarize him or herself with the project before recommending changes. High TTL turnover can be detrimental to project implementation by a team with both low capacity and no experience implementing Bank projects. Management of transitions between TTLs will likely limit the impact of TTL changes on project implementation. Management of transitions could include working with the client to (i) ensure a smooth handover between TTLs; (ii) ensure a common understanding of project vision and expectations between TTLs; and (iii) encourage TTL overlap even for a short period to provide support and ensure continuity.

ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Objective/Outcome: The proposed global objective is to improve the capacity of the VBA for transboundary water resource

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Action Plan to implement findings of Institutional Assessment developed and validated by member countries	Yes/No	N 15-Sep-2015	Y 21-May-2015	Y	Y 31-Aug-2019

Comments (achievements against targets):

The delivery of the Bank-executed institutional assessment (IA), was delayed and not aligned with the project timeline. The VBA initiated the activities on water charter development and development of communication strategy while the IA was under development. In preparation for the operationalization of the Water Charter, the VBA developed an action plan that focuses on the ratification and implementation of the Water Charter. This action plan is aligned with recommendations of the Bank-executed IA. The VBA action plan has three axes: Ratification of the Water Charter; Implementation of the Water Charter; and Communication, awareness-raising about the Water Charter content. The timeline for implementing the action plan is 2019 to 2026. Actions carried out in 2019 were validated by the member countries.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Direct project beneficiaries	Number	0.00 15-Sep-2015	50000.00 21-May-2015	6000.00 15-Jan-2019	0.00 28-Aug-2019
Female beneficiaries	Percentage	0.00	20.00		0.00

Comments (achievements against targets):
Due to delays, capacity, and security issues, none of the proposed investments under Component 3 could be implemented except (i) training of civil society organizations; and (ii) organization of the 4th VBA Stakeholders Forum. Indeed Component 3 activities could not be carried out due to insufficient implementation window before project closure. Therefore there were no direct beneficiaries reached as a result of implementation of Component 3. However, through capacity building activities in the form of training workshops and training for VBA staff, the project reached several beneficiaries who will, in turn, reach many beneficiaries in the basin through awareness-raising campaigns and IWRM activities by the VBA. The project trained 200 CSOs, at least 30 from each country, on ecosystems management. The CSOs' awareness campaigns on the ground will contribute to outcomes such as reducing deforestation, reduced erosion, and improved water quality, reaching thousands of beneficiaries in the Volta River basin and those outside the basin who depend on the basin's ecosystem services.

A.2 Intermediate Results Indicators

Component: Implementation of Strategic Action Programme priority actions.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion

Area restored or re/afforested	Hectare(Ha)	0.00 15-Sep-2015	150.00 21-May-2015	200.00 15-Jan-2019	0.00 31-Aug-2019
Area re/afforested	Hectare(Ha)	0.00 15-Sep-2015	150.00 21-May-2015	200.00 15-Jan-2019	0.00 31-Aug-2019

Comments (achievements against targets):
Component 3 design was overly optimistic. The project restructuring completed in January 2019 revised Component 3 to (i) cancel the activities that were no longer deemed achievable under the current time-frame of the project; and (ii) to revise the scope of the remaining activities to ensure the feasibility of implementation during the remaining project time. After the project restructuring, delays in procurement resulted in non-implementation of all Component 3 activities. The reforestation activity was not implemented. At restructuring, the reforestation activity was revised to reflect "200 hectares protected against deforestation". The implementation of Component 3 was limited to two activities: (a) training of civil society organizations in ecosystems management; and (b) organization of the fourth VBA Stakeholders Forum.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of priority actions implemented in Volta Basin transboundary zones.	Number	0.00 15-Sep-2015	6.00 21-May-2015		0.00 28-Aug-2019

Comments (achievements against targets):
Component 3 design was overly optimistic. At project design, it was envisaged that VBA would be able to conduct feasibility studies and then implement complex works on the ground in 6 countries in four years. There were delays in implementation of Component 3 activities partly due to low capacity of the client and inadequate implementation support evident in poorly defined TORs for feasibility studies and the lengthy review for technical documents. The project restructuring completed in January 2019 revised Component 3 to (i) cancel the activities that were no longer deemed achievable under the current

time-frame of the project; and (ii) to revise the scope of the remaining activities to ensure the feasibility of implementation during the remaining project time. After restructuring, the Component 3 activities could not be carried out due to security issues and insufficient implementation window before project closure.

Component: Water Charter Development for Volta River Basin

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Water Charter drafted and validated by member states	Yes/No	N 15-Sep-2015	Y 21-May-2015		Y 28-Aug-2019

Comments (achievements against targets):
The Volta Basin Water Charter was developed and validated in national workshops and regionally between July and December 2018. The Water Charter was endorsed by the VBA Council of Ministers.

Component: Facilitating dialogue, communication and project monitoring.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Communications Plan developed and validated by member countries	Yes/No	N 02-May-2016	Y 21-May-2015		Y 28-Aug-2019

Comments (achievements against targets):
This component was achieved. VBA communication strategy and plan were developed and validated by member countries.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of stakeholders consulted during development of Communications Plan	Number	0.00 15-Sep-2015	500.00 21-May-2015		500.00 28-Aug-2019

Comments (achievements against targets):
The development of the VBA Communications Strategy and Plan was completed, along with the associated consultations with stakeholders. At least 500 stakeholders were consulted.

B. KEY OUTPUTS BY COMPONENT

Objective/Outcome 1: To improve the capacity of the VBA for transboundary water resources management	
Outcome indicators	1. Action plan to implement findings of Institutional Assessment developed and validated by member countries. 2. Direct project beneficiaries (50,000; 20% female).
Intermediate results indicators	1. Water charter drafted and validated by member states. 2. Communications strategy and plan developed and validated by member countries. 3. Number of stakeholders consulted during development of communications plan (500). 4. Number of priority actions implemented in the transboundary areas of the Volta River basin (six). 5. Area reforested (150 hectares).
Key outputs by component (linked to the achievement of the objective/outcome 1)	**Components 1 and 2:** 1. Technical, legal, and institutional diagnostic report. 2. Water charter validated by the member countries and endorsed by the Council of Ministers. 3. Communications strategy and plan developed and validated by member countries. 4. Information shared through the GEF IW-Learn platform. 5. Updated administrative, financial and accounting procedures manual. 6. VBA National Focal Structures established; capacity of the National Focal Structures of the VBA member countries strengthened. **Component 3:** 1. Feasibility studies for the six priority actions. 2. 200 CSOs trained in ecosystems management. 3. Ecosystem management modules developed for the VBA. **Component 4:** VBA staff trained, and human resources capacity of the VBA strengthened.

Note:

Note: CSO = civil society organization; GEF = Global Environment Facility; IW-Learn = International Waters Learning Exchange and Resource Network; NFS = National Focal Structure; VBA = Volta Basin Authority.

ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION

A. TASK TEAM MEMBERS

Name	Role
Preparation	
Shelley Mcmillan	Task Team Leader
Mamata Tiendrebeogo	Procurement Specialist
Ngor Sene	Financial Management Specialist
Salamata Bal	Social Specialist
Lionel F. Yaro	Team Member
Sylvestre Bea	Team Member
Abdoulaye Gadiere	Environmental Specialist
Sirein Awadalla	Team Member
Koffi Hounkpe	Disaster Risk Management Specialist
Ibrahima Ly	Legal / Institutional Specialist, Consultant
Diane Arjoon	International Water Management Specialist, Consultant
Carl Dingel	Disaster Risk Management Specialist
Maya Abi Karam	Senior Counsel
Faly Diallo	Finance Officer
Lucson Pierre-Charles	Program Assistant
Gwladys Nadine Isabelle Kinda	Program Assistant
Nadia Agnegue	Program Assistant
Leissan Augustine Akpo	Program Assistant

Supervision/ICR	
Seydou Traore, Sanjay Pahuja	Task Team Leader(s)
Mathias Gogohounga, Mohamed El Hafedh Hendah	Procurement Specialist(s)
Jean Charles Amon Kra	Financial Management Specialist
Sandrine Egoue Ngasseu	Team Member
Gertrude Marie Mathilda Coulibaly Zombre	Social Specialist
Leandre Yameogo	Environmental Specialist
Veronique Verdeil	Team Member
Abdoulaye Gadiere	Team Member
Bienvenue Helene Karambiri	Team Member
Emeran Serge M. Menang Evouna	Team Member
Yolande Bougouma-Zagre	Team Member
Aissatou Diallo	Team Member
Thierry Davy	Team Member
Jean Vincent Koua	Team Member
Suzane Kabore Rayaisse	Team Member
Lionel F. Yaro	Team Member
Guy Tchakounte Tchabo	Team Member
Abdoul Wahabi Seini	Team Member
Marie-Laure Lajaunie	Team Member
Bourama Diaite	Team Member

B. STAFF TIME AND COST

Stage of Project Cycle	Staff Time and Cost	
	No. of staff weeks	US$ (including travel and consultant costs)
Preparation		
FY15	29.096	161,670.97

FY16	10.957	89,382.46
FY17	3.100	20,068.51
Total	**43.15**	**271,121.94**
Supervision/ICR		
FY16	.092	3,743.36
FY17	15.792	91,565.82
FY18	25.083	138,033.06
FY19	29.404	99,933.38
FY20	43.475	201,710.84
Total	**113.85**	**534,986.46**

ANNEX 3. PROJECT COST BY COMPONENT

Components	Amount at approval (US$, millions)	Actual at project closing (US$, millions)	Percentage of approval (US$, millions)
Water charter development for Volta River Basin	1.99	1.97	98.9
Facilitating dialogue, communication, and project Monitoring	1.26	0.52	41.1
Implementation of SAP priority actions	6.9	1.22	17.7
Project management	0.79	0.53	67.6
Total	**10.94**	**4.24**	**38.8**

Note: SAP = Strategic Action Program.
Exchange rate US$1 = CFA 591.95 (December 10, 2019).

ANNEX 4. EFFICIENCY ANALYSIS

The PAD Economic and Financial Analyses

1. **Benefits.** According to the PAD, the project was expected to generate a wide range of quantifiable and non-quantifiable benefits including:

(i) **Socioeconomic benefits** through dredging riverbeds and reinforcing extremely degraded portions of their banks, which would significantly contribute to increase the flow of targeted rivers, water resource availability, and flood control; these in turn would enhance the productivity of cultivated areas and crop, fishing, and pastoral activities in the basin resulting in socioeconomic returns.

(ii) **Food Security and Nutritional Benefits** as siltation and continued degradation of river banks due to anthropogenic actions were negatively impacting agricultural, fishing and pastoral productivity, undermining efforts to ensure food security within the basin. Implementation of selected priority actions aimed at increasing water resource availability would allow for incremental production of diversified agricultural products.

(iii) **Job creation and poverty alleviation** through increased hydro-agricultural cultivated areas to be induced by increased water resource availability caused by project reforestation, riverbank beautification, riverbed dredging-related activities, and rehabilitation works.

(iv). **Environmental benefits** would result from reforestation; agroforestry development and stabilization of selected riverbanks and hill slopes resulting in reduced soil erosion in critical areas; increased vegetal cover along the targeted riversides; increased preservation; and restoration of coastal and marine ecosystem goods and services.

2. **Project costs were estimated at US$10.94 million over the four-year implementation period.** Annual operation and maintenance (O&M) costs for various investments related to the project were estimated at 10 percent of respective capital expenditure. Most of actual costs at closing (US$4.4 million) were spent in Components 1, 2, and 4.

3. **The financial and economic analyses conducted for the PAD focused on a cost-benefit analysis of selected priority actions under Component 3.** The analyses covered 25 years, including four years of project implementation and considered only quantifiable benefit and cost streams from Component 3 sub-projects, which were not implemented. The viability of productive investments under these sub-projects was verified through computing net present values (NPVs) and internal and economic rates of return (IRR/ERR) and their comparison to the associated capital investment and the opportunity cost of the sub-project funds, estimated at 12 percent. The financial analysis considered selected productive investments based only on Component 3 direct costs and benefits. The economic analysis was prepared based on direct and indirect costs and expected benefits.[15] Several other project benefits were not quantified because of lack of usable data. These included mainly Components 1 and 2 benefits; environmental benefits (such as carbon credits); non-timber benefits such as hunting; and biodiversity and ecological protection benefits, which represent returns of significant value for the project. Results of this partial analysis indicate that the proposed operation was economically

[15] In addition to the anticipated revenues projected to accrue to targeted local communities, the project will contribute to the creation of about 2,500 local jobs and the generation of an average total annual income (salary) of about US$828,000 over the project life span. Income generating activities planned under the project would, on the other hand, benefit many local communities, including women and would contribute to improving their livelihoods.

viable at the regional level, with a positive NPV of about US$2,279,000 and an overall economic rate of return (ERR) estimated at 21 percent.

4. **The project had non-quantified benefits which were articulated in the PAD.** The PAD analysis indicated that non-quantified benefits from institutional capacity building activities planned under Component 1 along with activities under Component 2 aimed at fostering dialogue and effective dissemination of information on ongoing and planned initiatives in the Volta basin for coordination and monitoring purposes would catalyze stakeholders' energies to envision and develop a more ambitious program, building on the results and lessons learned from the project.

Restructuring of the Project

5. **The project was restructured in January 2019 with cancellation of US$2.629 million.** Targets under Component 3 were not met. The implementation status of the project at closing is as follows:

> **Component 1**: The elaboration of the Water Charter has been finalized and has been endorsed by the VBA Council of Ministers, thus surpassing the project targets.
> **Component 2**: The development of the VBA communications strategy and plan has been completed, along with the associated workshops and consultations. The study on the strengthening of the VBA National Focal Structures has been completed and validated. Targets for Component 2 have been met, including as stated in the PAD: "*to serve as the guiding document for improving coordination and collaboration among all relevant stakeholders; and on information sharing on current and planned projects in the Basin*".[16]
> **Component 3:** The project restructuring completed in January 2019 revised Component 3 to (i) cancel the activities that were no longer deemed achievable under the remaining time frame of the project; and (ii) revise the scope of the remaining activities to ensure the feasibility of implementation during the remaining project time. After restructuring, delays and security concerns resulted in additional activities that were not able to proceed. Therefore, the implementation of this Component was limited to only three activities: (a) training of CSOs; (b) preparation of feasibility studies for the six sub-projects (for which the project implementation unit and national focal points conducted field missions in each of the sub-project areas to raise awareness and inform local stakeholders, including citizens, authorities, CSOs); and (b) organization of the 4th VBA Stakeholders Forum.

6. **The reduction in the project scope during implementation set more achievable targets for the project within the project time frame.** The PDO was to improve the capacity of the VBA for transboundary water resources management through institutional development activities (effectively addressed by Components 1 and 2) and implementation of priority actions to lead to direct environmental and livelihood benefits. The restructuring changes and activity cancellations led to (i) a reduction in project costs (from US$10.9 million to US$4.4 million); and (ii) a partial achievement of the PDO. The direct beneficiaries from priority actions (Component 3) were initially substantially reduced and ultimately not achieved.

ICR Economic and Financial Analyses

7. To account for the discrepancy between the quantifiable outcomes expected to be achieved after the project completion on selected priority actions planned under Component 3 (hydro-agriculture and agroforestry and income generating activities) that were canceled (because they were no longer deemed

[16] The PAD states (p. 48) that "the Communication Strategy and Plan and procedures for internal regulations would provide VBA and its national counterparts with standardized tools for data collection and monitoring and facilitate exchange of information on actual transboundary threats such as floods and droughts".

achievable under the remaining time frame of the project), and the outcome attained from Component 3, the efficiency is considered negligible.

8. **However, an alternative impact assessment approach could be considered for verifying the overall efficiency rating of the project at closing considering the implemented activities and costs incurred.** Under this alternative approach, the ICR team considers that highly positive outcomes have been attained, from the economic efficiency analysis perspective, based on the strong platform created for the following: (i) future economic returns with shared prosperity, and (ii) effective climate change risk management (early warning systems) being launched on the six VBA countries; both mentioned in the PAD. The project has delivered an action plan to implement findings of the IA as validated by the member countries. The stakeholder countries amended and validated the Water Charter with three annexes: (i) protocol for data and information sharing between the six states; (ii) notification of planned measures and terms of reference; and (iii) the composition of bodies to implement the Water Charter to effectively improve water management in the Volta River basin through the application of good governance and environmental protection principles.

9. **The project cost of development of the Water Charter and strategy and the communication strategy and plan show that Components 1 and 2 were implemented efficiently and within the PAD planned budget.** It was not possible to compare with the cost for other basins because of lack of adequate information and the unknown starting point of the development process. The VBA's Water Charter is now in an advanced process to become a legal instrument that will specify the actions to be taken for integrated water resources management of the countries' trans-boundary rivers and aquifers in the basin. Endorsed by the VBA Council of Ministers, as the validation stage is completed, the Water Charter will clearly define roles and responsibilities of the riparian countries in the use of the water resources, strengthening the VBA's mandate to promote a harmonious and coordinated water policy in the basin, and defining principles that will allow the sustainable and integrated water resources management including common principles about how water and ecosystems should be utilized and protected for the benefit of present and future generations.

10. **Capacity building from workshops and shared information has boosted riparian trust and confidence, shaping the basis of transboundary cooperation.** The VBA has improved its approach to stakeholder communication, enabling enhanced dialogue among stakeholder countries. This will improve water resource management and development in the basin in the long term. The VBA is now proactive in strengthening knowledge generation and dissemination, sharing studies and knowledge products ranging from regional planning documents to more technical studies on water resources and climate risks management, development and coordination of early warning systems, and water economic infrastructure development in the region through an improved VBA website and by direct interactions and participation in international workshops. To facilitate knowledge sharing and use at the country level, the VBA has completed a study to establish and strengthen the capacities of the National Focal Structures. Complementary actions developed under the project included training in the law applicable to international waters and rivers, and the facilitation of training sessions as part of the process of adoption and ratification of the Water Charter. Based on this alternative impact assessment approach, the efficiency can be considered as Modest. However, as the PAD efficiency analysis was based on the quantifiable benefits from the implementation of sub-projects planned under Component 3, the efficiency at the ICR stage is rated Negligible as the sub-projects were not implemented.

ANNEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS

Volta River Basin Strategic Action Programme Implementation Project
Abridged Summary of the Borrower Project Completion Report

Introduction

1. **The VSIP project had the overall objective of the project to strengthen the capacity of the VBA for the management of transboundary water resources in the Volta Basin.** The specific objectives of the project were institutional development and the implementation of priority actions of the Strategic Action Programme (SAP) of the Volta Basin. The project had four components:

2. **Component 1:** Elaboration of a Water Charter that defines and develops the guiding principles for water resources management, the roles and responsibilities of riparian countries in the use and protection of water resources and strengthens the foundation of the VBA to promote harmonized water policies in the basin.

3. **Component 2:** Strengthening the communication system of the VBA to enable the institution to effectively fulfill its mandate. To achieve this, the main activities are:

- Development of a Communication Strategy, setting out the main orientations and communication procedures of the VBA, and a Communication Plan that will serve to operationalize the communication strategy (media and non-media activities, production of tools and media communication, etc.);
- Information and knowledge sharing activities through the online platform, IW-Learn, of the GEF;
- Finalization of the manual of administrative (including the human resources management procedures), financial and accounting procedures of the VBA;
- Establishment and strengthening of the capacities of the National Focal Structures of the VBA in the Member States; and
- Strengthening the management of human resources within the VBA.

4. **Component 3:** Component 3 of the project aimed to implement six select investments identified from the priority actions of the Volta Basin Authority's Strategic Action Program (SAP).

5. **Component 4:** Component 4 funded activities related to strengthening the management and internal procedures of the VBA. This component also provided support to the Project Coordination Unit (PCU) for the implementation of the project. It financed the cost related to fiduciary management, monitoring and evaluation of project results, technical reports and audits, any support (consultants) that the PCU needed for the management of the project.

Institutional Arrangements and Project Implementation

6. **The project institutional setup relied on existing VBA staff.** The project had a Steering Committee, a project Management Unit (PMU), consisting of Staff of VBA with the exception of the Procurement Specialist and the Project Accountant who were recruited and paid by the project. There was neither an Environmental Specialist nor a Monitoring and Evaluation Specialist in the project team.

The Annual Work Plan and Budget (AWPB) for 2017 which was approved in August 2017 made provision in the project budget for the recruitment of these specialists either on part-time or full-time basis. However, in November 2017, the project restructuring was proposed and it put a halt to the activities of Component 3 that required most of the monitoring and evaluation as well as the Environmental and Social Safeguards.

7. **The staff of VBA that served on the project have had their capacities strengthened.** The staff include the Director of the Observatory (Coordinator of VSIP), the Director of Planning and IWRM (Officer in Charge of Component 3 of Project) the Head of Finance and Accounting (Financial Management Specialist) and indeed the entire Project Coordination Unit (PMU).

8. **The Water Charter was elaborated in three phases**. First, there was Technical, Legal Institutional diagnostic analysis, which was undertaken prior to the drafting of the Water Charter. The diagnostic analysis was validated nationally by the six countries followed by a regional validation workshop. The Water Charter was then drafted and validated at national workshops in all six countries, and also in regional validation workshop. The third phase consisted of the preparation of three annexes, their validation at the national level and then at a regional workshop. The third phase also included support towards facilitating the ratification of the Water Charter.

9. **Implementation of Component 2 resulted in three main outputs.** First, the 'study on the establishment of the National Focal Structure (NFS) and their capacity building' was completed and validated at a regional workshop. Second, a Communication Strategy and Plan was developed and validated at a regional workshop. Third, the study on Strengthening the Management of Human Resources within the VBA was validated at the end of July 2019, together with the VBA Manual for Administrative, Financial, and Accounting Procedures.

10. **Component 3 implementation experienced many challenges.** These included (i) insufficient information on the sub-project sites and their baseline situation and programming of feasibility studies within the four-year project implementation period; (ii) the complexity of reforestation activities, the protection of riverbanks and the realization of small irrigation infrastructure, all in a regional context, and (iii) the duration of the project which was very short to undertake and complete the scheduled activities in time. A proposal for restructuring was made in January 2018, following the project MTR, which took place in November 2017. This restructuring process was lengthy, lasting more than one year.

Project Restructuring

Project Restructuring (November 2017)

11. **The Component 3 of the project which focused on the implementation of the SAP priority actions was restructured due to slow progress in implementation.** The restructuring was recommended following the second supervision mission which was also the mid-term review of the project.

12. **As part of the restructuring, a selection of new activities for component 3 was carried out in accordance with their feasibility in time.** For reasons of limited time remaining before the closing of the project, the following activities were selected:

- Training of Civil Society Organizations (CSOs) on ecosystems management in the Volta Basin. This activity was carried out in collaboration with GWP / WA;

- Protection of the Volta Basin ecosystems in Benin, Togo, Ghana and Côte d'Ivoire, the process of recruitment of NGOs for the implementation of the activities was started in March 2019 but at the end of April, the process was abandoned because the activity of recruitment of the NGOs had to be completed before the end of April to be able to continue without risk of not finishing before the end of the project.
- Organization of the 4th Forum of parties for the development of the Volta Basin.

Project Monitoring & Evaluation

13. **Initially, monitoring and evaluation of environmental and social safeguarding activities were carried out by the VBA Officer-in-charge of Project Component 3 and the Project Coordinator.** M&E was carried out in close collaboration with the VBA Focal National Points and the GEF Operational Focal Points of the six (06) beneficiary countries of the project. The M&E activities were carried out in an informal manner, principally due to the absence of an M&E specialist. The majority of the variables to be monitored fell under Component 3, which could not be implemented satisfactorily due to several reasons including the lengthy process for the recruitment of consultants to carry out feasibility and detailed studies, the longer than planned time to execute the feasibility and detailed studies, and the suspension of activities on Component 3 after the mid-term review in November 2017. The approaches to monitoring and evaluation adopted by the project included the preparation of quarterly financial and technical reports as well as the Project Completion Report prepared by the Project Management Unit (PMU) and update and revision of biweekly planning. The review of the Annual Work Plan and Budget as well as the presentation of Annual Reports during the Project Steering Committee meetings all constituted forms of M&E of the project.

Capacity Building and Training

14. **The VBA staff participated in various trainings organized by the Bank.** The trainings included capacity building workshops for implementation and monitoring of environmental and social measures organized in Cotonou, Benin, in 2017 and at the World Bank office in Ouagadougou, Burkina Faso, in 2019; training in the use of communication tools; advanced training on TOM2PRO; (iii) Participatory Communication for Development; and (iv) SYSCOHADA training.

Lesson learned

15. While using institutional personnel for project implementation has important benefits, such as internal capacity building, it should be noted that it also has disadvantages that can impact negatively on the implementation of a project like VSIP. The VBA staff who were the members of the PCU were not assigned to the project on a full-time basis; they also executed VBA tasks.

16. Adequate planning for M&E is necessary for successful project implementation.

17. Adequate time should be programmed for implementation of transboundary projects, and more so when feasibility studies are implemented during the project implementation period.

18. For effectiveness, capacity building of project staff should be treated as continuous process, and not a once off event.

19. Frequent project TTL changes are detrimental to the project as they do not ensure continuity in the implementation of the activities; they should be supported by adequate handover procedures.

ANNEX 6. SUPPORTING DOCUMENTS (IF ANY)

Project papers

1. Project Appraisal Document (April 30, 2015), Report No. PAD1287
2. Restructuring Paper (December 2018), Report No. RES32979

Financing Agreements

1. Amendment to the Grant Agreement (January 16, 2019)
2. CIWA Grant Number TF016611 (August 17, 2015)
3. GEF Grant Number TF0A0184 (August 17, 2015)

Additional Documents

1. Activity Completion Summary. Volta River Basin Support Program (P132564)
2. Aide Memoires.
3. An Institutional Assessment of the Volta Basin Authority: Synthesis Report. World Bank. June 2017.
4. International Development Association and International Bank for Reconstruction and Development Regional Integration Assistance Strategy for Sub-Saharan Africa. World Bank, 2008.
5. Partnering for Africa's Regional Integration: Progress Report on the Regional Integration Assistance Strategy for Sub-Saharan Africa. World Bank, 2011.
6. Project Implementation Status and Results Reports.
7. Volta Basin Strategic Action Programme UNEP/GEF/Volta/RR. 1/2014. UNEP-GEF Volta Project, 2014.
8. Volta River Basin Support Program (P132564) Concept Note.
9. A. Inocencio, M. Kikuchi, D. Merrey, M. Tonosaki, A. Maruyama, I. de Jong, H. sally and F Penning De Vries. 2005. Lessons from Irrigation Investment Experiences: Cost-reducing and Performance-enhancing Options for sub-Saharan Africa.

ANNEX 7. MAP OF THE VOLTA RIVER BASIN

Map 1. Volta River Basin and locations of priority actions.