



## 1. Project Data

<b>Project ID</b> P093806	<b>Project Name</b> 3A-Niger Basin Water Resources	
<b>Country</b> Western Africa	<b>Practice Area(Lead)</b> Water	<b>Additional Financing</b> P128336
<b>L/C/TF Number(s)</b> IDA-43420,IDA-43430,IDA-43480,IDA-H3200,IDA-H3210	<b>Closing Date (Original)</b> 31-Jan-2013	<b>Total Project Cost (USD)</b> 228,260,000.00
<b>Bank Approval Date</b> 03-Jul-2007	<b>Closing Date (Actual)</b> 31-Dec-2017	
	<b>IBRD/IDA (USD)</b>	<b>Grants (USD)</b>
Original Commitment	186,000,000.00	0.00
Revised Commitment	181,913,907.80	0.00
Actual	178,922,990.14	0.00
<b>Prepared by</b> Katharina Ferl	<b>Reviewed by</b> Fernando Manibog	<b>ICR Review Coordinator</b> Christopher David Nelson
		<b>Group</b> IEGSD (Unit 4)

## 2. Project Objectives and Components

### a. Objectives

According to the Project Appraisal Document (PAD) (p. v) and the Financing Agreement (Schedule 1, p. 7) of July 26, 2007 the objective of the project was “to enhance the regional coordination, development and sustainability of water resources management in the Niger River Basin”.

The restructuring paper of December 12, 2014 (p. 8) stated that the objective of the project was revised to “to enhance regional coordination and improve water resources management in the Niger River Basin.”



This project is the first phase of a two phase Adjustable Program Lending (APL). The APL was to span 12 years with the first phase lasting five years (2007-2012) and the second phase lasting seven years (2012-2019).

A split rating will be conducted according to the IEG guidelines for evaluators of ICRs (p. 45) since the project's outcome targets were revised and the project's scope was decreased.

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

Yes

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

Yes

**Date of Board Approval**

23-Dec-2014

**c. Will a split evaluation be undertaken?**

No

**d. Components**

The project included three components:

**Component 1: Niger Basin Authority (NBA) Institutional Strengthening and Capacity Building (appraisal estimate US\$7.77 million, actual US\$10.73 million):** This component was to finance the enhancement of the capacity of the NBA and its National Focal Structures. Activities included: (i) reinforcing the NBA's administrative and management skills to set up an Overall Performance Evaluation System; (ii) strengthening the NBA's communications and practices for sharing information, knowledge and experience, implementing its communications strategy and reinforcing the NBA's Information Technology; (iii) updating and implementing, jointly with other partners, the NBA's capacity building program; (iv) supporting the project's management and supervision; (v) strengthening the NBA's National Focal Structures including additional skills, resources and staff trainings for coordination with National Implementing Agencies (NIAs) and supervision of the Project's activities; and (vi) providing institutional support and strengthening of regional water resources management and planning. During the project restructuring in December 2014 the scope of activities under (vi) was reduced due to budget constraints as the allocated budget for the activities was underestimated.

**Component 2: Rehabilitation, Optimization and Development of Regional Infrastructure (appraisal estimate US\$138.45 million, actual US\$134.62 million):** This component was to finance the rehabilitation and upgrading of existing large water infrastructure of regional relevance, and supporting the



regional planning framework. Activities included the rehabilitation of Kainji dam and hydropower plant and the Jebba hydropower dam, and the assessment of optimization and management options for the development of regional water infrastructure. During the project restructuring in December 2014 the scope of this component was reduced since safeguards compliance, procurement processing, and contracts management issues increased the projected costs in planned activities. The rehabilitation works of the navigation lock was cancelled, the extent of rehabilitation of electromechanical equipment was reduced as well as activities such as options assessment for regional water infrastructure development.

**Component 3: Sustainable Management of selected degraded ecosystems and rehabilitation of small water infrastructure (appraisal estimate US\$39.78 million, actual US\$40.65 million):** This component was to finance the rehabilitation of small water infrastructure and management of ecosystems to support income-generating activities. Selected activities included the rehabilitation and diversification of small dams, rehabilitation and extension of small irrigation schemes, support to the development of traditional fisheries, watershed restoration and agro-forestry, and operational support to national implementing agencies. During the project restructuring in December 2014 the scope of this component was reduced since safeguards compliance, procurement processing, and contracts management issues increased the projected costs in planned activities and costs at appraisal were underestimated. Several activities regarding the rehabilitation and diversification of small dams, the rehabilitation and extension of small irrigation schemes, support to the development of traditional fisheries and watershed restoration and agro-forestry were reduced or cancelled.

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

**Project Cost:** The project was estimated to cost US\$228.2 million. Actual cost was US\$219.89 million.

**Financing:** The project was financed through three credits and two grants by the International Development Agency (IDA): (i) a US\$9.0 million credit (actual disbursement was US\$8.97 million); (ii) a US\$18.0 million credit (actual disbursement was US\$15.43 million); (iii) a US\$135.0 million credit (actual disbursement was US\$131.2 million); (iv) a US\$15 million grant (actual disbursement was US\$14.85 million); and (v) a US\$9.0 million grant (actual disbursement was US\$8.37 million). The project also received financing by the African Development Bank in the amount of US\$33.6 million, the Canadian International Development Agency in the amount of US\$3.7 million, and the European Commission in the amount of US\$3.5 million.

**Borrower Contribution:** The Borrowers were not to make any contributions.

**Dates:** The project was restructured twice:



- On June 6, 2011 the project was restructured to extend the project's closing date by 11 months from January 31, 2013 to December 31, 2014 due to delays in conducting technical studies under component 3, the need to relaunch the procurement process of the rehabilitation contract of the Kainji hydropower plant, and the slow project supervision by the NBA.
- On December 23, 2014 the project was restructured to: i) revise the PDO to better align it with the reduced scope of the project and better link the project target indicators, achievements, and activities; ii) extend the closing date to allow for the completion of project activities that were delayed due to slow implementation [For Niger the closing date was extended to December 31, 2015, for Benin, Mali, and Nigeria the closing date was extended to June 30, 2016, and for Guinea the closing date was extended to December 31, 2017]; iii) make arrangements to meet the requirements of safeguard OP/BP 4.09 (Pest Management), which was triggered due to activities in irrigation and agriculture; iv) reallocate among disbursement categories due to changes in components and costs (see section d for more details); and vi) adjust triggers to ensure their relevance to the overall program.

### 3. Relevance of Objectives

#### Rationale

The PAD (p. 1) stated that the Niger River provides the economic mainstay for its nine riparian countries – Benin, Burkina Faso, Cameroon, Chad, Cote d'Ivoire, Guinea, Mali, Niger and Nigeria. Even though the basin has a huge potential for development and investment, economic growth and the means to improve the livelihood of its population, it remains underdeveloped. Approximately 85 percent of the basin's population lives in rural areas with food security and social well-being depending on the river and existing water resources. However, the basin faces several challenges such as rapidly increasing population consisting of vulnerable groups such as women and children, degraded environment, unutilized development potential, inadequate operation and maintenance of existing water infrastructure, competitive unilateral development and inefficiencies within the Niger Basin Authority (NBA), which is responsible for promoting, facilitating and coordinating water resources development in the Niger River Basin.

The PAD (p. 5) stated that the nine riparian countries agreed that the first phase would focus on the five countries situated on the Niger River's main stem, Benin, Guinea, Mali, Niger, and Nigeria. At the time of appraisal the objective of the project was in line with the Bank's Country Assistance Strategies for Benin (2004-2006), Guinea (2004-2006), Mali (2004-2006), Niger (2003-2005), and Nigeria (2005-2007). The original and revised objectives of the project also supported the country's national policies such as Benin's Growth Strategy for Poverty, which aimed to accelerate economic growth and develop infrastructure, Guinea's Poverty Strategy which aimed to foster inclusive and sustainable growth. In Mali the government developed the Government Action Plan (2013-2018), which aimed to construct an emerging economy and implement an active social development policy. Niger's Economic and Social Development Plan (PDES)



(2012-2016) aimed to promote the economic, social and cultural well-being of the population. Nigeria's Government Vision 2020 aimed to optimize human and natural resource potential to achieve rapid economic growth.

The original and revised objective supports pillars/focus areas of the most recent Bank's Country Partnership Strategies/Country Partnership Frameworks for Benin (2013-2017) "increasing sustainable growth", Guinea (2014-2017) "stimulate growth and economic diversification", Mali (2016-2017) "create economic opportunities", Niger (2013-2016) "promote resilient growth and reduce vulnerability", and Nigeria (2014-2017) "federally led structural reforms for growth and jobs".

### **Rating**

High

## **4. Achievement of Objectives (Efficacy)**

### **Objective 1**

#### **Objective**

Enhance regional coordination: Modest (original and revised PDO)

#### **Rationale**

The project's theory of change causally linked the enhancement of regional coordination (final outcome) with the empowerment of the NBA through legal instruments, an institutional mechanism for water resources management, and implementation of all activities according to the jointly developed basin-wide plan. Also, the project's theory of change linked the enhancement of the development of water resources management (final outcome) to financing rehabilitation works and conducting feasibility studies of dams and irrigation schemes. In order to enhance the sustainability of water resource management, the project was to implement activities of watershed restoration and agroforestry, income generation, and fish production. This aligns with the project's achievement in the following way:

#### **Outputs:**

Since this aspect of the PDO was not changed during the 2014 restructuring, this validation assesses the achievements of original and revised targets in the same section.

- A regional environmental code was adopted by riparian water countries for integrated water resources management at the regional level, thus not achieving the original target of adopting four legal instruments. According to the ICR (p. 38) good progress was made on two additional legal instruments, the agreement on joint management of infrastructure and the agreement on dispute resolution and arbitration.



The agreement on common guarantee of infrastructure was not made, however, studies related to that agreement will be financed by the German Agency for International Cooperation (GIZ).

- All project activities were implemented according to the Niger Basin Sustainable Development Action Plan, achieving the original target of 100%.
- All monthly and/or annual water resources information databases were publicly available on the NBA's website, achieving the original target of 100%. The availability of data is supposed to inform riparian countries about the status of water resources, support coordinated actions, and foster coordinated management of critical situations such as flooding and droughts.
- The Permanent Water Commission (PWC) has not held a meeting since it was established in 2013. Therefore, the original target of two meetings or the revised target of three meetings held per year were not achieved.

**Outcomes:**

No outcomes were reported for this objective.

**Rating**

Modest

**Objective 1 Revision 1**

**Revised Objective**

Enhance regional coordination: Modest (original and revised PDO)

**Revised Rationale**

All outputs and outcomes are as above.

**Revised Rating**

Modest

**Objective 2**

**Objective**

Original PDO: Enhance regional development of water resources management in the Niger River Basin



## **Rationale**

### **Outputs:**

- Three hydropower units were rehabilitated in Kainji and six units were rehabilitated in Jebba, thus almost achieving the original target of 10 units.
- Faulty instrumentation and monitoring equipment at Kainji and Jebba were repaired and commissioned, thus achieving the original target.
- Six small dams were rehabilitated in Benin and Niger, thus achieving half of the original target of 12 small dams. According to the ICR (p. 19) one rehabilitated small dam in Niger collapsed before its technical acceptance.
- Three dam sites completed respective feasibility studies, thus almost achieving the target of four studies.
- 2,126 hectares of irrigation schemes were rehabilitated (6 hectares in Mali, 620 hectares in Niger, and 1,500 hectares in Benin), thus surpassing the original target of 1,200 hectares by almost double the amount.

### **Outcomes:**

- 340 Megawatt generation capacity of hydropower were constructed or rehabilitated under the project, achieving the target of original target of 340 Megawatt.
- The already existing production of 578 Megawatt generation capacity of hydropower in Jebba was secured, achieving the original target of 578 Megawatt.
- 340 Megawatt of generation capacity of hydropower were rehabilitated in Kainji, achieving the original target of 340 Megawatt.

## **Rating**

Substantial

## **Objective 2 Revision 1**

### **Revised Objective**

Unchanged: Enhance regional development of water resources management in the Niger River Basin

### **Revised Rationale**

Results as above.



## **Revised Rating**

Substantial

### **Objective 3**

#### **Objective**

Enhance the sustainability of water resources management in the Niger River Basin

#### **Rationale**

#### **Outputs:**

- 2,655 hectares of land were afforested for ecological or income generation purposes, achieving the original target of 1,000 hectares.
- 8,555 hectares of areas were stabilized against erosion (7,965 hectares in Niger and 590 hectares in Mali), not achieving the original target of 11,624 hectares.
- 10,620 hectares land area (1,115 hectares in Benin, 7,965 hectares in Niger, 590 hectares in Mali, and 950 hectares in Guinea) were brought under sustainable landscape management practices, surpassing the original target of 2,250 hectares.

#### **Outcomes:**

In Niger traditional fishery systems were improved through the introduction of different species of fishes into more than 20 ponds, the organization of fishermen in groups, and the purchase of fishery equipment such as small boats, fishing nets, and fish conservation equipment. The area with fish introduced increased from 360 hectares in 2009 to 1,020 hectares in 2012. The quantity of fish produced increased from 40,636 tons in 2009 to 70,649 tons in 2012. The value of fish produced increased significantly (i.e., more than doubled) from 13,565,600 CAF in 2009 to 40,849,750 CAF in 2012.

## **Rating**

Substantial

### **Objective 3 Revision 1**

#### **Revised Objective**

Revised PDO: Improve water resources management in the Niger River Basin

#### **Revised Rationale**





- Three hydropower units were rehabilitated in Kainji and six units were rehabilitated in Jebba, achieving the (lower) revised target of nine units being rehabilitated/reinforced.
- Six small dams were rehabilitated in Benin and Niger, not achieving the revised target of 8 small dams. According to the ICR (p. 19) one rehabilitated small dam in Niger collapsed before its technical acceptance.
- Three dam sites completed respective feasibility studies, achieving the target of three studies.
- 2,126 hectares of irrigation schemes were rehabilitated (6 hectares in Mali, 620 hectares in Niger, and 1,500 hectares in Benin), thus not achieving the revised target of 5,005 hectares.
- 2,655 hectares of land were afforested for ecological or income generation purposes, achieving the (increased) revised target of 2,205 hectares.
- 8,555 hectares of areas were stabilized against erosion (7,965 hectares in Niger and 590 hectares in Mali), surpassing the (lower) revised target of 2,250 hectares.
- 10,620 hectares land area (1,115 hectares in Benin, 7,965 hectares in Niger, 590 hectares in Mali, and 950 hectares in Guinea) were brought under sustainable landscape management practices, thus not achieving the (increased) revised target of 13,439 hectares.

There were significant shortcomings in the post restructured period, with the project falling short on the irrigation scheme rehabilitation target and the land brought under sustainable landscape management. In addition, there is insufficient outcome evidence on the result of the measures undertaken by the project in terms of its impact on water resources management.

**Revised Rating**  
Modest

## Rationale

Achievement of the first aspect of the PDO “to enhance the regional coordination” was Modest before and after the 2014 restructuring. Achievement of the second aspect of the original PDO “to enhance regional development of water resources management in the Niger River Basin” was Substantial both before and after the restructuring. Achievement of the third aspect of the original PDO “to enhance the sustainability of water resources management in the Niger River Basin” was Substantial. Achievement of the revised PDO “to improve water resources management in the Niger River Basin” was Modest. Based on the various ratings, this results in an overall Substantial rating for Efficacy prior to the restructuring and a Modest rating after the restructuring.



## **Overall Efficacy Rating**

Substantial

### **5. Efficiency**

#### **Economic Efficiency:**

The PAD (p. 25) conducted a traditional cost-benefit analysis defining the costs of the project as: (i) the full base costs of the public investment without taxes in infrastructure rehabilitation; (ii) the full base costs of investment in watershed conservation without taxes; (iii) the full base costs of project management without taxes; and (iv) physical contingencies that represent real costs. The analysis also defined monetary, environmental and nutritional benefits of the project. The analysis assumed: (i) constant prices based on the import parity price plus the cost of transport from the border to the market; (ii) real prices remain constant for the next 30 years; (iii) a period for net benefit evaluation of 30 years; and (iv) opportunity cost of capital of 12 percent. The analysis estimated an overall Economic Internal Rate of Return (IRR) of 51% for the first phase of the project. However, the IRR differed widely across countries and components. High net benefits were related to the rehabilitation of regional water infrastructure in Nigeria (IRR of 54%), and rehabilitation of national water infrastructure (IRR of 25%). Lower returns were estimated for fishery and bank protection sub-components in Mali (IRR of 21%).

The ICR (p. 22) followed the same methodology as used for the analysis in the PAD. The ICR applied discount rates at five and eight percent, resulting in a positive Net Present Value (NPV) for all sub-projects except for the irrigation sub-project in Guinea. EIRRs, except for the lowland development sub-project in Guinea, widely ranged from 11.3% to 75.5%. The project's overall EIRR was estimated at 27.6%, significantly lower than the one estimated in the PAD, the NPV (at a 5 percent discount rate) was estimated at US\$914.8 million and at US\$541.9 million (at an 8 percent discount rate). The ICR (p. 65) stated that the difference in the results is due to different assumptions used. The ICR analysis was based on actual ex-post data reflecting more realistic estimates. Expected incremental energy production at Jebba dam did not materialize, which reduced benefits from energy production. Further, the yields assumed at appraisal for irrigation subprojects in Guinea and Niger were too optimistic compared to those actually observed at project closing. Finally, the costs per area of subprojects in Guinea and Niger were higher than planned at appraisal.

#### **Administrative Efficiency:**

The project experienced several significant implementation delays due to issues related to financial management, procurement, safeguard compliance, coup d'états in three countries and an Ebola outbreak. These delays might be indicative of an inefficient use of project resources.

Taking everything together, the project's overall efficiency is rated Modest.



## Efficiency Rating

Modest

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

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	51.00	0 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	27.60	0 <input type="checkbox"/> Not Applicable

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

## 6. Outcome

Relevance of the original objective was High. Efficacy was Substantial before the restructuring and Efficiency was Modest, resulting in an overall outcome rating of Moderately Satisfactory. The relevance of the revised objective was High. Efficacy was Modest after the restructuring and Efficiency was Modest too resulting in an overall outcome rating of Moderately Unsatisfactory.

According to IEG/OPCS harmonized guidelines, when a project's objectives are revised, the final outcome rating is an average of outcomes before and after the revision of objectives weighted by Bank disbursements under each set of objectives. In this project 59.2% (US\$130.02 million) of disbursement occurred under the original objective and 40.8% (US\$89.8 million) under the revised objective.

- Based on the original objective with an outcome rating of Moderately Satisfactory (score of 4) and a disbursement weight of 0.592 the weighted outcome score is 2.36.
- Based on the revised objective with an outcome rating of Moderately Unsatisfactory (score of 3) and a disbursement weight of 0.408, the weighted outcome score is 1.22.
- The combined weighted average outcome score is 3.6 which corresponds to a Moderately Satisfactory outcome rating.

### a. Outcome Rating

Moderately Satisfactory



## 7. Risk to Development Outcome

According to the ICR (p. 34) the outcomes achieved by the project face several challenges. First, the sustainability of achievements made to enhance regional coordination will depend on strong leadership by the NBA. Weak leadership might result in friction among the riparian countries and result in lack of unilateral actions. During project implementation the NBA's observatory did not fulfill its responsibility to submit project results to the regional steering committee and the NBA's council of ministers, which might be an indication of weak leadership. Second, the sustainability of outcomes achieved in regards to improving performance of rehabilitated hydroelectric plants will depend on the Nigerian government who appointed a private company (MESL) for operating the Kanji and Jebba hydropower plants. The ICR (p. 34) stated that MESL has not made any investments to extend energy production since it received its contract in February 2013. This might present a potential risk for future production. And third, achievements made for beneficiary communities in areas such as improving irrigating agriculture and improving watershed management might be at risk due to the farmers organizations' weak managerial, organizational, and technical capacity to implement efficient production processes and the uncertain ability to sell their crops at a decent price. The Bank team (at the August 31, 2018 IEG interview) stated that even though the project built capacity in this area, experience shows that capacity building sometimes needs to be maintained for several years to bring farmers to a cruising speed.

## 8. Assessment of Bank Performance

### a. Quality-at-Entry

According to the ICR (p. 25) the project was built on analytical work conducted across the Niger River Basin that identified the benefits of multi-country and multi-purpose activities. Also, lessons learned from regional, national and local level experiences and previous Bank projects in river basins development in Africa informed project design.

The Bank identified relevant risk factors and assessed the following as High: additional costs during the rehabilitation of the 40-year old Kainji hydropower plant exceeding contingencies and the partial rehabilitation of the Kanji hydropower plant not generating benefits proportionate with the financed amount. Several risks were also rated as Substantial including NBA's lack of experience in implementing a regional project of this magnitude and in coordinating activities at national and local levels, and weak procurement and financial management governance resulting in implementation delays. Also, the project's complexity including the challenges of international waters and competing national agendas was identified as a substantial risk. The Bank's mitigation efforts included the implementation of institutional strengthening and capacity building activities at all levels and development of safeguard and fiduciary trainings.

However, the mitigation efforts were not sufficient and the project experienced significant challenges related to procurement and financial management. Also, safeguard compliance costs were not included



in the project's costs which resulted in a reduction of project activities to compensate for higher safeguard compliance costs. Furthermore, the Bank did not identify other external risk factors such as countries experiencing coup d'états such as in Guinea, Niger and Mali or the outbreak of Ebola in Guinea, all resulting in implementation delays. The Bank team built an adequate Results Framework but did not take the risk of countries lacking to submit data on a regular basis into account. In addition, the project's design was overly complex and the implementation period unrealistic. Initially designed to be implemented within five years, the project closed after 10 years due to procurement, financial management and safeguard issues.

### **Quality-at-Entry Rating**

Moderately Unsatisfactory

### **b. Quality of supervision**

The ICR (p. 29) stated that the Bank conducted at least 20 supervision missions on a regular basis throughout the implementation period. Also, monthly videoconferences were organized to support project activities. However, the project experienced a high turn-over of Task Team Leaders (TTLs), with five different TTLs over its implementation, adversely affecting project activities. According to the ICR (p. 29) the Bank team raised issues related to financial management, procurement and safeguard compliance to the NBA and countries and provided ad-hoc trainings. However, issues in these areas persisted throughout project implementation. The Bank restructured the project twice to adjust activities to changing circumstances in countries.

### **Quality of Supervision Rating**

Moderately Satisfactory

### **Overall Bank Performance Rating**

Moderately Satisfactory

## **9. M&E Design, Implementation, & Utilization**

### **a. M&E Design**

The original and revised objectives of the project were clearly specified. The theory of change and how key activities and outputs would lead to outcomes were reflected in the Results Framework. The Results Framework included an adequate set of PDO and intermediate outcome indicators to measure the contribution of the project towards achieving the outcomes. The indicators were specific,



measurable, relevant and time bound. However, the indicators were only measuring outputs and with the exception of one intermediate outcome indicator, all indicators lacked a baseline.

The NBA's observatory was responsible for all M&E activities and was to report results to the regional steering committee and to the NBA's council of ministers. Data by country was to be collected for each of the indicators identified in the Results Framework through the National Focal Structures, aggregated at the national and then at the regional level by the Niger Basin Observatory.

## **b. M&E Implementation**

The ICR (p. 29) stated that sub-national implementers provided data on a monthly and quarterly basis to the main NIA, which prepared and submitted quarterly reports to the NFS. The NFS provided quarterly, bi-annual and annual reports to the PMCU at the NBA. According to the ICR (p. 30) M&E implementation experienced several delays and some sub-projects did not send their data to the observatory and the observatory did not report all project activities to the regional steering committee and the NBA's council of ministers. The ICR (p. 30) therefore stated that the sustainability of the M&E system is questionable since the observatory did not fulfil its responsibility.

According to the Bank Team (August 31, 2018 IEG interview) the platform of the Niger Basin Observatory included a database and georeferenced indicators (built from data contained in the database). It was meant to inform two domains: (a) the environmental condition of the basin (including the hydrology) through a set of key indicators measured over the years at specific locations in the basin, and (b) the effect of projects implemented by or through the NBA in the basin. This platform was functional but was insufficiently fed with the expected data.

## **c. M&E Utilization**

According to the ICR (p. 30) M&E data was used to inform the project regional steering committee and NBA management about implementation progress during the annual meetings. Also, according to the Bank team (August 31, 2018 IEG interview) data on water resource information was used by several consultants working on sizing dams, designing irrigation schemes along the river, and developing coordinated operation rules of cascade dams, and by the NBA itself to carry out its notification role.

## **M&E Quality Rating**

Modest



## 10. Other Issues

### a. Safeguards

The project was classified as category A and triggered OP/BP 4.01 (Environmental Assessment), OP/BP 4.04 (Natural Habitats), OP/BP 4.11 (Physical Cultural Resources), OP/BP 4.12 (Involuntary Resettlement), OP/BP 4.36 (Forests), OP/BP 4.37 (Safety of Dams) and OP/BP 7.50 (Projects on International Waterways). During the 2014 restructuring OP/BP 4.09 (Pest Management) was also triggered. The project appointed a safeguard specialist in the core team and a focal point in each country's National Focal Structure/National Implementation Agency.

**OP/BP 4.01 (Environmental Assessment):** According to the ICR (p. 31) specific studies were conducted and an action plan was developed to ensure compliance with the Bank's safeguard policy. For the Kanji and Jebba rehabilitation works environmental and social audits were conducted and an Environmental and Social Management Plan (ESMP) was developed. The ICR (p. 28) stated that the lack of an ESMP at the initial phase of project implementation in Nigeria resulted in implementation delays.

**OP/BP 4.04 (Natural Habitats):** Project activities did not affect critical natural habitats, however, the ICR (p. 31) stated that environmental and social assessments were prepared for components 2 and 3 and the ESMP included measures to protect, maintain, and rehabilitate natural habitats.

**OP/BP (Pest Management):** Since the project financed small irrigated areas with very limited use of pesticides, environmental and social impact studies were conducted as well as public awareness sessions on good practices in the use of pesticides.

**OP/BP 4.36 (Forests):** The project financed the participatory development of classified forests and reforestation. According to the ICR (p. 31) as part of complying with OP/BP 4.01 the project conducted environmental and social assessments and implemented measures to reduce deforestation, enhance the contribution of forested areas to the environment and promote afforestation.

**OP/BP 4.37 (Safety of Dams):** According to the ICR (p. 31) the project undertook measures to ensure the safety of small dams such as carrying out the environmental and social impact study to provide recommendations on design execution of works and maintenance works. Also, an environmental and social audit was conducted for the Kainji and Jebba dams and the ESMPs for these two dams were updated and supported by a rapid social assessment in 2010-2012.

**OP/BP 7.50 (Projects on International Waterways):** According to the ICR (p. 31) notification to riparian states were made in accordance with this safeguard policy. The NBA, as the regional executing agency of the project, and its member states set up an agreement and there was no objection to project interventions.

IEG requested the project team for further evidence regarding compliance with safeguard policies that were triggered by the project, including any independent reviews or impact assessments. The team responded on





September 12, 2018 that the Bank team conducted a social assessments up front and the project invested in a manner that avoided displacement and compensation.

## **b. Fiduciary Compliance**

### **Financial Management:**

An accountant and internal auditor at the NBA's Project Management and Coordination Unit (PMUC) were responsible for the fiduciary aspects of the project. At the country-level, the National Focal Structure (NFS) and National Implementation Agencies (NIAs) an accountant was responsible for the Financial Management. The ICR (p. 32) stated that the internal auditor at the NBA resigned in June 2012 and was not replaced before project closing. According to the ICR (p. 28) the project experienced delays due to the low quality of financial reporting. Also, the project did not implement the recommendations by the external auditor, who conducted the annual financial audit, and the Bank's Financial Management Specialist. In light of the ICR's statement (p. 32) that "throughout project implementation non-compliance with the Bank's Financial Management regulations and reporting issues were highlighted", IEG requested the project team for more information on what those issues were, and whether and how those were resolved. IEG has not received any further clarification from the project team.

### **Procurement:**

A regional procurement specialist within the PMCU at the NBA was responsible for the project's procurement function. Also, every country's NIA included a procurement specialist. According to the ICR (p. 33) procurement related issues resulted in implementation delays in almost all beneficiary countries (Benin, Guinea, Mali, and Nigeria). An unsuccessful procurement process for the rehabilitation works of Kainji hydropower could only be completed more than two years into project implementation. Also, poor quality of terms of references due to lack of capacity, the complexity of the project with activities on the regional, national, and community level resulted in implementation delays.

According to the ICR (p. 32) the Bank team tried to address these issues by conducting procurement reviews of the PMCU and NIAs to improve processing and contract management. Also, the Bank conducted monthly video-conferences and provided ad-hoc training to address these issues.

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

NA





#### d. Other

---

### 11. Ratings

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

### 12. Lessons

The ICR (p. 34-37) includes several lessons learned. This Review considered that the following specific lessons were particularly important with general application to similar projects.

- **Conducting an in-depth risk assessment, which also includes externally driven risks and setting up a contingency budget for unforeseeable costs, is critical for successful project implementation.** In this project the coup d'états in Guinea, Niger, and Mali and an Ebola outbreak were not identified as potential risks, resulting in significant implementation delays and a five-year project extension.
- **Setting realistic objectives is critical for building a track record of success and buy-in by member states for a newly set up implementation authority.** The original objectives of this project (some aspects of legal reforms as well as some of the infrastructure activities) were overly ambitious, resulting in delays and tensions between the NBA and its member states. Allowing the NBA to achieve less ambitious objectives first before transitioning to a more challenging phase might have been beneficial.
- **Including project activities that boost the local economy, build capacity, and improve the environment are beneficial for the sustainability of project outcomes.** In this project activities related to traditional fishery, watershed restoration and agroforestry, and small-scale irrigation built managerial, organizational, and technical capacity within local communities to ensure sustainability, and had a positive impact on income levels and the environment.



### 13. Assessment Recommended?

No

### 14. Comments on Quality of ICR

The ICR provides a good overview of project preparation and implementation. Also, the ICR is concise, includes a solid economic analysis, and lessons learned based on project implementation. However, the ICR is not particularly outcome driven and lacks information in critical areas such as the project's compliance with safeguard policy OP/BP 4.11 (physical cultural resources), exact outputs produced by the project, procurement, financial management, and M&E.

#### a. Quality of ICR Rating

Substantial