PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA15518

Project Name	Niger River Basin Management Project (P149714)
Region	AFRICA
Country	Africa
Sector(s)	Hydropower (30%), General water, sanitation and flood protection sector (30%), Sub-national government administration (20%), Agricul tural extension and research (20%)
Theme(s)	Regional integration (35%), Social Inclusion (15%), Environmental policies and institutions (15%), Water resource management (35%)
Lending Instrument	Investment Project Financing
Project ID	P149714
Borrower(s)	Niger Basin Authority (NBA)
Implementing Agency	Niger River Basin (NBA)
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	08-Nov-2014
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Decision	

I. Project Context

Country Context

The Niger River basin is shared by ten countries in West and Central Africa: Algeria , Benin, Burkina Faso, Cameroon, Chad, Ivory Coast, Guinea, Mali, Niger and Nigeria . Four of these countries, Burkina Faso, Chad, Mali and Niger, are land-locked. The basin's surface area spans nearly 1.5 million square kilometers and is marked by a mosaic of climates, ecosystems, human settlements, and agricultural production systems. The basin has a rich and diversified fauna and flora and several major protected areas, notably the Niger Inner Delta wetland in Mali. However, these habitats are threatened by pollution, erosion in the Sahelian watersheds, and over-fishing.

The population in the basin is highly vulnerable. With a population of over 110 million, and countries with annual growth rates of 2 – 4 percent , the basin's population is young, rural and characterized by large disparities. Seven of the ten basin countries are among the 20 poorest countries in the world, with widespread gender disparities as well as large income disparities in the richer basin countries. More than half of the population is less than 15 years old. The majority of

the countries in the Niger basin continue to have a predominantly rural population who rely on rain-fed agriculture, pastoralism or other natural-resource based livelihoods. There, food security and social well-being depend mostly on unpredictable and extreme rainfall patterns, particularly in the Sahel part of the basin. These challenges are further intensified by climate change. The vulnerability of people in the basin is exacerbated by political instability, notably recent conflicts in Mali and other parts of the Sahel, and the resurgence of Boko Haram and the resulting violence and lack of security. Finally, the recent Ebola outbreak in the region continues to threaten the health and livelihoods of the people in the basin. Projections show that it will have severe economic impacts in the region, expected to reduce the gross domestic product (GDP) of Guinea alone by 2.3 percent.

Sectoral and institutional Context

Along the 4,200 km of its course, the Niger River, as well as its tributaries, is the economic mainstay for the ten riparian countries in its basin. The Niger River is strategically important in particular for Mali, Niger and Nigeria, which account for 80 percent of the surface area of the basin. For thousands of years, the river has supported the riparian population with diverse livelihoods such as farming, cattle grazing and fishing, and is an important lifeline in the arid and semi-arid lands of the Sahel. The challenges facing the basin, including food insecurity, rural poverty and climate change, are acute. At the same time, the basin's tremendous potential for infrastructure development is significantly under-tapped. Water infrastructure development, such as hydropower plants, irrigation schemes and navigation facilities can significantly contribute towards economic growth and improvement of livelihoods, especially if accompanied by sound integrated water resources management (IWRM).

Overall, the lack of flow regulation in the Upper and Middle basin poses a threat to water security in large towns bordering the river, limits the scale and intensity of irrigation investments, and deprives countries of relatively clean, accessible and cheap sources of energy. Agriculture in the basin is primarily rain-fed, and overall food productivity in the basin is highly dependent on rainfall patterns. Lack of infrastructure to store and control river flows, exacerbated by low levels of productive water efficiency use, constrain both existing irrigation and its potential for scale-up. Although only 19 percent of potential irrigated land in the Sahel part of the basin is currently irrigated, water availability during dry season low flows is already a constraint. Enhancing upstream water availability during the dry season in the Niger would allow significant expansion of the cultivated area in downstream Mali and particularly the Office du Niger irrigation scheme, where the current 90,000 ha cultivated today could be brought to 160,000 ha (rice, sugar cane, and vegetables) in the short run using the existing infrastructure, and facilitate achievement of the long term objective of Office du Niger of 400,000 ha in the next 20 years .

The demand for energy in the basin is considerable, and is expected to increase significantly in the coming years (from 30,000 GWh in 2003 to 117,000 GWh by 2020). Access to power in the basin remains some of the lowest worldwide, in both absolute and relative terms (with access rates at only 23 percent and almost 90 million people without electricity). At present, fuel wood represents 90 percent of the energy consumed. Hydropower remains an attractive source of energy in the basin, with an estimated 6,000MW hydropower potential, of which around one third is currently developed.

The 2007 Sustainable Development Action Plan (SDAP) for the Niger basin encompasses a broad based mix of large scale multipurpose transboundary infrastructure investments on the River Niger

(anchored to Fomi dam in Guinea, Kandadji dam in Niger and Taoussa dam in Mali); small scale infrastructure investments in nine basin countries (rehabilitation of small dams, development of lowlands, agroforestry); ecosystem protection (regulatory systems, information tools including modeling of low flows, and watershed management investments for erosion and siltation control); and institutional capacity building (legal systems and tools, strengthening the NBA hydrological observatory and sub-basin committees; and basin stakeholder mobilization). The proposed investment program is a key part of the basin's climate change adaptation strategy. As demonstrated in the 2013 Climate Risk Assessment of the Niger basin, large-scale storage infrastructure will significantly improve climate resilience in the basin, with favorable rates of return that remain robust over a range of climate change scenarios.

The Fomi multipurpose project is a crucial part of the basin's SDAP. The Fomi dam site is located in Guinea, near the border with Mali, in the upper part of the basin; the project would provide a diverse stream of transboundary benefits including upstream storage (representing up to 20 percent of the River's total annual flow at Bamako and four times the volume at Kandadji in Niger) , expansion of irrigated agriculture (over 210,000 ha in downstream dry-season irrigation, mostly in Mali's Office du Niger irrigation scheme) and associated hydropower (90-100 MW, which would be connected to the West African Power Pool grid). The project design intends to maintain a minimum environmental flow and guaranteed water supply in large towns downstream of the site, such as in Bamako. It will also entail the resettlement of up to 45,000 people (mostly in Guinea) and significant changes to the flood regime in the ecologically rich and sensitive Niger Inner Delta in Mali. Given the transboundary and complex nature of both the benefits and the impacts of the dam, there is a need to facilitate a high degree of both bilateral and regional cooperation around the project.

What makes the Fomi dam a particularly challenging and complex project is that the dam design and operating rules are key determinants of the magnitude and share of both potential benefits and impacts within Guinea and downstream Mali, and therefore need to be decided upon with full understanding of their impacts and with adequate institutional mechanisms in place for decision making and the sharing of benefits and costs. Cooperative preparation of the project is therefore crucial in defining the final dam design, operation, and equitable and workable mechanisms for sharing costs and benefits.

The NBA, established in 1980 as successor to the Niger River Commission, is the regional river basin organization (RBO) mandated to promote cooperation among its nine member countries to develop and manage the basin's resources. A "Shared Vision Process", which led to the signing of the 2004 Paris Declaration, set management and governance principles for the sustainable development of the Niger basin and reaffirmed the central role of the NBA as a coordination, knowledge, and development organization. Based on the SDAP, an $8 billion 20-year Investment Program was approved in April 2008. The Water Charter, approved in April 2008, gives legal status to the Paris Declaration and confirmed the core mandates of the NBA. These include monitoring the conditions of the basin (done, in practice, through the NBA's Observatory of the Environment), providing services to key stakeholders (including flow forecasts), providing a neutral analysis of planned water abstractions, and mobilizing high-level expertise for relevant studies and analyses.

The NBA has so far focused on two types of activities: (1) administration and implementation of activities on the ground together with member countries, and (2) development of frameworks and tools to support sustainable development and IWRM in the basin, including a repository of the

basin's hydrological historical database and central collection of new data, flow forecasts, and update and running of the basin model to simulate the impact of infrastructure planned by countries on the river.

With the coming online of major regulating infrastructure , the demands on the NBA and its role in promoting and participating in the design and exploitation of works and projects of common interest are growing. Operation of these new transboundary infrastructure works requires a carefully coordinated approach at the regional level, which the NBA is mandated to take on. The NBA has an increasingly central role in facilitating decisions and building consensus among member countries, water users, civil society, and other key river basin partners and increasingly called upon to link national-level investments to regional processes. With the assistance of several partners , the NBA has made significant progress towards operationalizing its mandate, however as the development in the river basin continues, and pressure on the water resources base increases, the NBA needs to become a more robust institution. This will require a more autonomous and sustainable financial resources base for the NBA, improvement of the basin-wide legal framework for enhanced coordination in the exploitation of transboundary infrastructure, as well as information systems and tools to enable the NBA to effectively respond to the growing demands on its coordination function.

II. Proposed Development Objectives

The proposed development objective is to strengthen the institutional framework for regional cooperation in water resources in the Niger River basin.

III. Project Description

Component Name

Component 1: Strengthening the Niger Basin Authority for Sustainably Delivering its Core Mandate

Comments (optional)

This Component will support the institutional and financial strengthening of the NBA to enhance its capacity to implement its core mandates. It will also support the implementation of the Water Charter, focusing on the process of adoption and operationalization of the Niger basin Water Charter's Annex 2 on Water Management Regulation for the Large Regulating Dams; and the development of a common vision on general principles on benefit and cost sharing among the NBA Member States (Annex 4 of the Water Charter). Specific activities are:

Sub-component 1.1: Further analysis and operationalization of selected financing mechanisms for the NBA

Sub-component 1.2: Implementation of the Water Charter

Sub-component 1.3: Strengthening the institutional and organizational systems of the NBA

Component Name

Component 2: Facilitating evidence based-decision making in the Fomi multipurpose project preparation process

Comments (optional)

The Component will facilitate sound decision making, support an exemplary preparation process for the Fomi multipurpose development project, and, in parallel, build the capacity of the NBA through its hands-on involvement in this complex project. Through this Component, the Project will support NBA as they link national level needs and plans with regional processes, dialogue, and supporting analytics. The specific activities are:

Sub-component 2.1: Process of engagement and decision making around Fomi

Sub-component 2.2: Institutional frameworks

Sub-component 2.3: Complementary environmental and social assessments
Sub-component 2.4: Donor and investor roundtables

IV. Financing *(in USD Million)*

Total Project Cost:	7.50	Total Bank Financing:	0.00
Financing Gap:	0.00		

For Loans/Credits/Others	**Amount**
Borrower	0.00
Cooperation in International Waters in Africa	7.50
Total	7.50

V. Implementation

The grant recipient is the NBA, established based on the Convention creating the NBA (signed in 1980, revised in 1987). The NBA Executive Secretariat is the executive organ of the Authority. It is mandated with the administration of the Authority and implementation of decisions taken by the higher entities (Summit of Heads of State and Governments (SHSG) and Council of Ministers (CoM).

Project-level implementation arrangements will utilize the existing project management structure that is in place for implementation of the Niger Basin WRD-SEM Program. The existing Project Management and Coordination Unit (PMCU) has in place the core positions (Project Coordinator, Procurement Specialist, Environmental and Social Specialist, Dam Specialist, Regional Accountant and Project Assistant) that are needed to implement the proposed activities. This existing structure will be utilized for implementation of this Project, and the NBA Secretariat will continue to play an important support role in the implementation of key activities. Utilizing the PMCU builds on the capacity and expertise of the existing implementation structures, allows for synergies with the World Bank's wider WRD-SEM program, and allows for implementation to commence in a timely and efficient manner. This project will finance three core positions (Project Coordinator, Procurement Specialist and Project Assistant) that are not budgeted for under the WRM-SEM program after end of June 2016.

At the advisory level, a CIWA Basin Advisory Committee (BAC) will be established within 6 months of project effectiveness. The Committee will coordinate the engagement strategy, projects and activities under the wider CIWA program for the Niger River basin. The CIWA BAC will be an extension of the existing Regional Steering Committee, established in 2004 by the NBA's CoM, with the major difference being that the CIWA BAC will include the World Bank and interested CIWA development partners as full members. The Regional Steering Committee meets at least once a year to give overall guidance to the NBA and its National Focal Structure (NFS), formally reviews progress, and approves annual work plans. Refer to Annex 4 (Implementation Arrangements) for more details.

Institutional and Financial Sustainability. The NBA is long-standing basin authority, established in 1980 by all 9 riparian countries (from the earlier 1964 Niger River Commission), with around 150 staff. Its mandate has been recently strengthened through the enactment of the Water Charter. The project is assisting the NBA to step up to its new, enlarged mandate, by helping operationalize certain aspects of the Water Charter and supporting necessary internal organizational and systems

changes in NBA to better supports its mission. Financial sustainability is a particularly important aspect of long term sustainability. Although the NBA's core operational budget benefits from around $2.3 million in country contributions; such contributions are often delayed and increasingly insufficient to support the NBA's new core responsibilities. Exploring options for operationalizing complementary autonomous revenue streams, as part of this project is therefore an important step in helping the NBA consolidate its long-term, financial and institutional future.

Technical, environmental and social sustainability. Ensuring the sustainability of complex projects such as Fomi starts with a high quality technical design of all aspects of the project. As such, one of the core tasks of this technical assistance is to ensure that all critical foundations are given due consideration within the project design framework (whether these are financed by the project or not). Key aspects include selection of appropriate technical designs (including through robust due diligence processes), provisions for long-term operations and maintenance of the infrastructure, the design of dynamic monitoring and evaluation platforms to track long-term (often hard to predict) social and environmental changes, and the design of long-term benefit sharing arrangements to support such emerging social and environmental needs, even after the project construction phase has been completed. In a similar vein, the review and design of appropriate institutional and financial arrangements (including possible joint-financing) will also go a long way in determining the financial viability and long-term sustainability of the Fomi project.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	×	
Natural Habitats OP/BP 4.04		×
Forests OP/BP 4.36		×
Pest Management OP 4.09		×
Physical Cultural Resources OP/BP 4.11		×
Indigenous Peoples OP/BP 4.10		×
Involuntary Resettlement OP/BP 4.12		×
Safety of Dams OP/BP 4.37		×
Projects on International Waterways OP/BP 7.50		×
Projects in Disputed Areas OP/BP 7.60		×

Comments (optional)

VII. Contact point

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