PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA24081

Project Name	Volta River Basin Strategic Action Programme Implementation (P149969)
Region	AFRICA
Country	Africa
Sector(s)	General agriculture, fishing and forestry sector (40%), General water, sanitation and flood protection sector (40%), General public administration sector (20%)
Theme(s)	Water resource management (50%), Environmental policies and institutions (30%), Regional integration (20%)
Lending Instrument	Investment Project Financing
Project ID	P149969
GEF Focal Area	International waters
Borrower(s)	Volta Basin Authority
Implementing Agency	Volta Basin Authority (VBA)
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	08-Apr-2015
Date PID Approved/Disclosed	09-Apr-2015
Estimated Date of Appraisal Completion	09-Apr-2015
Estimated Date of Board Approval	21-May-2015
Appraisal Review Decision (from Decision Note)	

I. Project Context

Country Context

The Volta is a shared river basin connecting the West African countries of Benin, Burkina Faso, Cote d'Ivoire, Ghana, Mali and Togo, covering a surface area of about 400,000 km2 and extending 1850 km north-south. The riparian countries of the Volta are characterized by economic differences and disparities of growth that are influenced by, among other factors, climate and its impact on natural resources. Burkina Faso and Ghana have, with 43% and 42 % respectively, the largest share of the basin, followed by Togo with 6%. Benin, Cote d'Ivoire and Mali have smaller shares of the basin. Table 1 below provides a detailed overview of the share of the six riparians on the Volta Basin. The total riparian population is estimated at 91 million inhabitants, of which 20 million live in the basin itself. Upstream Burkina Faso is a low-income, sahelian country, which is highly dependent on cotton exports and vulnerable to exogenous market and climate shocks. In 2007, when the country underwent a strong drop in the production of cotton (-44%), it resulted in a 1.5%

reduction in the economic growth of the country. On the other hand, downstream Ghana, which is located in the water abundant region of the basin, is one of the strongest economies in Western Africa, with a growth rate of 6.3% in 2007. Agriculture remains the core sector of the Ghanaian economy, contributing 38.8% of its GDP. Since the recent exploitation of oil resources off-shore, Ghana is now transitioning to a low middle income country. The Volta River basin has substantial economic importance for the region, based on ongoing and planned development plans such as irrigated agriculture in Burkina Faso and northern Ghana, hydro-power generation at Akosombo, Kpong, Bui dams (Ghana); Bagre and Kompienga dams (Burkina Faso); or drinking and industrial water supply for urban centers such as Accra and Ouagadougou. The Akosombo Dam has created one of the world's largest artificial lakes, Lake Volta, with a surface area of 8500 km² and a capacity of 148 km³. The electricity generation capacity at Akosombo and Kpong dams are 1,020 MW and 160 MW, respectively.

The Volta River has three main tributaries; the Black Volta (Monhoun) and White Volta (Nakambé) originating in Burkina Faso and the Oti River (Pendjari) originating in Benin.

- The Black Volta originates in the south-west of Burkina Faso, flows north-eastwards and then turns south. In the south, it becomes the border, first between Ghana and Burkina Faso, and then between Ghana and Côte d'Ivoire.
- The White Volta originates in the north of Burkina Faso and flows south-eastwards to the border with Ghana.
- The Pendjari River originates in the north-west of Benin. It flows north-east, then turns sharply to the west to become the border, first between Burkina Faso and Benin, then between Togo and Benin before entering Togo. Further downstream, it becomes the border between Togo and Ghana.

Recognizing the importance of coordinated management of the shared resources of the Volta, the six riparian countries established the Volta Basin Authority (VBA), which came into force in 2009. The VBA, which has a jurisdictional coverage of all surface and groundwater within, including lakes, river, wetlands and aquifers the basin, is tasked with the mandate to “promote permanent consultation tools among the basin’s stakeholders, promote the implementation of IWRM and the equitable distribution of 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”. Although equipped with a strong mandate for collaborative management, the Volta riparian countries have yet to explore the basin’s potential in cooperative development in agriculture, transportation, power, water storage or environmental conservation.

Sectoral and institutional Context

Sector Context

The riparian countries have not utilized the full potential of the Volta River basin to meet their demands for poverty alleviation and economic growth, nor have they fully mitigated basin-related environmental risks. For instance, the riparian countries of the basin are all facing energy shortages and growing power demand, which is hampering their economic performance. While an important portion of the energy that fuels the economy in some of the riparian countries comes from hydroelectric dams within the basin, the remaining hydropower potential of the river remains underdeveloped. In addition, irrigation and fishing are critical economic sectors in the basin as a

result of manmade reservoirs (such as Lake Volta) and present economic opportunities. The way in which these sectors develop also presents risks and opportunities for the management and preservation of ecosystems in the basin.

The Global Environment Facility (GEF) financed a series of studies on the Volta River Basin; the Transboundary Diagnostic Analysis (TDA; 2012) presents information on the opportunities and concerns in the Volta, for instance, indicating that the Volta River Basin is experiencing high levels of water quality and flow degradation, coastal erosion, increased sedimentation of rivers, invasive aquatic species, loss of soil and vegetative cover and ecosystem degradation as a result of factors related to climate change, livelihood practices and poor governance and mismanagement of the basin's natural resources. On the basis of the TDA, a Strategic Action Programme (SAP) was developed. The proposed project is informed by this SAP, although its focus is on the strengthening the institutional capacity of the VBA through actions derived from the SAP. The SAP suggests that the basin's environmental and water challenges stem from a combination of physical constraints as well as challenges related to the governance, use and management of ecosystems, at regional, national and sub-national levels. The following sections provide more information on the economic resources of the basin followed by a summary of the main concerns in the Volta, as described in the TDA, Water Atlas of the Volta Basin, data compiled by the World Bank and Food and Agriculture Organization (FAO) and other publications.

There are significant economic opportunities in the Volta Basin based on its natural endowment. Evidence shows that agriculture is the main economic activity, the main employer, and a key engine for growth in the basin. However, it has been estimated that less than 50 percent of the potential irrigable lands of the basin (estimated at 1,487,000 ha) are in production. Agricultural practices are currently low-technology, in terms of inputs, although this is slowly changing. The sector is dominated by small scale unorganized farmers who depend mainly on simple labor intensive production techniques. It is characterized by low productivity resulting from the continuous usage of indigenous farm implements and adoption of indigenous farming practices. Agriculture is a main source of demand for water and land. There has been a slow shift away from the agricultural economy, and although this shift is expected to continue, each country also has clear plans to further develop and expand agricultural production over the coming decades. The specific impacts of agricultural production include land degradation (especially in areas where forests have been cleared), loss of top soil, erosion, sedimentation of water sources, salinization and pollution. In the dominant agro-climatic zones of the basin, land degradation has occurred as a result of over-grazing and land clearing for cash crops.

Opportunities in hydropower abound in the Basin, particularly for projects of regional significance. While Benin and Togo basically depend on oil for energy use, Ghana, in addition to oil, depends on hydropower, generated through three hydroelectric plants on the Volta River, with current installed capacities of 1,020 MW and 400 MW and 160 MW at the Akosombo, Bui and Kpong Generating Stations, respectively. The Bagre and Kompienga dams supply 16 MW and 14 MW to Burkina Faso, respectively, as well as supply water towards irrigation schemes in that country. The combined existing hydro systems currently supply over 95 percent of Ghana's electricity needs. The Volta River Authority (VRA), which manages the Akosombo dam, also supplies neighboring countries of Togo and Benin and until recently, supplied Côte d'Ivoire, while there are ongoing projects within the West African Power Pool to extend this power sharing arrangement to Burkina Faso. Studies conducted by VRA indicate that the estimated potential of unexploited hydropower resources on three major tributaries in the Volta Basin is of the order of 715 MW with a

corresponding average annual energy generation potential exceeding 3,097 GWh. These tributaries are the Black Volta, the White Volta, and the Oti. There are in addition, other sites for hydro development on the Pra and Ankrobra Rivers in the Western Region. Livestock, fisheries and aquaculture also constitute a major portion of the basin's economy and are exploited to varying degrees within the countries.

While the Volta Basin has strong potential for growth and development in its riparian countries in the sectors stated above, risks to the environment, water sources and basin ecosystems also abound. Burkina Faso, Ghana and Togo rank high amongst African countries most exposed to risks from multiple weather related hazards. In the last 20 years, Ghana alone experienced seven major floods; most prominently were the ones of 1991, and more recently those of 2007, 2008 and 2010. The Sahel and savannah belts of the basin, including northern parts of Benin, Cote d'Ivoire, Ghana and Togo are prone to droughts regularly impacting livelihoods and the cotton dependent economies of Burkina Faso and Mali. Ouagadougou was hard hit by floods in 2009 causing damages and losses to the economy and displacing more than 100,000 people.

Changes in water quantity and seasonal flows of the Volta tributaries relate to differences in socioeconomic and cultural uses as well as physical constraints. Changes are also a result of the impacts of climatic change on the hydrological regimes of the Basin's rivers. Indeed, changes in the aggregate volume of water and changes in its temporal and seasonal distribution have been observed over the past decades resulting in, increasingly, more serious and less predictable water shortages, the drying up of some of the Basin's rivers for lengthy periods of time and frequent flooding. Changes in the Basin's climatic trends are significant with precipitation values decreasing over the last few decades, reducing water-fed agriculture, drying up perennial streams faster, and having a significant impact on water availability.

Climate change is predicted to adversely impact temperature and precipitation trends in the basin. The World Bank's Climate Change Portal indicates that there will be increased fluctuations in temperature across the basin. The trend over the period 2006 to 2050 indicates warming in all sub-basins, with temperatures increasing the most in the North where the forecast suggests temperature rise in the order of 2.2 to 2.3°C. The Economics of Adaptation to Climate Change (EACC) study also suggests a cyclical pattern for rainfall over the period 2006 to 2050 for all sub-basins, with high rainfall levels followed by a drought every decade or so. It is also expected that climate change will increase intra-annual rainfall variability in the basin lengthening the dry period and shortening the wet ones. This could also be accompanied by wide variations in stream flows and runoff and these fluctuations would increase the risk of floods and/or droughts. The regional nature of these environmental risks would require a collective effort by riparian countries to address their impacts.

Water quality degradation in the basin is an important issue with a significant transboundary characteristic as polluted water – be it from grazing, agricultural or industrial activity – crosses national borders. The main cause of water pollution in the Volta is improper fertilization and the heavy use of pesticides for agriculture; the growing use of fertilizers and pesticides for agricultural purposes and the unregulated use of chemicals affect the water quality. Urbanization is leading to inappropriate discharges of domestic waste and other contaminants, with resulting increases in the biochemical oxygen demand of the affected streams and rivers. Industry presents few transboundary water quality problems, but some localized significant problems – for example near large industrial sites or mining areas are apparent. The deterioration of the water quality in the basin is also caused by inefficient irrigation technologies combined with agricultural policy that is meant

to protect the water quality, but that is not fully implemented.

Poor land-use practices such as use of bush fires to clear land, widespread tree cutting for fuel wood and over-cultivation of the land are resulting in loss of vegetative and forest cover. These practices, particularly in the upper watershed of the Volta River are contributing to increased and faster run-off and heavier siltation of waterways which are exacerbating flooding in the White Volta sub-basin and lead to coastal erosion. Moreover, the continuing deforestation plaguing areas of the basin can lead to the loss of important ecosystems such as wetlands and species such as the Ephemeroptera, an important food resource for many of the fish in the Volta River. Soil degradation is caused by intense erosion, desertification and bushfires, removal of topsoil for mining, and sand and gravel extraction. Sediment loads are increased by land uses such as farming along river banks and on steep slopes, burning of farmland, excessive sand and gravel extraction, mining on river banks and beds, harvesting of fuelwood and more systematic deforestation.

The coastline in the downstream area of the Volta Basin has changed over the years in response to changes in the natural environment and human activities. It is well-known and documented that Ghana and Togo have been experiencing severe coastal erosion problems at various points along their coastlines and that this has dramatically affected the Volta Estuary in Ghana. This coastal erosion is being directly caused by changes in the river flows, increased storm intensities and sea-level rise, and these factors are, in turn, a result of climate change, movement of sand, sediment and gravel from dam construction and mining, and removal of mangroves for wood. The driving factors behind these secondary forces include inadequate knowledge, cultural and social preferences, and weak legislative frameworks. Moreover, increasing population pressure is leading to higher levels of water abstraction in response to increased water demand for domestic use, urbanization, agriculture and livestock watering, and implementation of large scale water resources development investments. While increased infrastructure is being pursued to precipitate development, water quantity and seasonal flows are also affected by the development of infrastructure such as dams in the basin's rivers to support the generation of hydroelectricity, the development of agriculture, mining and industrial activities.

The environmental challenges of the Basin are further exacerbated by governance insufficiencies. A look at the portion of the basin within Mali demonstrates this interplay between environmental challenges, human activity and governance issues. In Mali where approximately 80 percent of the region within the basin is used for agriculture, livestock or dwellings, there is strong competition between livestock breeders and farmers over increasingly limited water and land resources. Because these competing uses of the resources are unregulated and unsustainable, these factors have resulted in a steady degradation of the region, which has become prone to wind erosion and a decline in production. Another example can be seen in the White Volta between Burkina Faso and Ghana, where it often said that flooding in northern Ghana is a result of releases from Bagre dam in Burkina Faso but is a result of several factors including natural topography, limited water storage infrastructure and environmental degradation. This misinformation has led to political tensions along the border of the two countries while the risk of flooding has not been mitigated.

Inadequate public knowledge, lack of institutional capacity and gaps in policy or lack of implementation provide an environment for the proliferation of challenges. These challenges impede management within national borders and in local settings; a further secondary challenge is introduced when the transboundary perspective is added. An example of this is the need to harmonize policies across the many institutions that are mandated with management of

transboundary water resources. The TDA showed that there are forty six key national institutions that are responsible for water and environmental management across the six riparian countries of the Volta basin, often times leading to confusion and overlap in authority. And despite the multiplicity of institutions, national laws typically do not have provisions related to transboundary water resources in particular. Additionally, states of the Volta basin operate in different politico-administrative contexts; Ghana operates in the British system of administration, whereas the other five countries operate under a French tradition. The lack of harmonization among institutions, policies and political or administrative contexts create constraints for the Volta Basin Authority (VBA) to effectively manage the transboundary aspects of the Volta River Basin. The limited ownership of the VBA by member states, capacity needs and weaknesses and gaps within these institutions themselves add additional constraints to management of the transboundary river system and its related environment.

The Volta River Basin is a critical resource, both economically and ecologically, for the riparian countries. Efforts towards mitigation of environmental concerns, increased water storage and infrastructure, coupled with multi-purpose water resources development and management, are crucial to addressing the growing demand for water and food, and to ensuring sustainable growth and the welfare of the ecosystems and people living in the basin. However, there is a need for coordinating water resources management and investment planning at both the national and regional levels because uncoordinated management can contribute to environmental degradation as can be seen above and can also reduce the economic returns of planned investment projects. For instance, increased sedimentation can lower the storage capacity of downstream reservoirs. Additionally, looking forward, unilateral plans that are made and implemented without consideration of the larger river basin context pose the risk that some of the national investments in water-related sectors could be sub-optimal and may foreclose future development opportunities. For instance, there are currently a number of large infrastructure developments progressing unilaterally in Ghana including Pwalugu dam on the White Volta, Bui dam on the Black Volta and potentially Noumbiel dam. These projects could be especially problematic since Ghana is a downstream riparian where the quantity and quality of water flow regimes could be significantly impacted by upstream development.

For existing infrastructure such as the the Akosombo hydropower plant, the need for ensuring basin-wide cooperation is equally strong. The Akosombo dam, which is managed and operated by the Volta River Authority (VRA) and supplies about 70 per cent of Ghana’s power needs, requires a dependable annual inflow (estimated at about 28 BCM) which is stored in Lake Volta. Run-off accounts for the bulk of replenishment to the usable storage and is an important direct factor affecting the power generation at the Akosombo Dam. Since the Lake Volta is situated in the downstream reach of the Volta River, changes in run-off resulting from upstream development would equally negatively impact power generation. VRA has further limited reliable, real time information on inflows into Lake Volta, making it difficult for them to optimally manage storage and hydro-power generation.

Institutional Context

The Volta Basin remained for many years one of the few large transboundary river basins in Africa without formal legal and institutional arrangements among riparian countries for managing its resources. In order to institute measures for sustainable transboundary water resources management, the Ministers responsible for water resources of the riparian undertook measures to

establish the Volta Basin Authority, in the early 2000s. ECOWAS was involved in these efforts since 2004 and provided much technical and financial support towards formation of the Volta Basin Technical Committee (VBTC), which expanded dialogue on a cooperative platform for the Volta to the remaining four countries and aimed to identify the issues and obstacles towards the launching of a Volta basin organization. The VBTC led to approval of a draft Convention and Statues of the Volta Basin Authority (Convention) on July 16, 2006 in Lomé, Togo. The Convention was signed by the heads of States of the riparian countries at their first assembly held in Ouagadougou, Burkina Faso on January 19, 2009 and finally came into force on August 14, 2009.

The signing and ratification of the Convention for the establishment of the Volta Basin Authority marked a turning point in transboundary cooperation for the Volta River Basin, which commits the riparian countries to engage in sustainable development and enhance coordination and information sharing on the shared water resources. This Convention is a testament that the riparian countries recognize that basin-wide cooperation for water resources management can lead to a larger pool of benefits for all countries to share. The countries also acknowledge that the consequences of unilateral actions will be unsustainable development, more environmental degradation, and higher tensions within the basin; while cooperation is expected to enhance regional stability and security. As a sign of the region's commitment towards regional integration, ECOWAS has continued to provide material, financial and technical support towards the evolution and growth of the VBA.

The jurisdictional coverage of the VBA in the performance of its functions, as stated in Article 7 of the Convention, includes the Volta River, its tributaries and sub-tributaries, the reservoirs and lakes, groundwater and wetlands as well as the aquatic and land ecosystems linked to the basin, the estuary of the river including the zone of coastal and oceanic influence. Article 6 of the Convention mandates the Authority to:

i. Promote permanent consultation tools among the parties for the development of the basin;
ii. Promote the implementation of integrated water resources management and the equitable distribution of the benefits resulting from their various utilizations;
iii. Authorize the development of infrastructure and projects planned by the stakeholders and which could have substantial impact on the water resources of the basin;
iv. Develop joint projects and works;
v. Contribute to poverty alleviation, the sustainable development of the Parties in the Volta basin, and for better socioeconomic integration in the sub-region.

However, despite this strong mandate on paper, this has translated into little real action. Regional cooperation for water resources management and development which is needed to effectively tackle all the above pressing issues is still very limited as evidenced mainly by the limited number of on-going infrastructure projects in regional planning or development. Two main types of constraints face the VBA presently, which this project aims to address: 1) the incomplete design of the institution; and 2) capacity limitations in its multiple functions. The latter is a constraint faced by transboundary river basin organizations in general as the process and political dynamics of establishing a multi-sector institution for basin management are quite difficult, and the difficulties are compounded when sovereignty and trans-national authority are involved.

Regarding the former, in the case of the VBA, limitations in the institutional design are attributed to several factors. The VBA does not have sufficient, well-structured and validated internal procedures for administrative and financial management. Although the VBA has developed documents that

define the Organizational Chart, Definition of Posts and Profiles, Financial Regulations and Conditions of Service, a cursory review of these policies demonstrates them to be insufficient to the level of administrative and management needs of the VBA's mandate and jurisdiction. Furthermore, the VBA does not have an effective communications framework that can structure flow of information among member states and stakeholders at different levels. The limited exchange of hydrological and meteorological data, e.g. on the release of water from Bagré dam in Burkina Faso, has so far mainly been organized bilaterally between the two major hydropower operators SONABEL (Société Nationale d'électricité du Burkina – Burkina Faso) and VRA (Volta River Authority – Ghana) without much involvement from VBA. The lack of an effective communications framework strongly limits engagement by riparian states in basin level cooperation and reduces riparian ownership of the VBA.

Nevertheless, it is important to note that the VBA has taken steps towards ensuring its financial efficiency – it has doubled execution of its budget between 2010 and 2012; it has concluded a study exploring Autonomous and Sustainable Financing Mechanisms for the VBA, and elevated the attainment of this financial autonomy and sustainability to one of the Objectives of its 2015-2019 Strategic Plan (list of Objectives given below); and there is a positive trend in payment of arrears by member countries – 51 percent in 2012 and 71 percent in 2014. However, funds continue to be limited as country contributions only pertain to the operating costs of the organization and the VBA is implementing a limited number of small projects. Additionally, there is a feedback effect between available funds and the strength of the institution to implement projects, resulting in a continuation of limited financial resources to enhance the institutional design. Finally, a Water Charter which would lay the legal foundation for establishing roles and responsibilities of riparian countries with regard to water resources use, exchange of information and the position of the VBA with respect to the institutional landscape of the basin, and which would strengthen the underpinning of VBA to promote coordinated and harmonized water policies in the Basin does not yet exist.

It is important to note that several agencies have, in reaction to the increasing pressure on the water resources of the basin, initiated various projects and programs to provide information and help develop solutions for sustainable management of the water and other natural resources of the Volta basin. These projects and programs have also contributed to the development of the VBA, in particular in terms of the knowledge base available in the basin. They have included analysis of the hydrological cycle and impacts of climate change in the basin, water audit, a compilation of baseline information on the water resources and associated environmental variables within the basin, framework for regional meteorological data collection, and others.

The VBA has recently validated its Strategic Plan for 2015-2019, which builds on its previous Strategic Plan and identifies the following objectives: (i) involve VBA in regional integration and economic development policy of the Volta basin, (ii) ensure VBA's autonomous and sustainable funding, (iii) enhance participation and partnerships with water stakeholders of the Volta basin, (iv) strengthen the legal framework of the Volta basin, (v) develop the technical framework to implement Integrated Water Resources Management of the Volta Basin, (vi) adapt the VBA's resources to the implementation of its Strategic Plan, (vii) monitor and assess the Volta basin evolution, and (viii) enhance the VBA's communication. These objectives are fully aligned with the recommendations of the SAP and the scope of the proposed project.

II. Proposed Development Objectives

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

III. Project Description

Component Name

Water Charter Development for Volta River Basin

Comments (optional)

Carrying out a program of activities to develop a Water Charter, including: (a) a stakeholder assessment to: (i) determine the roles and responsibilities of the various stakeholders; and (ii) identify institutional problems and suggest practical solutions; (b) an in-depth legal and diagnostic study in the Member States, respectively, to prepare an inventory of water resource management legislation, regulations and legal systems in force in the area; (c) consultation on the draft Water Charter through: (i) the preparation of a suitable TOR to define the contextual needs in the consultative process; and (ii) the provision of technical assistance to ensure that the multidisciplinary nature of the consultation is properly integrated; and (d) the dissemination of the adopted Water Charter.

Component Name

Facilitating Dialogue, Communication and Project Monitoring

Comments (optional)

Carrying out a program of activities aimed at facilitating dialogue and communication among the different stakeholders through, inter alia: (a) the development of a communication strategy and plan, including: (i) an assessment to identify the typology of the stakeholders and their communication needs; (ii) an assessment for the establishment of a platform for information and harmonized data exchange; and (b) the provision of support to knowledge generation and dissemination through participation in the International Water Learning Exchange and Resource Network activities.

Component Name

Implementation of Strategic Action Programme Priority Actions

Comments (optional)

Carrying out a program of activities to support the development and implementation of Priority Actions aimed at improving water quality, flows and ecosystem services, including: (a) preserving critical ecosystem functions and reducing adverse impacts on flow of the river through: (i) rehabilitation of degraded forest ecosystems; (ii) rehabilitation of river banks; (iii) reforestation along degraded river banks; and (iv) reforestation of selected watershed areas; and (b) developing small market gardens using water conserving techniques showcasing alternate forms of irrigation applicable to the Sahel.

Component Name

Project Management

Comments (optional)

Strengthening the Recipient's capacity through: (a) the provision of Operating Costs for Project management, including: (i) fiduciary compliance; (ii) M&E and technical reporting; and (iii) audits; (b) the hiring of additional consultants for the purpose of Project implementation; and (c) the provision of technical assistance to strengthen its internal processes.

IV. Financing *(in USD Million)*

Total Project Cost:	10.94	Total Bank Financing:	0.00
Financing Gap:	0.00		

For Loans/Credits/Others	**Amount**
Borrower	0.24
Global Environment Facility (GEF)	7.20
Cooperation in International Waters in Africa	3.50
Total	10.94

V. Implementation

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

World Bank

Contact: Shelley Mcmillan
Title: Sr Water Resources Spec.
Tel: 473-4827
Email: smcmillan@worldbank.org

Borrower/Client/Recipient

Name: Volta Basin Authority
Contact:
Title:
Tel:
Email:

Implementing Agencies

Name: Volta Basin Authority (VBA)
Contact: Charles Biney
Title: Executive Director
Tel: 22650376067

Email: cbiney@gmail.com

VIII. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop

Public Disclosure Copy