

PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE

Report No.: PIDC3785

Project Name	Volta River Basin Institutional Development Project (P147202) and Strategic Action Programme Implementation Project (P149969)
Region	AFRICA
Country	Western Africa
GEF Focal Area	International waters
Sector(s)	General agriculture, fishing and forestry sector (40%), General public administration sector (20%), General water, sanitation and flood protection sector (40%)
Theme(s)	Regional integration (20%), Environmental policies and institutions (30%), Water resource management (50%)
Project ID	P147202/P149969
Borrower(s)	Volta Basin Authority (VBA)
Implementing Agency	Volta Basin Authority (VBA)
Environmental Category	B – Partial Assessment
Date PID Prepared/Updated	7-Mar-2014
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I. Introduction and Context

Country Context

1. 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.

2. 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. Annex 1 provides a map of the Volta River Basin, with main tributaries and riparian country borders.

- 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.

3. 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

Sectoral Context

4. 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 on the basin. 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, with the largest being the Akosombo and Kpong dams (1020 MW) supplying power to Ghana, Togo

and Benin, the hydropower potential of the river mostly remains underdeveloped and is approximated at around 900 MW. Fishing is a growing sector in the basin as a result of manmade reservoirs (such as Lake Volta) and presents economic opportunities. In addition, it has been estimated that less than 50% of the potential irrigable lands (estimated at 1,487,000 ha - FAO, 2012) of the basin are in production.

5. Further, 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, Cotonou and Lomè were hard hit by floods in 2009 and 2010, causing damages and losses to the economies worth several hundred million US dollars.

6. The Global Environment Facility (GEF) financed a series of studies on the Volta River Basin, starting with the Volta River Basin Preliminary Transboundary Diagnostic Analysis (TDA) in 2002 and later in 2012, under the *Addressing Transboundary Concerns in the Volta River Basin and its Downstream Coastal Area* project, a more detailed TDA. The TDA indicates 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 and this SAP informs the design of the proposed project. 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.

7. 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. 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.

8. 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. 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 lack of effective governance (including inadequate legislative frameworks and weak institutional capacity and enforcement) and the low level of education in the basin countries, (leading to poor agricultural and livestock practices, poor energy harnessing and inadequate technology) further exacerbate the problems.

9. 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 and inappropriate or unimplemented agricultural policy backed up by inadequate knowledge and awareness, inadequate legislation and weak institutional capacity.

10. 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. ~~Sedimentation has also arisen as a consequence of the construction of the major hydroelectric dams, i.e., the Akosombo, Kpong, Bagre and Kompienga dams, as well as of smaller reservoirs in Burkina Faso and northern Ghana for irrigation.~~ Such inappropriate land uses are the result of inadequate public knowledge and awareness, weak or unimplemented policy and legislation and lack of institutional capacity within the agricultural livestock, energy, mining and transport sectors.

11. 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. In Keta (and in its extension to Lome in Togo) the sea covered about 1 km of tarred road in 2009. In similarly affected areas, such as Ada (where the Volta River flows into the Atlantic Ocean), up to 20 meters of beach front is currently being lost to erosion per year. 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.

12. The environmental challenges of the Basin are further exacerbated by governance deficiencies. 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% 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 it 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.

13. 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 Nombiel 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.

14. 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.

15. In response to a need for a regional approach to development when it comes to transboundary river basins, the West African nations are increasingly cooperating regionally on economic and political matters through the Economic Community of West African States (ECOWAS). In 2009, The ECOWAS was instrumental in helping get the VBA established and also launched a multi-stakeholder dialogue on large hydraulic infrastructure in West Africa ~~in 2009~~. This dialogue, which included the newly instated Volta Basin Authority (VBA), led to a prioritization exercise, based on a multi criteria analysis, of 39 dam projects in West Africa, eight of which are in the Volta River Basin; Nounbiel, Ouessa, Bonwale, Bougouriba and Bagré aval in Burkina Faso and Heman, Juale and Pwalugu in Ghana. The dialogue also led to specific recommendations for the sustainable development of water infrastructure in West Africa, which ECOWAS ~~envisions to~~ has used in the preparation of a framework directive, currently being finalized for validation by member countries. These moves indicate increased regional support for well-planned water resources development, but also a clear pipeline of hydropower infrastructure which could progress without adequate basin level coordination, certainly in the Volta River Basin unless VBA can more effectively carry out its mandate.

Institutional Context

16. 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 countries approved a draft Convention and Statutes of the Volta Basin Authority (VBA) 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 (VBA) 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.

17. VBA has the mandate to promote permanent consultation, promote implementation of integrated water resources management, authorize the development of infrastructure and contribute to poverty alleviation and sustainable development of water resources in the basin. For the period 2010 to 2014 VBA and its major partners have identified the following strategic objectives, (i) strengthening policies and institutional framework, (ii) strengthening knowledge base of the basin, (iii) coordination, management and planning, (iv) communication and capacity building for all stakeholders, and (v) effective and sustainable operation (VBA, 2011).

18. The jurisdictional coverage of the Authority in the performance of its functions, as stated in Article 7, 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 VBA 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.

19. However, despite this strong mandate on paper, this has been 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 regional level infrastructure projects in planning and development. Engagement by riparian states in basin level cooperation is limited by the lack of capacity in VBA and the lack of a coherent institutional framework. Although VBA has a strong mandate, it does not yet have a Water Charter which would lay the legal foundation for establishing roles and responsibilities of riparian countries with regard to water resources use and which would strengthen the underpinning of VBA to promote coordinated and harmonized water policies in the Basin. In addition, the VBA does not have well-structured and validated internal procedures, which would strengthen the functionality of VBA through reinforcement of administrative and financial management, or a plan for managing communication between and with riparian states. This has limited the expansion of VBA despite the investment from a wide range of development partners, including AFD and UN agencies. Furthermore the exchange of hydrological and meteorological information and the collaboration in preparation and response to floods and droughts remains fairly limited. Information exchange, e.g. on the release of water from Bagré dam in Burkina Faso, has so far mainly been organized bi-laterally between the two major hydro-power operators Volta River Authority (Ghana) and SONABEL (Burkina Faso). VBA aims to initiate an observatory for the Volta to strengthen the knowledge and scientific characterization of the river (VBA, 2011).

20. Before the establishment of the VBA, several institutions had, in reaction to the increasing pressure on the water resources of the basin, initiated various projects and programs to provide information and develop solutions for sustainable management of the water and other natural resources of the Volta basin. These have contributed to the development of the VBA, in particular in terms of the knowledge base available in the basin, the most critical of these is the GLOWA Volta basin project (2000-2010) which included an analysis of the hydrological cycle and impacts of climate change in the Volta Basin and development of Decision Support System for water resource management (supported by German Federal Ministry of Education and Research). A Water Audit of the Volta Basin has been sponsored by IUCN/PAGEV with financial support from SIDA. In addition some support has been provided by the EU to start to develop monitoring and evaluation tools. There are also a number of projects ongoing funded by other development partners which will contribute to the Institutional development of the VBA.

Relationship to CAS

21. The Program is consistent with the general goals of improved environmental and water resources management expressed in the six riparian countries' existing CAS or CPS. For all recipient countries, the program is also consistent with the general sector goals of strengthening governance, building institutional capacity and increasing sustainable management practices to reduce poverty. In the same way, the program is aligned to their PRSP goals for good governance and sustainable development. Individual country CAS goals, as they relate to the Project, are identified below:

22. **Benin.** The 2013-2017 CPS focuses on building capacity of the government to address its implementation constraints with emphasis on regional approaches to infrastructure in areas such as hydropower and transport. The CPS supports improving agricultural productivity and diversification, focusing on channelling more private investments into agro-business and designing an agricultural-based youth component into a youth employment project. The CPS also focuses on sustainable management of natural resources, which it has already begun through projects that are regionally-based.

23. **Burkina Faso.** One of the focuses of the Bank's country partnership strategy (CPS) for 2013-2016 is on transforming the agricultural sector as the biggest employer, particularly in rural areas through (a) secure land use and tenure arrangements in order to reduce conflicts and build incentives for long-term investments in value added businesses; (b) enhance productivity and reduce vulnerability to weather by scaling up investments in irrigation and water harvesting; and (c) encourage strategic reforms to attract private investment in production of higher-value products through agro-processing that will create more remunerative jobs.

24. **Cote d' Ivoire.** The Bank country partnership strategy (CPS – 2010/2013) for Cote d' Ivoire is to promote short-term visible results to improve quality of life, boost economic activity, and support stabilization; while continuing to support long-term reforms to help achieve sustainable peace and growth and make progress toward the MDGs. Four strategic

objectives are pursued: (i) strengthen governance and institutions; (ii) improve the performance of agriculture; (iii) strengthen the private sector; and (iv) renew infrastructure and basic services. Expected CPS outcomes include (but are not limited to): increased productivity and value addition of export and food crops, increased rural incomes, strengthened protection of the environment and natural resources.

25. **Ghana.** The Bank's country partnership strategy (CPS) for 2013-2016 is based on the pillars of: (i) improving economic institutions, (ii) fostering competitiveness and job creation and (iii) protecting the poor and vulnerable. All of these objectives are dependent on improving water resources management and service provision of the water-using sectors owing to the importance of the country's agriculture sector to all three pillars.

26. **Mali.** The Interim Strategy Note (2014-2015) focuses on post conflict recovery, following events of 2012, with more efforts towards economic recovery, political risk mitigation and local economic growth. Other objectives being supported that are in line with this project include expansion of the energy sector, rural electrification projects, increasing agricultural performance and improving resilience to weather related shocks. Efforts in agriculture will address: (i) the lack of productive infrastructure, especially for irrigation, post-harvest management, processing operations, and market access; (ii) low-intensity techniques, very limited use of fertilizers and improved seeds, and little access to financing, in particular for women in agriculture; and (iii) the lack of coordination in the sector, leading to many fragmented and scattered interventions with limited impact at the national level. Efforts will also target sustainable land and water management techniques.

27. **Togo.** The Bank's strategy for Togo is aligned to the country's ambitious poverty reduction strategy (PRS) to revive economic growth and improve basic living conditions along three strategic axes: (i) strengthening political and economic governance, with a focus on institutional reform and fiscal governance; (ii) promoting economic recovery and sustainable development, with measures to reform state-owned enterprises and financial institutions, improve the business environment, strengthen regional integration and trade, revive agricultural production, rehabilitate infrastructure, and improve management of natural resources and the environment; and (iii) developing social sectors, human resources and employment, with a focus on improving access to and the quality of basic education and health services.

II. Proposed Development Objective(s) / Global Environmental Objective(s)

A. Project Development Objective(s)

28. The proposed development objective is to strengthen transboundary water resources management in the Volta River Basin through institutional development and implementation of priority actions of the Strategic Action Programme.

Key Results (From PCN)

29. The proposed PDO Level Results Indicators would measure progress for all components of the proposed project. The proposed PDO level results indicators are:

- a. Improved capacity and operations of the VBA for more effective transboundary water resources management in the Volta River Basin;
 - b. Direct project beneficiaries benefitting from implementation of the SAP priority actions.
30. The proposed intermediate results indicators are:
- i. Water Charter is finalized, validated by the riparian states and presented to the CoM;
 - ii. Number of persons informed about the mandate and role of the VBA in the Volta River Basin;
 - iii. Procedures for Internal Regulations introduced at the VBA

III. Preliminary Description

Concept Description

31. **Description.** The project is the first support provided to the VBA by the World Bank. It is expected to be implemented over four years with implementation from October 2014 to September 2018. The project will be financed by a \$7.2 million grant from the GEF and \$3 million grant from CIWA, and will consist of four components: (i) Water Charter development for the Volta River Basin; (ii) Facilitating Dialogue, Monitoring and Project Development; and (iii) Implementation of SAP Actions. A fourth component allocates funding related to the Project Management Cost. A parallel, bank-executed activity will be conducted for an institutional assessment of the VBA, and will be financed by an additional \$0.5 million from CIWA. This activity is bank-executed so as to have an independent assessment.

32. **Component 1: Water Charter Development for Volta River Basin (US\$1,487,492,000).** The aim of this first component is to develop a Water Charter which specifies roles and responsibilities of riparian countries with regard to water resources use, strengthens the underpinning of VBA to promote coordinated and harmonized water policies in the Basin and defines 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 has the objective to: (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 by determining the modalities of allocation of water resources between the different sectors and associated beneficiaries; (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 defining 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.

33. **Component 2: Facilitating Dialogue, Monitoring and Project Development (US\$1,260,000).** In order to effectively carry out its coordination role, the Strategic Plan for

the period 2010 -2014 recommends that VBA establish a Basin Management and Regulation Committee that will be responsible, among others, for sharing information on current and planned projects in the Member States and generally, improving coordination and monitoring of projects basin-wide. This activity will ultimately strengthen the sustainable management of water resources of the Volta Basin through: (i) acceleration of dialogue, transfer and sharing of knowledge; (ii) effective dissemination of information on ongoing and planned initiatives in the Volta basin for coordination and monitoring purposes; (iii) identification of future collaborative projects; (iv) promotion of dialogue with stakeholders on emerging water-related issues within the basin and the expected role of VBA; (v) facilitation of information sharing, and (vi) increased dissemination and use of project results by policy and decision makers through joint efforts.

34. Component 3: Implementation of SAP Actions (US\$6,898,000). This component represents implementation of SAP measures through priority projects. It will support the development of projects that lead to improvements in water quality, flows and ecosystem services. These actions will be designed in consultation with VBA and the riparians based on measures identified in the SAP and building on the pilots that were started under the previous GEF project. One set of consultations with the VBA has been completed and resulted in the criteria for selection and a tentative list of priority actions. The criteria ensure that projects being chosen are transboundary in nature. The tentative list includes actions across the four components of the SAP, integrating measures that directly address physical stresses, to those related to human capacity and knowledge for maintaining the environment to governance and institutional capacity for its management. While the priority actions will be further defined and detailed during project preparation, they will likely include watershed management, alleviation of water pollution in pollution hotspots, increasing and sharing environmental information, wetland restoration efforts, coastal bank restoration and others.

35. Component 4: Project Management (US\$5505,000). This component will finance project management costs relating to fiduciary management, monitoring and evaluation, technical reporting and audits as well as any operating costs for project management. **This component will support the establishment and implementation of procedures for internal regulations.** The objective of this component is to strengthen VBA’s capacity to effectively assume its mandate through the update and finalization of: (i) Manual of Administrative and Financial Procedures; and (ii) establishment and implementation of VBA Focal Structures in Member States.

IV. Safeguard Policies that Might Apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	X		
Natural Habitats OP/BP 4.04	X		
Forests OP/BP 4.36	X		
Pest Management OP 4.09	X		
Physical Cultural Resources OP/BP 4.11		X	

Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12	X		
Safety of Dams OP/BP 4.37		X	
Projects on International Waterways OP/BP 7.50	X		
Projects in Disputed Areas OP/BP 7.60		X	

V. Financing (in USD Million)

Total Project Cost:	10.2	Total Bank Financing:	0.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			0.00
Global Environment Facility (GEF)			7.20
Cooperation in International Waters in Africa			3.00
Total			10.2

VI. Contact point

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