PROPOSAL FOR A PROJECT DEVELOPMENT AND PREPARATION FACILITY (PDF) BLOCK B GRANT

1. Identifiers

Project Number:	Implementing Agency Project number Not Yet Assigned
Project Title:	Preparation of a Trans-Boundary Diagnostic Analysis for the Integrated Management of the Volta River basin
Implementing Agency:	UNEP
Executing Agencies:	Bénin: Direction de L'Amenagement du Territoire (Ministere de l'Environnement de l'Habitat et de l'Urbanisme) Burkina Faso: Direction Nationale de l'Hydraulique (Ministere de l'Environnement et de l'Eau) Côte d'Ivoire: Direction de l'Environnement (Ministere de l'Environnement et de la Foret) Ghana: Environmental Protection Agency (Ministry of Environment Science and Technology) Mali: Direction Nationale de l'Hydraulique (Ministere du Developpement Rural et de l'Eau) Togo: Direction de l'Ecologie Générale et de la Réhabilitation du Milieu (Ministere de l'Environnement et de la Protection Forestiere)
Requesting Countries:	Regional: West Africa (six countries); Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, Togo
Eligibility	The countries are eligible under paragraph 9(b) of the GEF Instrument
GEF Focal Area:	International Waters
GEF Programming Framework	Integrated Land and Water Multiple Focal Area Operational Programme OP #9

2. Costs and Financing

GEF PDF-B Funding	US $ 347,500
PDF Co-funding:	National Governments US $ 90,000 (in kind) UNEP US $25,000 (in kind)
Block A grant awarded:	Yes

BACKGROUND

1. The Volta River basin, with an area of almost 400,000 km^2, is the ninth largest river/lake basin in Sub-Saharan Africa. It covers six nations (Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, and Togo) and contains some of the sub-region's most important environmental, social, land and economic resources (see Fig. 1, Map of the Volta River Basin). The basin provides water for hydroelectric power generation, domestic supplies, irrigation, livestock watering, transportation, and fisheries.

2. The Volta River basin is home to several National Parks, including the Pendjari National Park (NP) in Benin, a World Heritage Site, Digya, Bui and Mole NP in Ghana, the Keran NP in Togo as well as part of the Komoé NP in Côte d'Ivoire. Collectively these sites have global significance for the ecosystem biodiversity including endemic species, species under threat, as well as a number of globally endangered species of primates and large mammals.

3. The primary environmental problems facing the Volta River basin stem from poverty and lack of equity in the distribution of and in access to resources. Throughout the basin, chronic poverty is the main cause and consequence of environmental degradation, which continues to undermine sustainable economic development. This is because poverty drives populations into the unsustainable use of natural resources and onto marginal lands. According to UNDP/World Bank classification these countries are amongst the poorest in Africa with high population growth rates and low per capita incomes (Table 1).

Table 1. National Statistics on Population Growth Rates, Income and Debt of countries sharing the Volta River basin.

Country	Population Growth Rate (% per year; 1998 estimate)	GNP per Capita/yr. (US $ 1997 estimate)	Debt as % of GNP (1995 estimate)
Benin	3.31	380	75
Burkina Faso	2.72	250	65
Côte d' Ivoire	2.21	710	161
Ghana	2.13	390	85
Mali	3.24	260	121
Togo	3.52	340	107

4. The construction of various large and small-scale impoundments in all the riverine nations has caused significant changes to the environment and consequently to the distribution and livelihoods of people both upstream and downstream of the dams. These changes extend to the coastal wetlands associated with the Volta Estuary. In addition, the coastlines of some of

the riparian countries have experienced coastal erosion as the possible consequence of reduction in sediment flux.

5. The largest of these impoundments, the Volta and Kpong dams in Ghana are the major source of electricity for Ghana (currently providing almost 95% of total consumption) with over 10% of total production (≅ 70 MW) exported to the neighbouring countries of Togo and Benin. The decline in the lake's water level due to reduced inflows caused by drought and the unsustainable rate of abstraction has resulted in episodic and catastrophic energy shortfalls affecting Benin, Ghana and Togo (as an indication, over the past decade the reservoir has been operating below its minimum design depth of 75.6 m). As a further indication of the overall water scarcity in the area concerned, according to recent expert estimates[1], three of the six riparian countries, Burkina Faso, Ghana and Togo are expected to face water stress (i.e. water availability of between 500 and 2000 m^3/capita/year) by the year 2025. The problem of water availability caused by population increase and life style expectation/changes is compounded by short-term climatic variability, which is manifested in the form of Sahalian drought. Linked to this issue is the overarching problem of increased evapo-transpiration, which further reduces water availability in dry years.

6. Apart from the fundamental issue of the basic lack of water whereby the majority of inhabitants of the Volta River basin currently do not have access to safe and secure water supply, the major environmental concerns of the Volta River basin include:

- Degradation of the quality of trans-boundary water resources through the introduction of toxic chemicals, nutrients, pathogens, oxygen-demanding wastes, sediment and solid waste
- Introduction of non-indigenous species causing the disruption of aquatic ecosystems as well as health threats through the creation of habitat for vectors and hosts of water related diseases
- Physical habitat degradation of lakes and water courses, wetlands, mangroves, and estuaries, as a result of land conversion, dredging, coastal construction and irrigation, and changes in water flow regimes downstream
- Excessive exploitation of living and non-living resources due to inadequate management and control measures including over-fishing and water withdrawal; and
- Soil erosion, and consequent siltation of water bodies, caused by deforestation, bush fires and overgrazing.

7. At the Accra workshop, held as part of the PDF Block A grant activities, a working group comprised of technical representatives from the six riparian countries focussed on the identification of the perceived water related environmental problems of the basin: these are presented in Table 2 below. It was noted at the workshop that these problems are further compounded by demographic pressures and consequent pressures on natural resources: the Volta River basin is inhabited by an estimated 60 million people, most of whom derive their sustenance and income from the natural resources of the basin.

[1] Gardner-Outlaw, T. and Engleman R. (1997) Sustaining Water, Easing Scarcity: a Second Update. Population Action International, Washington, 19p

8. Due to the large degree of interdependency between the riparian nations, up-stream/down-stream actions and impacts are very much linked. Though Togo and Benin are upstream to Ghana, they suffer the effects of lack of water in Ghana through the link via power generation and supply. Due to long-shore drift and the prevailing direction of coastal currents (west to east), activities in the hinterlands of Togo and Benin also affect their coasts via the discharge and transport of material through the Volta estuary in Ghana. Sahalian countries have significant nomadic populations who move north-south crossing national boundaries in search of fodder and water for their livestock. The identified environmental problems listed in Table 2 vary in intensity both within and between countries. It is this intra and inter national variation that is one reason for adopting a basin wide approach to problem solving, with each nation providing and sharing information and knowledge with other riparian countries.

Table 2. Key Environmental Problems and their Causes as identified by Technical Representatives during the PDFA funded Accra Workshop.

Problem	***Overall Cause***
Upstream	
Diminishing Water Resources	Increased demand for water resulting from increased populations and life style changes such as the use of modern sanitation; Changes in land use; Siltation of water courses affecting water extraction (e.g. treatment plants).
Hydrological changes	Siltation of water courses; Changes in land use; canals for irrigation, dredging for navigation and flood control; impoundments.
Soil Erosion	Deforestation; Bush fires; Overgrazing; Nomadism and Human Migration; Uncontrolled human settlements along river banks.
Downstream	
Pollution	Dumping of human, domestic and industrial waste into water courses; Leaching of agro-chemicals into rivers; Salt water intrusion; Oil spillage; Waste from mining activities; Use of agro-chemicals in fishing.
Coastal Erosion	The inadequate flow of sediments to the coast due to physical development within the basin.
Coastal Pollution	Transport of pollutants to the coastal zone.
Flooding	Uncontrolled spilling from reservoirs; Inadequacy/lack of early-warning systems; Rainfall Patterns; Loss of wetlands.
Basin Wide	
Loss of Biodiversity	Deforestation, Pollution, Over exploitation of natural resources by humans and their livestock (overgrazing); Changes in flow regimes downstream of dams; Inundation of reservoir areas, dams as barriers.
Aquatic Weeds	Eutrophication of water bodies by run-off fertilisers and human waste; introduction, deliberate in the case of florists, accidental in the case of fishermen and others, of weeds from one place to another.
Water-Borne Diseases	Creation of dams or impoundments; Changes in flow regimes; Contamination of water bodies with human waste and pollution; Infestation of water bodies with aquatic weeds, habitat for hosts and vectors.
Inadequate / Lack of information dissemination mechanisms	Inadequate Resources (financial/human) for information gathering; Absence of a Regional mechanism for gathering Information from member countries.
Inadequate Institutional and Legal Framework for Basin Management	Lack of an enabling political environment

9. Currently, there are no institutional arrangements for managing the water resources of the transboundary rivers such as the Volta, Bia, and Tano which are shared by Benin, Burkina

Faso, Côte d'Ivoire, Ghana, Mali and Togo. There are also no legal provisions for co-operation among the riparian countries for integrated multipurpose development and management of the shared water resources. There is currently a proposal under development for a project to be funded by the French GEF to support the integrated management of shared water resources between Burkina Faso and Ghana. The aims of the French GEF proposal (limited to two nations) are similar to this PDF B proposal. It is expected that as the parties are already in agreement, mutual benefits through synergy and complementarity will be gained.

10. The proposed PDF B activity will benefit from the results of the FAO implemented project "Integrated management of Catchment and Coastal Areas of the WACAF Region" (WACAF/11-ICAM)(1995-1997). It will also draw information from the outputs of the GEF/UNIDO/UNDP Gulf of Guinea Large Marine Ecosystem project which involved four of the 6 Volta Basin riparian countries (Benin, Côte d'Ivoire, Ghana and Togo).

11. The present proposal is in agreement with the water policies of the African Development Bank (AfDB) whose Water Supply and Sanitation Sector Policy adopted in 1989 assigns high priority to social issues such as women, and environmental issues such as water resources management, waste water disposal, solid water disposal and toxic waste management. The AfDB draft Integrated Water Resources Management Policy is also congruent with the PDF B proposal. AfDB might be expected to play a role in the provision of additional finances during the full project.

12. Through the Volta River Basin Declaration (enclosed as Annex A) signed during the Accra workshop, held as part of the PDFA grant activities, the six riparian countries have demonstrated their commitment and political will to address the environmental problems of the Volta River basin through a co-ordinated plan of action. The preparation of a TDA will assist the countries involved in the development and implementation of a plan of action for the integrated management of the Volta river basin.

13. The planned project activities and goals are in line with the GEF Operational Strategy, policies, and priorities. The Strategy lists " degradation of the quality of transboundary water resource, caused mainly by pollution from land-based activities.." and "…physical habitat degradation of coastal and near-shore marine areas, lakes, and watercourses as a result of inappropriate management.." as two of the major global environmental concerns relating to international waters. Further, the project activities will specifically contribute to the further development of the GEF Operational Programme #9. This OP stresses the prevention of damage to threatened waters and includes projects which focus on integrated approaches to the application of better land and water resource management practices on an area-wide basis.

14. The detailed assessment of the relationship between the water sector and national environmental, economic, and equity policies will complement the more generic activities envisaged under the UN System Wide Special Initiative for Africa (SIA). The SIA has five themes, all of which would be supported under this PDF B especially the priority areas under the themes of Water and Food Security.

1.1

SUMMARY PROJECT OBJECTIVES AND DESCRIPTION

15. The objective of the PDF-B is to prepare a Trans-boundary Diagnostic Analysis, a preliminary outline Strategic Action Programme (SAP) and a GEF Project Brief. The PDF-B will also establish the framework for a consensus building process for which the long-term purpose is to secure global environmental benefits by reducing the degradation of the Volta River basin.

16. All the activities to be implemented in the PDFB are designed as preparatory actions required to plan and execute a regionally co-ordinated Strategic Action Programme. In devising the project to develop and implement the SAP, the following issues recommended during the PDFA phase must be taken into consideration:

- the need for a diagnostic analysis of environmental problems and their root causes, socio-economic activities and the roles and responsibilities of national stakeholders in an established framework; and the establishment of co-ordination mechanisms;

- the need for close consultations between UNEP, UNDP, the World Bank, the African Development Bank and the six participating countries in developing and adopting the Outline Strategic Action Programme;

- the requirement for a common strategy based on coherent and harmonised national policies that take account of relevant international conventions that have been signed and ratified by governments. This would involve the identification, during the PDFB phase, of appropriate national legal/institutional frameworks for integrated management of natural resources, to be subsequently developed in the full project;

- the need to co-ordinate with regional initiatives related to the implementation of the World Bank Freshwater Initiative for Africa and the UNEP/GEF Land and Water Initiative for Africa and other initiatives relevant to the integrated management of freshwater basins (e.g. Senegal, Chad, Niger); and,

- the need to utilise appropriate precedents established by other basin-wide management initiatives such as the Chad Basin Commission and the Senegal River Basin Organisation.

17. As many of the activities described above involve meetings, (in fact, a matter of concern expressed by participants at the Accra Workshop was the general lack of a regional forum in which to meet and discuss issues pertaining to the Volta River Basin and other related regional projects) a clear sequence of events needs to be established by the Project management on how information will be circulated before and after meetings. It is suggested therefore that guidelines for the preparation of documents to be discussed at meetings would be circulated

well in advance of the scheduled meetings thus allowing a thorough preliminary assessment by correspondence prior to the meetings themselves. This is especially relevant in the context of the Intergovernmental Meeting scheduled under Activity 5.

18. **The TDA** aims specifically to undertake an initial quantitative assessment of the water related issues and problems and their root causes in the Volta basin in order to identify the key points and areas for intervention and to identify priorities for action which are likely to result in maximum environmental benefits. The TDA will serve as the basis on which to develop a SAP in the full GEF project. The goal of the SAP would be to reduce the environmental degradation of the Volta River Basin. A TDA is required in order to identify those problems that are purely transboundary in nature and therefore eligible for GEF intervention, as opposed to those that are primarily national, requiring both direct national intervention and investment, or bilateral assistance.

19. **The Preliminary Outline Strategic Action Programme** to be prepared will include a preliminary list of remedial actions and their tentative costs. The list will include, but not be limited to, the following general framework topics:

- analysis of the current baseline situation and the activities required to address each identified transboundary priority problem;
- integrated land – water management programme that will incorporate issues such as gender, health, poverty alleviation as well as providing contingency plans to address climatic instabilities;
- include elements such as land-use planning, coastal zone planning and management; pollution control; elements and guidelines for the preparation of individual national programmes of action;
- institutional strengthening;
- capacity building;
- legislation and policy reform; and,
- identification of potential roles for Non-Governmental Organisations (both national and international) in the execution of specific activities.

20. **The project brief** that will be subsequently submitted to the GEF will outline the modalities of operation and management of the full project. The document will include identification of priority short-term actions of a demonstration or pilot nature. More specifically, the project brief will incorporate a list of activities required for the formulation of a SAP including, but not limited to, additional studies as required, demonstration projects to test the feasibility and/or costs, priority investment projects requiring pre-feasibility studies, requirements for capacity building at national and regional level including an analysis of baseline and incremental costs.

DESCRIPTION OF PROPOSED PDF ACTIVITIES

21. The PDF funds will be used for the following activities:

1. Establishment of a Steering Committee (seven members & one observer)

A Steering Committee (SC) will be established to ensure co-ordination of the PDF B activities. The Committee will be composed of representatives of the UNEP/GEF Co-ordination Office, the Chair (Ghana – Ministry of Environment, Science and Technology (MEST), Ministerial level), UNDP and the World Bank (in ex-officio capacities), the African Development Bank, one Ministerial level representative from one of the Francophone riparian states, and the project's Regional Coordinator (RC). The Task Manager of the proposed French GEF project on the joint use of the Volta basin (Burkina Faso and Ghana) will be invited as an observer. Task managers and co-ordinators of regional projects related to the Volta basin may also be invited as observers on an *ad hoc* basis.

The Steering Committee will meet three times. At Project Initiation (Project Month (PM) 1) to agree and confirm procedures to be implemented by the National Co-ordinators. Twice in association with the National Co-ordinator meetings: at PM 7, to assist in the review of Country reports and at PM 12, to contribute to the Regional Synthesis and provide their endorsement of the Trans-boundary Diagnostic Analysis and Outline Strategic Action Programme.

3.1

3.3.1

2. Establishment of a Regional Co-ordinating Mechanism

A Coordinator, to be based in Ghana, will be hired (by UNEP) as overall Regional Co-ordinator with responsibility of ensuring timely implementation of the proposed activities and specifically to:

- Prepare a regional review of existing data and information;
- Establish guidelines for the contents of the country reports;
- Develop drafts of the Trans-boundary Diagnostic Analysis;
- Draft framework elements of the Outline Strategic Action Programme;
- Prepare a GEF Project Brief, and
- Advise National Co-ordinators.

The initial responsibility of the Regional Co-ordinator will be to prepare an annotated bibliography of relevant data and information in consultation with the Steering Committee and the national co-ordinators. The RC will provide an analysis of the water related environmental problems of the Volta River basin. The Ghana Environmental Protection Agency, the executing agency in Ghana, would provide the necessary office space as part of that country's

in-kind contribution to the project. (See Annex E for Draft Terms of Reference of Regional Coordinator).

3. Establishment of an Operations Committee (seven members)

The Operations Committee (OC) will function as the management board of the project and will be responsible for reviewing National Level activities for referral to the Steering Committee (SC). It will be composed of the National Co-ordinators, the Regional Co-ordinator and the UNEP/GEF Co-ordination Office representative (as chair). It will also aim to share experiences, identify problems and seek solutions. The OC will meet three times: the first meeting will follow the first SC meeting; the second and third meeting will take place 2 weeks in advance of the other SC meetings.

4. Preparation of Country Reports

In project months one and two (PM 1-2), the National Executing Agencies will be invited to nominate National Co-ordinators for the implementation of the project. The National Co-ordinators will assist the Regional Co-ordinator to determine the elements and structure of the TDA and outline SAP preparation and the process for its development. The role of the National Co-ordinators would include:

- convening and chairing national inter-ministry/agency committees as well as those including a wide range of stakeholders (including industry, NGOs, scientific community, etc.) with responsibility for ensuring adequate cross-sectoral inputs to the country reports (See Annex F for draft Outline of Country Reports);
- reviewing existing national data and information;
- assisting the RC in finalising guidelines for the preparation of country reports;
- providing inputs for the preparation of the draft Trans-boundary Diagnostic Analysis and SAP, including;
  - key water related environmental issues and problems of the Volta River basin,
  - proximate and ultimate causes of environmental problems,
  - specific sources and sites of impact of these problems,
  - national and regional constraints that may prevent action; and
  - possible mitigating actions.

Three working sessions of the National Co-ordinators are planned. The first, in PM 3, is for a comprehensive briefing on the project and agreement of formats of country reports. The second meeting, in PM7, is to report on and monitor project progress. The final meeting, in PM 12, will provide a forum for the technical endorsement, by the six participating countries, of the relevant documents (TDA and outline SAP). This last meeting needs to be as participatory as possible and will therefore include a wide range of stakeholders from the Volta River basin (e.g. NGOs, Industry, Traditional Authorities, etc.); this final meeting will cover a regional synthesis of the problems faced in each country and recommend a wide range of mitigating actions.

5. GEF Project Brief

A Ministerial level Inter-Governmental Meeting (IGM) will be held in PM14 to give National endorsement and formal adoption of the Trans-boundary Diagnostic Analysis for the Volta River basin as well as the Outline Strategic Action Programme. The Regional Co-ordinator, in collaboration with the National Co-ordinators and the Steering Committee, will prepare a GEF project brief that would be subsequently submitted, considered and formally adopted by the IGM prior to GEF submission. The project brief will include the preparation of a Strategic Action Programme for the Volta River basin and will outline the modalities of operation and management of the project.

PDF-B OUTPUTS

22. The outputs of the PDF B activities are as follows:

1. An annotated bibliography of data and information sources relevant to the development of the TDA and Strategic Action Programme.

2. Six (6) Country reports on priority issues, institutional arrangements, and issues of transboundary importance.

3. Three (3) sets of meeting reports/minutes each for the Steering Committee Meetings, Operation Committee Meetings and National Co-ordinator Meetings.

4. Trans-boundary Diagnostic Analysis for the Volta River basin.

5. A Preliminary Outline Strategic Action Programme for the Volta River basin.

6. GEF project brief for the elaboration of the Strategic Action Programme for the Volta River basin.

7. Declaration of Adoption of the GEF Project Brief by the six riparian nations.

ELIGIBILITY

23. All the participating countries are eligible under paragraph 9(b) of the Instrument for the Restructured GEF. Annex B provides a table indicating ratification and/or signature of relevant Conventions.

ITEMS TO BE FINANCED BY THE PDF

24. Annex C gives a breakdown of costs associated with the proposed activities. The total budget is US$ 462,500 of which US$ 347,500 is the requested PDF Block B grant, and US$ 115,000 are in kind contributions from national governments (See Annex G) and UNEP.

EXPECTED PROJECT PERIOD

25. A preliminary work plan and timetable are included as Annex D. The PDF B activity is planned to last 15 months with an additional two months pre-project to recruit the necessary staff.

Figure 1 Map of the Volta River Basin and the six Riparian Countries

Annex A. Text of the Accra Volta River Basin Declaration

In view of the increased degradation of the land, water and the environment in general in the Volta River Basin, the six (6) countries sharing this important ecological entity, namely

- The Republic of Benin
- Burkina Faso
- The Republic of Côte d'Ivoire
- The Republic of Ghana
- The Republic of Mali
- The Republic of Togo

agreed during a sub-regional workshop held in Accra (Ghana) from 20 to 24 September 1999, and sponsored by the United Nations Environment Programme (UNEP) and the Global Environment Facility (GEF), to join forces and proactively collaborate in order to achieve the following objectives:

- the formulation of a strategic action plan for the Volta River Basin
- the formulation of a framework agreement of co-operation between the Basin States for the integrated management of the Volta River Basin
- the formulation of an agreed programme with a holistic vision for the integrated management of the Basin

In order to achieve a satisfactory follow up of the above mentioned activities the workshop formulated the following recommendations:

1. The formulation of a PDF-B (Project Development Facility Block B) document to be submitted to the GEF by UNEP encompassing comments from each participating country
2. The establishment of an interim arrangement including:

    An overall co-ordinator (Ghana)

    A national representative in each of the six (6) participating countries.

The co-ordinator will be responsible, *inter alia*, for liaising with technical and financial partners, sub regional intergovernmental organisations that have experience in issues of shared river basin management, in order to guarantee additional support for the implementation of the programme.

Signed in Accra the 24th day of September 1999

The Representative of the Republic of Benin
The Representative of Burkina Faso
The Representative of the Republic of Côte d'Ivoire
The Representative of the Republic of Ghana
The Representative of the Republic of Mali
The Representative of the Republic of Togo

Annex B. Eligibility/Conventions/Protocols

	GEF Participant	Convention on Biological Diversity	UN Convention on the Law of the Sea	UN Framework Convention on Climate Change	UN Convention to Combat Desertification	Ramsar Convention on Wetlands
Benin	Yes	Ratified	Ratified	Ratified	Ratified	Signed
Burkina Faso	Yes	Ratified	Signed	Ratified	Ratified	Ratified
Côte d'Ivoire	Yes	Ratified	Ratified	Ratified	Signed	-
Ghana	Yes	Ratified	Ratified	Ratified	Signed	Ratified
Mali	Yes	Ratified	Ratified	Ratified	Ratified	Ratified
Togo	Yes	Ratified	Ratified	Ratified	Ratified	Ratified

Annex C: Indicative Budget

Activity	GEF	UNEP inputs	Government inputs	Responsible Agencies	Total
1 Steering Committee meetings (3)	*45,000			UNEP/Regional Co-ordination Office	45,000
2. Establishment of a Regional Co-ordinating Mechanism	62,500	12,500	-	UNEP	75,000
3. Operations Committee Meetings (3)	*45,000			UNEP/Regional Co-ordination Office	45,000
4a. Preparation of Country Reports	**90,000	12,500	***90,000	National Executing Agencies	192,500
4b. National Co-ordination Working Sessions (3)	****90,000			Regional Co-ordination Office	90,000
5. Adoption of GEF project Brief at Inter-Governmental Meeting	15,000			UNEP/Regional Co-ordination Office	15,000
Totals	347,500	25,000	90,000		**462,500**

* Basic cost of US $ 15,000 per meeting, covering costs of air fares, DSA, document preparation/translation, interpretation, meeting reports
** Lump sum of US $ 15,000 per country to cover preparation of Country Reports and national Cross-sectoral meetings (See Annex G)
*** Government inputs of US $ 15,000 per country to cover staff time and in country logistic support
**** Two representatives from each country are expected to attend sessions, cost based on double cost of SC/OC meetings

Indicative Costs of Meetings		**Break down of costs of Activity 3**	
Hotel costs for 7 participants for 4 days @ US $ 100/d	2,800	Salary of Regional Coordinator @ US $ 2,500/m x 15	37,500
DSA costs for 6 participants for 4 days @ US $ 50/d	1,200	Salary of Bilingual Secretary @ US $ 600/m x 13	7,800
Averaged Travel cost for 6 participants @ US $ 400/p	2,400	Computers with modems(2) printers and UPS (lump sum)	6,000
Translation and Interpretation Costs (meeting & reports)	6,000	Stationary & Communications (telephone, courier, internet)	6,000
Conference Package for 7 participants @ US $100/p	700	Regional Co-ordinators Travel and DSA	5,200
Local transport	1,000	**Total**	**62,500**
Communications & Meeting Materials	500		
Contingency	400		
Total	**15,000**		

Annex D. Indicative work plan and timetable

	Project Month																
	-2	**-1**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Co-ordination																	
Appointment of Regional Coordinator																	
Formation of Steering Committee																	
Appointment of Support Staff																	
Appointment of National Co-ordinators																	
Document Review and Preparation																	
Review of existing National information																	
Preparation of Country reports																	
Preparation of Transboundary Diagnostic Analysis*									*	*	*	*	*				
Preparation of Outline Strategic Action Programme*											*	*	*	*			
Preparation/Review of full Project Brief*													*	*	*		
Meetings																	
Steering Committee Meetings																	
Discussion and Confirmation of Project Procedures																	
Monitor and review of Project Progress																	
Assessment of Regional Synthesis and draft papers																	
Operational Committee Meetings																	
Preparation of Country Report Guidelines																	
Monitor and review National level Project Progress																	
Assist in Regional Synthesis																	
National Co-ordinator Working Sessions																	
Technical Briefing Session																	
Review and finalisation of draft country reports																	
Regional Synthesis																	
Inter-Governmental Meeting for Adoption of Project																	
Project Evaluation and Finalisation																	

* Sequential Drafts

Annex E. Draft Terms of Reference for the Regional Co-ordinator

The Regional Co-ordinator will be responsible for two main types of activities:

1) liaising with technical and financial partners, sub regional intergovernmental organisations that have experience in issues of shared river basin management as well as National Governments, National Co-ordinators and National Committees.

2) Preparation of Project documents.

More specifically, the Regional Co-ordinator will:

(a) Prepare a regional review of existing data and information presented as an annotated bibliography

(b) Assist National Co-ordinators in networking

(c) Participate in, and facilitate regional workshops and meetings, including arranging logistics and providing reports

(d) In consultation with the Steering and Operational Committees establish guidelines for the contents of the country reports

(e) Ensure that country reports conform to the agreed guidelines and that reports are delivered on time

(f) Develop with National Committees, UNEP and the SC/OC drafts of the Trans-boundary Diagnostic Analysis

(g) Prepare the framework elements of the Outline Strategic Action Programme

(h) Prepare a GEF Project Brief

(i) Organise an inter-governmental Meeting to adopt the GEF Project Brief

(j) Assist UNEP/GEF Monitoring and Evaluation teams.

Annex F. Draft Country Report Outline

1. Socio-economic characteristics

Social: Population size; growth rate, density, urban/rural distribution over 1990 - 1995, 1996 - 2000, 2001 - 2025, Life expectancy (at birth), Infant mortality rate, Literacy rate, etc. Economic: Gross Domestic Product and Composites (Agricultural, Manufacturing and Services), GNP/Capita, Growth of GNP, Inflation rate, Debt, etc.

2. Physical Features

Area of country, Location (co-ordinates), Topography, Geology, Soils, Drainage.

3. Climate and Hydrology

Precipitation/rainfall, Temperature, Humidity, Wind, Evapo-transpiration, Run-off, Water Balance.

4. Water Resources Availability

Surface water quality and quantity, Groundwater quality and quantity, Issues and problems with water resources assessment.

5. Water Demand and Utilisation

General water demand over the periods (1990 - 1995, 1996 - 2000, 2001 - 2025)
Water demand for agriculture (food crop, fisheries, livestock)
Domestic and Municipal uses, Industry, Energy, Transportation, Recreation
Issues and problems with meeting water demand now and up to 2025

6. Land Resources and Land use

Land resources, i.e. land under cultivation, forest, grassland, reservation, etc. Issues and problems with land resources assessment, planning and use

7. Integrated Water and Land Resources Planning

Integrated water and land resources management: District/local level, National level, International level, Traditional management practices, Issues and problems with integrated water and land resources assessment

8. Environmental problems caused by land or water development

Problems arising from: Development of the land for (Agriculture, Industry, Urbanisation) construction of hydraulic structures (dams, canals, inter-basin water transport etc.) Water abstraction for agricultural, domestic/municipal and industrial water supply; Wastes disposal from (Agricultural, Domestic/Municipal sources, Industry, (disposal on land and in freshwater bodies, atmosphere and coastal ecosystems); Introduction of Exotics; Natural Hazards (Floods, Droughts, Landslides etc.) Anticipated climate change from global warming (green house effect), Precipitation changes and sea level rise from global warming.

9. Transboundary Issues

Laws and Policy, International Conventions, Migration, Energy, Sedimentation, Cross-boundary Pollution, Structures and Institutions.

Annex G. Breakdown of Activities and Spending at the Country Level

Funds at the National Level come from two sources, GEF and National Governments.

National Governments

Funds from National Governments as in-kind contributions are to cover the salaries and logistics of individuals who will contribute to the preparation of Country Reports. National Governments will determine the size and composition of their committees; however, given the scope of the problems facing the Volta River basin, this should be in the order of 15 – 20 staff per country. It would also be expected that these staff would contribute at least two weeks per project month over the four-month period allocated for the preparation of country reports. This will result in between 30 – 40 person-months per country (professional level staff). In addition, further inputs will be provided by support staff such as secretaries, communication costs, in-country travel etc. It is therefore estimated that each country will contribute approximately US $ 15.000.

Activity	Cost US$
Local Co-ordination	1,500
National Level Briefing (1 day meeting with all stakeholders, ca. 100 people)	3,000
Local Workshops for National Committee (2 day non residential meetings)	
Initial Briefing and Planning Workshop	2,000
Progress / Assessment Workshop	2,000
Finalisation of Report Workshop	2,000
National Level Dissemination (1 day meeting with all stakeholders ca. 100 people)	3,000
Local Costs (Communication, Office Supplies, etc.)	1,500
	15,000

GEF

Funds from GEF will be used to hold National Committee meetings and to prepare, review and assess national information. It should be clear that each country will have its own mechanism and protocols for producing the country reports so the breakdown below should be taken as indicative