

GEFSEC Project Tracking System

Response Due Date: 06/14/99

Correspondence Description

Addressed to: <i>Mr. Kenneth King</i>	Correspondence Date: 06/04/99
Date Received: 06/04/99	Organization: WB
From: Lars Vidaeus	

<i>Assigned To: A. Merla</i>

<i>Status: Open</i>

Type: Electronic Mail Topic: PDF B: Regional (Guinea, Mali, Mauritania, Senegal): Senegal River Basin Water and Environmental Management Program

Action Instructions

- For Bilateral meeting
- For information only. No action needed.
- Please handle/respond on behalf of Mr. Kenneth King and provide a copy.
- Please handle/respond on behalf of Mr. Mohamed El-Ashry and provide a copy.
- Please prepare a draft response and return to Program Coordinator
- Please reply directly and provide a copy.
- Please review and/or technical comments

Special Instructions

Andrea, please enter your review in the dabase. GEF staff, please send your technical comments to Andrea by June 11.

Information Copies Sent To:

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THE WORLD BANK/IFC/M.I.G.A.

OFFICE MEMORANDUM

DATE: June 4, 1999

TO: Mr. Ken King, Deputy CEO, GEF Secretariat
ATTENTION: Program Coordination

FROM: Lars Vidaeus, GEF Executive Coordinator

EXTENSION: 34188

SUBJECT: **Submissions for GEF Secretariat - World Bank Bilateral Consultation
June 17, 1999**

*Martin King
L. Vidaeus*

1. Attached are the project proposals, MSPs, and PDF Bs for consideration at the Bilateral Consultations scheduled for June 17, 1999.

Full Project

Costa Rica: Ecomarkets (OPs 3 & 4)

MSPs (over \$750,000)

Seychelles: Marine Ecosystems Management (OP2)

Vietnam: Marine Protected Area (OP2)

PDF Bs

Senegal: River Basin Management (OP9)

Chad: Gas Flaring Reduction (Short term)

Philippines: Rural Electric Cooperative System Loss Reduction Component (OP5)

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**GLOBAL ENVIRONMENT FACILITY
PROPOSAL FOR PDF BLOCK B GRANT**

Country:	Regional: Guinea, Mali, Mauritania, Senegal
Focal Area:	Integrated Land and Water, Multiple Focal Area Operational program. (Operational Program #9).
Project Title:	Senegal River Basin Water and Environmental Management Program
Funding Requested:	US\$ 350,000
Counterpart Finance:	US\$ 450,000
Co-funding:	US\$ 538,000
Requesting Agency:	World Bank
Cooperating Agencies:	OMVS, UNDP, UNEP, OUA, IUCN
Block:	Block B
Block A Grant Awarded:	Yes – US\$ 25,000
PDF Duration:	18 Months
Focal Ecosystems:	Senegal River Basin

ORIGIN OF PDF B PROPOSAL

1. The Senegal River basin is shared by four countries: Guinea, Mali, Mauritania and Senegal. Whereas most of the Senegal River's water originates in the Fouta Djallon Mountains of Guinea, the downstream riparian countries – Mali, Mauritania and Senegal – have created the OMVS (*Organisation pour la Mise en Valeur du Fleuve Sénégal*) through which they have built two dams that regulate the river's flow since the mid-1980s. The two reservoirs and the resulting changes in flow regime have had both positive and negative environmental effects. Issues related to flow regulation will become more prominent when the hydro-electric equipment currently being installed at the dam located upstream will start producing power in the second half of the year 2001.

2. OMVS requested in 1997 World Bank assistance in the preparation of a GEF project for the Senegal River Basin. In late 1998, the Organization, with the endorsement of its member countries and Guinea, addressed to the GEF Secretariat a request for a PDF A grant to finance a workshop to initiate the process of preparing the project. The Canadian GEF Trust Fund supported two consultants to prepare a background document for the workshop.

3. The workshop was held 3-6 February 1999 at Saint-Louis, Senegal, under the sponsorship of the World Bank, UNDP and the International Union for the Conservation of Nature (IUCN). It brought together representatives of the riparian countries' relevant government services, UNDP, bilateral donors, the World Bank and other interested parties. The workshop reinforced the perception of environmental issues presented in the background document, provided additional information on certain issues and, in particular, recognized the need for and identified the benefits of a well-coordinated integrated approach to managing the Senegal River basin's water and environment.

4. The present request for a PDF B grant is based on the outcome of the Saint-Louis workshop and subsequent discussions with relevant government agencies in Guinea, Mali, Mauritania and Senegal as well as the local UNDP, World Bank and IUCN offices, during which this document was prepared and discussed.

THE SENEGAL RIVER BASIN

BASIN FEATURES

5. The Senegal River is, after the Niger River, the second largest river of West Africa. About 1800 km long, it originates in Guinea, runs through western Mali and then flows west, forming the border between Mauritania and Senegal (Annex A). It has a basin of around 300,000 km² shared by Guinea (11%), Mali (53%), Mauritania (26%) and Senegal (10%). The river's three principal tributaries – the Bafing, the Bakoye and the Faleme – all originate in the Fouta Djallon Mountains in Guinea and together produce over 80% of its flow. The Bafing alone contributes about half of the river's flow at Bakel. The main tributaries below Bakel, namely the Gorgol and Oued Gharfa on the river's right bank, add as little as 3% to the water the Senegal River discharges into the Atlantic Ocean at Saint-Louis. The rains falling in the Fouta Djallon Mountains from April through October produce a flood season beginning in July and ending in October.

6. The Senegal River basin has three distinct parts: (i) the Upper Basin, a mountainous area between the Fouta Djallon and Bakel; (ii) the Valley, featuring a flood plain varying in width from 10 to 20 km between Bakel and Dagana; and (iii) the Delta between Dagana and the sea. The Delta and the Valley flood plain have seen the development of both large-scale and community-based irrigation for several decades on the Mauritanian as well as on the Senegalese side. The irrigation schemes currently in place cover slightly over 100,000 ha, some 60,000 of which are cropped (mostly with rice) in the wet season and some 20,000 in the dry season. Important delta wetlands have been preserved at four Ramsar Convention sites including the Diawling (Mauritania) and Djoudj (Senegal) National Parks.

7. The basin is inhabited by close to two million people, 85% of which live near the river. Population growth rate is high (some 3% per year), partly due to in-migration into the lower valley and the delta in response to employment opportunities offered by the industries related to large-scale irrigation. The Upper Basin has largely remained an area of subsistence agriculture based on shifting cultivation. In the Valley and the Delta one finds side by side traditional production systems (flood-recession cropping, livestock raising, fishing) and the practice of modern irrigation with water pumped from the river.

OMVS INVESTMENT AND ENVIRONMENTAL PROGRAMS

8. The Senegal River's development potential and regional importance have long been recognized. In 1968, Guinea, Mali, Mauritania and Senegal created OERS (*Organisation des États Riverains du Fleuve Sénégal*) with a view to realizing the potential offered by the basin's land and water resources in a framework of regional economic integration. Guinea withdrew from OERS in 1971, which led Mali, Mauritania and Senegal to form OMVS (*Organisation pour la Mise en Valeur du Fleuve Sénégal*) the following year. OMVS is governed by three principal legal texts: *Convention relative au statut du fleuve Sénégal (1972)*; *Convention portant création de l'OMVS (1972)*; and *Convention relative au statut juridique des ouvrages communs (1978)*. In 1992, Guinea and OMVS signed the *Protocole d'accord cadre de coopération entre la République de Guinée et l'OMVS* with a view to creating a framework for cooperation in actions of mutual interest concerning the Senegal River and its basin, including a provision allowing Guinea to attend OMVS meetings as an observer. This agreement has yet to produce tangible results.

9. OMVS completed a first investment program with the construction of dams at Diama and Manantali. Diama Dam, located some 23 km from the river's mouth, has functioned since 1986. Its purpose is to block seawater intrusion and to raise the level of the upstream water body (confined by dykes along both shores) to facilitate irrigation, navigation and the filling of *lac de Guiers* in Senegal and *lac Rkiz* in Mauritania. Manantali Dam, built in Mali at a distance of some 1200 km from the river's mouth, has regulated the flow of the Bafing River since 1987. This dam's purpose is to attenuate extreme floods, generate electric power and store water in the wet season to augment dry-season flows for the benefit of irrigation and navigation. OMVS has entrusted two separate entities with the dams' operation and maintenance: the *Société de gestion du barrage de Diama* (SOGED) and the *Société de gestion du barrage de Manantali* (SOGEM).

10. A second investment program (co-financed by the World Bank under its Regional Hydropower Project) is currently underway with the installation of hydro-electric equipment at Manantali and the construction of the corresponding transmission lines serving the three OMVS member countries. Power generation, transmission and distribution is expected to begin in the second half of 2001. Recognizing the social and environmental implications of constructing the power lines as well as the potential conflicts between power generation and the other, often competing, uses of the Senegal River's water, OMVS has embarked on the design and implementation of a program called PASIE (*Plan d'Atténuation et de Suivi des Impacts sur l'Environnement*).

11. PASIE, whose estimated cost of US\$ 17 million is being financed by a number of multi- and bi-lateral donors including the World Bank, has six programs:

- A Mitigation of Hydropower Project Impacts;
- B Acquisition of Right-of-Way for Transmission Lines;
- C Reservoir Management Program;
- D Environmental Health;
- E Complementary Measures;
- F Coordination and Monitoring.

Annex B summarizes the content and current (March 1999) status of these programs.

WATER AND ENVIRONMENTAL MANAGEMENT ISSUES

CLIMATIC AND ANTHROPIC CHANGES

12. Man made changes to the Senegal River's flood plain started in the 1960s with the construction of dykes protecting agricultural land in the lower and middle valleys. The ensuing reduction of seasonal inundation affected the riparian ecosystems. These changes were exacerbated by the persistent drought that resulted in the pronounced decline of the river's flow following the late 1960s (Annex C). The drought provided the OMVS member countries with the impetus to proceed with the implementation of a multi-purpose water-management project that – aiming to develop irrigation, hydropower and navigation – features Manantali and Diama Dams.

13. So far, the dams have primarily benefited irrigation, thereby playing a key role in preventing a massive exodus of the valley's population in the face of severe drought and desertification. Flow regulation by Manantali Dam ensures a year-round supply of irrigation water, while Diama Dam prevents this supply from mixing with intruding sea water and reduces pumping costs by raising the upstream water level. Additional benefits are (i) the creation of a significant fisheries resource in the Manantali reservoir that has led to the seasonal settlement of fishing communities, (but has reduced fisheries in the lower and middle delta) and (ii) the maintenance of the Diawling and Djoudj wetlands with controlled flows from the Diama reservoir. Whereas hydropower generation is expected to start in 2001, the development of navigation taking advantage of water levels raised by low-flow augmentation is still at the study stage.

14. The dams have brought on major ecological changes in the flood plain on both the Mauritanian and the Senegalese sides of the river. Filling of the reservoir behind Manantali Dam over the past 10 years or so has reduced the volume and duration of the annual floods, which, in turn, diminished the inundation of the flood plain and resulted in weakened eco-systems depending on prolonged seasonal submersion, a reduced area suitable for flood-recession

cropping, and curtailed groundwater recharge. Diama Dam has created a permanent and fairly stable freshwater body whose shores were promptly invaded by a dense growth of aquatic nuisance plants (mainly *Typha australis*). These plants hamper fishing. They also proliferate in the river's distributories and in the irrigation canals, reducing flow velocities and encouraging insects.

15. The nuisance plants' most damaging effect, however, is the habitat they offer for vectors of water-borne diseases. An explosion of mosquito and snail populations has brought malaria and both urinary and intestinal bilharzia to epidemic proportions. Despite enormous efforts by the international aid community and national public-health services, the re-infection process causes the prevalence of these diseases to remain at an unacceptably high level. The nuisance plants and their consequences for public health clearly call for corrective measures to be implemented in a concerted fashion on both

16. The practice of drawing water from the river is becoming increasingly hazardous, particularly in the dry season, as the irrigated area expands and the use of agro-chemicals intensifies. Although the question of the river's water quality is being addressed in connection with major undertakings such as the Dakar Long Term Water Project, it has never been the object of concern with respect to the riverside population.

17. It is not easy to measure to what degree the Senegal River development scheme has by now succeeded in reaching its primary stated goal of improving the livelihood of the valley's inhabitants. The financial and economic viability of irrigation is often questioned, a viewpoint supported by the under-utilization of the irrigation infrastructure already in place, while opportunities for the traditional practices of flood-recession cropping, livestock raising and fishing have considerably shrunk.

18. The apparent lack of equity in sharing in the investments' benefits is aggravated by the absence of democratic rules in rural and urban societies. All along the valley, societies are typically hierarchical and subject to conflicts accentuated by ethnic diversity and temporally and spatially overlapping production systems. In such a situation, resource scarcity, as caused by drought or pressure on the land, can trigger painful episodes of social and political unrest, including armed confrontation.

19. To help address these issues, in the late 1980s a number of meetings were held, groups formed and surveys carried out. National bodies were created including in Senegal, the "Cellule Après Barrage". A "Management Plan for the Development of the Left Bank" (PDRG) was produced. After extensive amendment and discussion this supported the following objectives: rehabilitation of the natural environment; management of natural and human resources; optimization of traditional systems of production, both in the floodplains and the rain-fed zones; rehabilitation of existing areas where socially feasible and economically viable; extension of irrigation by promoting investments by farmers and the private sector and adoption of necessary policy measures to enable all this to happen.

20. Approved by the Senegalese authorities the PDRG became a plan for integrated development over 25 years (1992-2017), and was said to be a true expression of a series of consultations, and containing plans for four administrative districts (Dagana, Podor, Matam and

Bakel). However it was clear that this would only work effectively if similar plans were implemented on the right bank in Mali and Mauritania. There is a clear need to build on the work that has already been done in defining the “post-dam” aspirations of the people to ensure that the needs of the whole population are determined and addressed in so far as possible.

21. More recently, in 1997, the United Nations Department for Economic and Social Affairs (UN-DESA - Division for Sustainable Development) executed a regional project RAF/94/01C, funded by UNDP: "Management of International Waters in Sub-Saharan Africa : Senegal River Basin". Within the river basin, in Mali, Mauritania and Senegal five consultants conducted interviews and research, in the capitals and in the field along the river, to assess the current situation in terms of Sustainable Human Development. For each country about 30 representatives of four main groups of actors were interviewed (users, developers, managers, and donors) about their own perception of the basin development and, consequently, about their own strategy. This project has provided a recent and documented diagnostic on the current management of water for various users, the participative dimension in the development of the basin, and the environmental dimension in the Senegal valley.

22. Consideration of the results of these and many other studies and consultations that have been carried out are a *sine qua non* for the development of this project. In addition, it is planned that updated assessments will be made including the holding of local workshops to determine the current perceptions of needs in the basin.

MITIGATING THE IMPACTS OF POWER GENERATION

23. The forthcoming operation of Manantali Dam for hydropower generation will require careful management to minimize negative environmental impacts. The fundamental problem lies with the limited volume of water available to satisfy in the course of a given year the competing requirements of the planned objectives (irrigation, navigation, hydropower), of critical ecological processes (groundwater recharge, maintenance of flood-plain ecosystems) and of traditional societies (flood-recession cropping, livestock, fishing). The annually available volume is currently considerably less than assumed in the 1960s when the water-management scheme was conceived on the basis of the flows observed up to that time (Annex C). The PASIE addresses this issue in Program C: Optimization of Reservoir Management (Annex B).

24. A key element of this optimization is the so-called artificial flood expected to inundate the floodplain to an extent and of a duration adequate to satisfy the needs of ecosystems and traditional production activities. The artificial flood is produced by releasing water from Manantali reservoir to complement the flood flows in the uncontrolled tributaries of the Senegal River. The releases are determined by a computer model taking into account real-time flows in these tributaries and into Manantali reservoir, as observed at stations in Mali and Senegal.

25. The estimate of appropriate releases could be considerably improved – and the limited volume of available water thereby better allocated – by extending the computer model to take into account the rain falling onto the headwaters of the Senegal River. The last report from IRD/ORSTOM shows that rainfall data are not reliable, in Mali as well as Guinea. The proposed

management scheme therefore is not based on a reliable rainfall-runoff model. Not only are such data currently unavailable to OMVS but the existing network of stations is inadequate. Such a model will take several years to develop and will require real-time rainfall and stream-flow data from stations located in Guinea and Mali

26. Program C also includes a cost/benefit study of water-management scenarios and is expected to ultimately result in a Water Charter defining the principles and modalities of sharing the available water among the riparian countries and among the different water uses. A major concern is that the Water Charter will serve the SOGEM as a rigid blueprint for operating the infrastructure, without leaving much room, or providing appropriate mechanisms, for the resolution of conflicts and/or its modification as improved information becomes available. Given the short time allocated to establishing the Charter in the framework of PASIE, there is concern that it may not succeed in resolving far-reaching questions of equity, such as that posed by the fact that the electricity from Manantali is produced for urban centers at some expense to populations whose livelihood depends on the annual flood. The proposed project could support a broader approach to the refinement of a Water Charter that will address equitably all the requirements of the basin.

THE HEADWATERS

27. In the Guinean part of the Senegal River basin, the knowledge required for adequate water and environmental management is limited to a few sub-basins that were the object of interventions under the Fouta Djallon Integrated Watershed Management Project coordinated by the OAU. Elsewhere the existing knowledge is woefully inadequate. What is primarily required are topographic maps at a sufficiently large scale and an appropriate network of hydro-meteorological stations. These elements would, in addition to helping Guinea with the judicious development of its water and land resources, provide the information and data required to refine and run the computer model estimating the releases from Manantali Dam to produce optimal artificial floods.

28. The restoration and maintenance of the watersheds of the Senegal River's headwaters is of critical importance. Unsustainable production systems like slash-and-burn agriculture and fuel-wood and charcoal production have literally turned the *Moyenne Guinée* area into a Sahelian ecosystem, susceptible to erosion that could lead to rapid sedimentation of the Manantali reservoir. Full-scale bauxite mining, currently undertaken on a pilot basis in the Bafing sub-basin, would not only have a similar effect but would also become the source of the water's chemical pollution.

29. Finally, the day will come when Guinea decides to realize the hydropower potential of the Senegal River headwaters. In the Bafing River sub-basin, Guinea has identified four favorable dam sites with a combined power-generation potential of 770 MW. Of these, the Koukoutamba site alone has a potential of 290 MW. This compares with the 200 MW for which Manantali will eventually be equipped; which in itself is not enough to serve the needs of the three OMVS countries. Close collaboration with Guinea in the development of the headwaters' land and water resources is clearly indicated. In the energy sector, the integration of Guinea in a regional power grid is an alternative that may be of interest to OMVS and its member countries.

THE PROPOSED PROJECT

OBJECTIVES

30. The proposed project ("the Project"), to be prepared with PDF B support, would have as objectives:
- (a) to ensure the sustainable management of the basin's water resources, biodiversity and environment;
 - (b) to ensure the cohesiveness of environmental management activities at the level of the entire basin;
 - (c) to provide an effective framework for the integration of national activities into a basin-wide environmental action program;
 - (d) to provide the framework for the integration of environmental actions undertaken by OMVS;
 - (e) to ensure the sustainability of the PASIE elements that remain relevant beyond the start of power generation at Manantali.

COMPONENTS

31. The following four components constituting the Project have been identified tentatively:
- (a) Environmental Management Structure;
 - (b) Knowledge Base;
 - (c) Priorities and Opportunities Analysis;
 - (d) Action Program for the Global Environment

They are briefly described in the following paragraphs.

32. The Environmental Management Structure Component aims at establishing effective institutional structures and mechanisms for the coherent management of the Senegal River basin's water resources and environment. It would entail (i) a thorough analysis of the capacity and needs of each riparian country's relevant institutions and of OMVS, (ii) the definition of optimal institutional structures at the national as well as at the regional level, (iii) the requisite strengthening of the national institutions and of OMVS, and (iv) the design of a set of appropriate regional coordinating procedures.

33. The Knowledge Base Component would consist of (i) the thorough inventory of information and data on the parameters defining the socio-economic and bio-physical conditions in the basin; (ii) analysis of previous recommendations and the results of public surveys and needs assessments for the various population groups; (iii) the establishment of a data base in each of the four riparian countries and at OMVS, and (iv) the design of a system allowing the countries and OMVS to access the data bases. The facilities required to establish, maintain and access the data bases would be provided under the Environmental Management Structure Component. The whole component would be developed in close coordination with the Environment Monitoring system ("*Observatoire*") which is planned under the PASIE. It is likely that it would build on this

element of the PASIE, address the incremental costs for extending it to the basin as a whole, and help develop the capacity to ensure the sustainability of the necessary monitoring programs, as well as provide the baseline for environmental and social needs assessment.

34. The Priorities and Opportunities Analysis would comprise (i) the identification of all environmental phenomena and outstanding or unresolved environmental issues involving more than one country (ii) the analysis and, to the extent possible, quantification of these phenomena, (iii) the identification and indicative definition of measures eliminating or mitigating their negative effects and (iv) the identification of the priorities and opportunities perceived by the public in the basin, as well as those perceived at the national and inter-State, basin wide, regional and global levels. Stakeholder participation would be an important part of this analysis.

35. The Action Program for the Global Environment would consist of (i) the detailed definition of the corrective measures identified by the Priorities and Opportunities Analysis, (ii) the integration of these measures in an action program featuring both national and regional components, (iii) implementation of any necessary policy and institutional reforms identified and (iv) the implementation of elements qualifying for GEF funding.

DESCRIPTION OF PROPOSED PDF B ACTIVITIES BY COMPONENT

36. Given the complexity of environmental issues faced in the Senegal River basin and the fact that OMVS represents only three of the four riparian countries, the coordination of project preparation activities by the countries and OMVS represents a major challenge. The countries have therefore requested that this coordination be provided by the World Bank (Annex I).

37. As illustrated by the organization chart in Annex D, project preparation will be overseen by a Regional Project Preparation Committee (RPPC) chaired by the OMVS High-Commissioner and including a representative from each country, a representative of the OAU Office for the Fouta Djallon Watershed Management Project, and one representative per donor. The World Bank will create a Coordination Unit, located in Dakar for ease of communication with the riparian countries and OMVS. A Regional Coordinator reporting to the World Bank's Task Manager will be entrusted with coordinating the project-preparation activities. A Panel of Experts from identified key environmental fields, expected to be supported by interested donors, will be responsible for ensuring the technical quality of the preparation work and the resulting project design.

38. Preparation activities in each country will be overseen by a National Project Preparation Committee (NPPC) composed of representatives of relevant entities, with the committee's work facilitated by a qualified independent organization such as IUCN selected by the country. In the OMVS member countries, the NPPC will be a subcommittee of the *Comité National de*

Coordination (CNC) already set up to coordinate the PASIE activities. Similarly, the project preparation activities of OMVS will be overseen by the PASIE Steering Committee. The funds allocated to each country to defray the cost of the required activities will be administered by the local World Bank office. The funds allocated to OMVS will be administered by the Bank's Dakar office.

39. Annex E proposes a provisional time schedule for the project preparation activities. These are grouped by the four project components tentatively identified and described above. In addition, the time schedule features a Coordination Component that includes the activities required to ensure the integrated planning and progress tracking of the project preparation endeavor, as well as a Project Brief Component covering the drafting and approval of the Project Brief. The schedule has little room built in for delays in decision making but will be reviewed at the outset; it starts with the first meeting of the RPPC.

40. The following paragraphs briefly describe the project preparation activities to be carried out under each component, while the Responsibility Matrix in Annex F defines for each activity the roles of the entities participating in its execution and specifies the expected output. Not specifically mentioned is the ultimate result of preparing each of the four project components, the definition of the component's features, which consists of: (i) the identification of the means necessary to carry out each activity under the component, (ii) the estimate of the time required to complete the activity, and (iii) the establishment of a budget estimate of the activity's cost.

COORDINATION

41. Project-preparation activities will start with the Regional Coordinator preparing a Master Work Plan for review and approval by the NPPCs, OMVS and the RPPC. Each country and OMVS will then prepare a detailed work plan respecting the requirements of the Master Work Plan. While establishing the National Work Plans, emphasis will be put on identifying all public and civil-society groups having a stake in the management of the basin's natural resources and environment and providing for the participation of their representatives in the project-preparation activities. The National Work Plans will specify the outputs to be delivered, identify the resources to be employed, indicate the planned duration of activities and milestone dates, and present a detailed budget for all project-preparation work at the national level and at OMVS. Approval of a National or the OMVS Work Plan by the RPPC will signify authorization to proceed with the proposed project-preparation activities.

ENVIRONMENTAL MANAGEMENT STRUCTURE

42. The preparatory work towards defining an effective environmental management structure for the Senegal River Basin will begin with a consultant reviewing existing basin management institutions and drafting a proposal for a regional structure. The proposed structure will be debated and validated at national- and regional-level workshops. Consultants will then undertake a preliminary institutional analysis and conclude the preparation of the Environmental Management Structure Component with the preliminary definition of the required institutional strengthening.

KNOWLEDGE BASE

43. The preparation of the Knowledge Base Component will comprise: (i) an inventory of information and data available in the riparian countries and at OMVS about the basin's water resources, the environment, social conditions and economic activity; (ii) the preliminary characterization of linkages among water, eco-systems and the livelihood of the basin's inhabitants; (iii) the identification of the needs for data collection, analysis and dissemination to be addressed under the Project's Knowledge Base Component; and (iv) analysis of all available public perception and social needs surveys.

PRIORITIES AND OPPORTUNITIES ANALYSIS

44. The preparation of the Priorities and Opportunities Analysis (POA) Component will begin with a consultant carrying out a preliminary analysis based on the results of the preparatory work for the Knowledge Base Component. The consultant's analysis will be supported by a series of local surveys and/or workshops designed to identify the priorities and opportunities perceived by the public as well as at National workshops designed to identify the national perceptions. The results of this process will be validated by a regional workshop which will identify the need for any additional work required to refine the analysis under the Project.

ACTION PROGRAM FOR THE GLOBAL ENVIRONMENT

45. The work to prepare the component of the Project that would focus on the development of the Action Program will include: (i) an exhaustive inventory of all ongoing and planned relevant actions; (ii) the identification of the principal elements of an action program; (iii) the preliminary identification, definition and costing of interventions likely to qualify for GEF financing and (iv) the identification and proposals for implementation of any necessary policy and institutional reforms

46. The Action Program for the Global Environment (APGE) to be developed by the Project will consist of national and regional interventions taking into account and complementing the environmental actions already ongoing or planned. It is expected that the project-preparation work will reveal priority action components whose implementation could be justified without waiting for the whole Project to be designed and approved. Such interventions will be defined at a level of detail required to initiate the mobilization of the required funding.

PROJECT BRIEF

47. The Regional Coordinator will be responsible for presenting the Project in the form of a 'Proposal for Review' based on the synthesis of the results of the project-preparation activities.

ELIGIBILITY

48. The Project would conform to the Integrated Land and Water Multiple Focal Area Program (Operational Program 9). As such it would be a broad cross-sectoral project and would have strong links to the Water-body based Program (OP 8) and the three Biodiversity programs: Arid and Semi-arid Ecosystems (OP 1), Coastal, Marine, and Freshwater Ecosystems (including wetlands) (OP 2) and Forest Ecosystems (OP 3). It would directly address land degradation as it relates to the integrated management of the basin's water resources and environment. It would also be developed in close coordination with other GEF projects within the Basin and with those under development in adjacent basins, such as the Niger River Basin.

49. The four riparian countries have ratified the most directly relevant United Nations conventions on the following dates:

Convention	Guinea	Mali	Mauritania	Senegal
Biodiversity	05/07/93	03/29/95	08/16/96	10/17/94
Desertification	06/23/97	10/31/95	08/07/96	07/26/95
Climate Change	03/21/94	12/28/94	01/20/94	10/17/94

All four countries are eligible to borrow from the World Bank and are also eligible recipients of UNDP technical assistance.

NATIONAL LEVEL SUPPORT

50. While there are substantial differences in the riparian countries' legislation, policies and institutional structure concerning the management of the environment, all countries offer a relevant framework that is at least adequate for effectively participating in the preparation of the Project and its implementation.

GUINEA

51. Guinea developed a National Environmental Action Plan (NEAP) in 1994. The Plan defines a set of integrated sectoral initiatives, some of which are currently being implemented. The NEAP also proposed the creation of a *Conseil National de l'Environnement* representing 13 ministries and several civil-society entities concerned with environmental management. The *Conseil* has been formed and is about to become operational.

52. Development of environmental policy and enforcement of the corresponding laws are the responsibility of the *Ministère de l'Équipement* through its *Direction de l'Environnement*. The principal government services that would be directly concerned with the preparation of the

Project and its execution are: (i) the *Direction Nationale de la Gestion des Ressources en Eau* (DNGRE) and the *Direction Nationale de la Météorologie* (DNM), both of the *Ministère des Ressources Naturelles et de l'Energie*; and (ii) the *Direction Nationale des Eaux et Forêts* (DNEF) of the *Ministère de l'Agriculture, des Eaux et des Forêts*.

MALI

53. Mali's NEAP, which integrates actions responding to the UN Convention to Combat Desertification, is the result of wide-ranging consultations at the national, regional and local levels. Representing the synthesis of work started in 1994 and endorsed in May 1998 by a national validation forum, it defines a National Environmental Protection Policy and proposes National Action Programs, Regional Action Programs and Local Action Programs to achieve the policy's objectives.

54. The NEAP's nine cross-sectoral national programs include the National Program on Water Resources Management, which has as one of its operational objectives "to protect and ensure a sustainable management of rivers and their catchment areas, including with neighboring countries (shared resources)." One of its eight regional programs concerns the Kayes Region, essentially covering Mali's portion of the Senegal River Basin.

55. Mali has created an Environment Ministry with three departments: (i) *Direction de la Conservation de la Nature*; (ii) *Direction du Contrôle des Pollutions et des Nuisances*, and (iii) *Secrétariat Technique Permanent*. The two directorates operate in a decentralized fashion at the level of local administrative units. The Secretariat is responsible for policy formulation and strategy development. The principal sectoral entities concerned with the management of the Senegal Basin's water resources and environment are the *Direction Nationale de l'Aménagement et de l'Équipement Rural* and the *Direction de l'Élevage*, both under the *Ministère du Développement Rural et de l'Eau*.

MAURITANIA

56. An Environmental Strategy Paper prepared by the World Bank in 1994 recognized the need to integrate all economic, technical, ecological and social aspects in the development of the Senegal River. A study supported by UNDP in 1997 as a contribution to the formulation of an environmental management and protection program reiterated this concern and stressed the urgency of developing a NEAP

57. In 1995, Mauritania established the *Conseil National pour l'Environnement et le Développement Durable (CNED)* – composed of an advisor to each of the President and the Prime Minister and of representatives from 13 relevant ministries – as the entity responsible for supervising the development of an environmental strategy. Mauritania has not yet developed a NEAP. The principal operational entities concerned with environmental issues in the Senegal River Basin are the *Direction de la Planification et la Coopération Sanitaire* of the *Ministère de la Santé*, the *Direction de l'Environnement et de l'Aménagement Rural*, of the *Ministère du Développement Rural*, and SONADER (*Société Nationale de Développement Rural*).

SENEGAL

58. The NEAP completed by Senegal in 1997 is the result of the consolidation of a series of regional environmental action plans developed in a decentralized and participatory manner. It integrates the national action program to combat desertification in the framework of the UN Convention to Combat Desertification. The regional action plan for the Senegal River Valley (*Région de Saint-Louis*) essentially represents the environmental management measures provided by the *Plan Directeur Rive Gauche (PDRG)*.

59. The Ministry responsible for elaborating and implementing Senegal's environmental policies was established in 1993. Called *Ministère de l'Environnement et de la Protection de la Nature (MEPN)*, it comprises four directorates: (i) *Direction de l'Environnement et des Établissements Classés (DEEC)*; (ii) *Direction des Eaux, Forêts, Chasse et Conservation des Sols (DEFCCS)*; and (iii) *Direction des Parcs Nationaux (DPN)*. Recognizing the dependence of sustainable development on sound environmental management as well as the cross-cutting nature of environmental concerns, Senegal has created two supervisory and coordinating bodies: (i) the *Commission Nationale pour le Développement Durable*; and (ii) the *Conseil Supérieur de l'Environnement et des Ressources Naturelles (CONSERE)*. It is these two bodies that oversaw the elaboration of the country's NEAP.

COORDINATION WITH ONGOING ACTIVITIES

60. During project preparation great care will be taken to ensure that the proposed Project fully considers activities of ongoing or planned projects in the Senegal River Basin and will avoid any overlap or diversion of resources from these during implementation. The most prominent of these at present is the PASIE, but there are numerous others, including several GEF projects under way or under development that are included in the list below.

61. The proposed Project would be designed to complement the work initiated under the PASIE but would not replace this work in any way. It is likely that the project would not commence until after the completion of the PASIE in 2001. The PASIE is developed and implemented by OMVS and so is limited in scope to the immediately impacted parts of the three member countries only. It is also limited in time as it is currently expected to expire when electricity begins to be produced in the second half of 2001. The Project would complement PASIE activities and would help ensure that activities commenced under the PASIE that are relevant to the Action Program for the Global Environment could be extended beyond the start of power generation and continue into the future.

62. The following list includes some of the most prominent of the projects in the Basin. The list will be expanded during the preparation of the Project to account for all relevant current and planned activities so as to ensure that their characteristics will be taken into account in the Project's design.

International

- Regional Hydropower Development Project (IDA and other donors)
- *Plan d'Atténuation et de Suivi des Impacts sur l'Environnement (PASIE)* which includes six substantial elements including the establishment of an environmental data base in the framework of an *Observatoire de l'Environnement*. (Annex B).
- Biological Diversity Conservation through Participatory Rehabilitation of the Degraded Lands of the Arid and Semi-Arid Transboundary Areas of Mauritania and Senegal (GEF, UNEP/UNDP)
- Canary Current GEF Project (Offshore)

Guinea

- Third Water Supply and Sanitation Project (IDA)
- Fouta Djallon Mountains Integrated Watershed Management Project (OAU)

Mali

- *Projet de Gestion des Ressources Naturelles (IDA) (Parc National de la Boucle du Baoulé)*
- Medium-sized GEF project to conserve biodiversity around Manantali reservoir (in preparation with UNDP support)

Mauritania

- Assistance to Diawling National Park (IUCN)
- PGRNP (*Projet de Gestion des Ressources Naturelles en Zone Pluviale*) (IDA)
- PDIAIM (*Projet de Développement Intégré de l'Agriculture Irriguée en Mauritanie*) (IDA and other donors)
- Endemic Diseases Control Project (IDA)

Senegal

- Assistance to Djoudj National Park (IUCN)
- Dakar Long Term Water Sector Project (IDA and other donors)
- Endemic Diseases Control Project (IDA)
- *Programme de Revitalisation des Vallées Fossiles* (Republic of China, CIDA)

JUSTIFICATION FOR PDF GRANT

63. The requested PDF grant will help enable the Senegal basin's four riparian countries to jointly develop a regional approach to (i) the environmental management of the basin, (ii) the preservation of the basin's water resources, and (iii) the effective and equitable operation of the water-management infrastructure already in place. The grant will help achieve this objective even though membership in the existing river-management agency, OMVS, is limited to Mali, Mauritania and Senegal and the source of the bulk of the Senegal River's flow is located in a non-member country, Guinea.

ITEMS TO BE FINANCED

64. **PDF Block B Grant.** Of the grant of US\$ 350,000, US\$ 300,000 will be allocated in equal parts (US\$ 60,000) to the four riparian countries and OMVS. These amounts will be used to hire national consultants assisting the participating government services in the preparation of the Project and to defray the cost of national and regional workshops. The remaining US\$ 50,000 will be used by the Coordination Unit to hire consultants (designated as regional consultants) to undertake work common to all countries or necessary to ensure uniformity of approach.

65. Annex G presents the detailed estimated breakdown of the Block B grant by financed activity and level (regional or national) of consultants and workshops, while Annex H shows the corresponding use of a typical country's portion of the grant. The table below summarizes the allocation of the Block B grant to the components of the Project to be designed, the Coordination and Project-Brief components of the project-preparation endeavor, and OMVS.

(US\$)

Project-Preparation Component	Consultants	Workshops	Total
Coordination	12,000	20,000	32,000
Environmental Management Structure	49,000	45,000	94,000
Knowledge Base	31,500		31,500
Priorities & Opportunities Analysis	12,500	25,000	37,500
Action Program for the Global Env'm't.	75,000	20,000	95,000
Project Brief	0	0	0
Subtotal	180,000	110,000	290,000
OMVS			60,000
PDF B Block B Grant			350,000

66. The funds allocated to the countries will be administered by the local World Bank Missions. The funds allocated to OMVS will be administered by the Dakar Mission. Administrative and fund management expenses will be covered by the World Bank.

67. Counterpart Financing. The counterpart contribution essentially consists of the time devoted to the preparation of the Project by the staff of the governments and of OMVS. The value of this contribution is estimated at 225 million FCFA or approximately US\$ 450,000.

68. Co-funding. Co-funding estimated at US\$ 538,000 will be required to cover: (i) the costs of the Coordination Unit, (ii) the expenses associated with the work of the RPPC, (iii) the cost of the Panel of Experts and (iv) the costs of the surveys and local and national workshops to determine the perceptions and priorities of the public. The table below shows the amount estimated for each of these elements. It is hoped that locally represented donors will support the public participation program data gathering and workshops; that donors will sponsor experts (3 are already promised); that the costs of the RPPC will be covered by local UNDP offices and that the Coordination Unit will be supported by the World Bank.

	(US\$)
Coordination Unit	140,000
Regional Project Preparation Committee	50,000
Panel of Experts	245,000
Public participation program	103,000
Total	538,000

OUTPUTS

69. The principal outputs of the project-preparation activities financed in part by the PDF B grant will be:

- (a) a mechanism for formulating the proposed Project in consultation with the various stakeholders within each of the four riparian countries and with close coordination among the four countries;
- (b) the results of a preliminary Priorities and Opportunities Analysis;
- (c) a preliminary Action Plan for the Global Environment;
- (d) the design of the Project in the form of a 'Proposal for Review';
- (e) the identification and preliminary design of priority projects.

EXPECTED DATE OF PREPARATION COMPLETION

70. It is estimated that the preparation of the Project will require a minimum of 18 months (see Annex E). In the establishment of such a multi-agency project preparation process involving representatives from four governments, an inter-governmental organization and civil society, in an area where communications are not always easy, it is possible that delays may be incurred in reaching consensus and agreement among all parties over certain key points, especially in the initial stages. The schedule is never-the-less prepared on the basis of 18 months from the date of the first meeting of the RPPC in the hope that with good will, commitment and improving communications, this target will prove realistic. The drafting of the Master Work Plan will involve a review of the Schedule at the outset of the process.

SPECIAL FEATURES

71. The Project proposed for preparation with GEF support would integrate Guinea into the process of developing a coherent approach to water and environmental management of the Senegal River basin and aim at putting into place a regional mechanism for effective and permanent conflict resolution. The integration of Guinea would provide the basis not only for protecting the bulk of the basin's water resources but also for gaining the hydro-meteorological knowledge required to improve the management of the limited amount of water available. Moreover, the proposed initiative clearly has the potential to become an important step towards the greater integration of the four riparian countries' economies.

72. There is a certain urgency about the Project. The infrastructure to significantly modify the flow of the Senegal River is in place. Starting in about two years, the infrastructure will be operated to produce hydropower. The current long term low-flow cycle poses a serious challenge for reconciling the water needs of power generation with those of floodplain ecosystems and traditional production activities on which the livelihood of a large portion of the valley's population still depends.

73. The proposed Project would not affect or interfere with the PASIE in any way. The PASIE, developed and implemented by OMVS, is limited in scope to the three State-members of OMVS. It is focussed on the areas of impact of the Manantali generation project. It is also limited in time, and is expected to expire when electricity will begin to be produced in the second half of 2001. Since a GEF Project addresses only incremental costs, it implicitly reinforces, but must not duplicate or interfere with, an existing project. This GEF project could help to ensure that any PASIE activities remaining relevant beyond the start of power generation will continue into the future; but it would be designed only to complement or reinforce any of these ongoing post-PASIE activities. The Knowledge Base for example could build on the work of the *Observatoire* in the PASIE by contributing to the incremental costs of covering the whole basin.

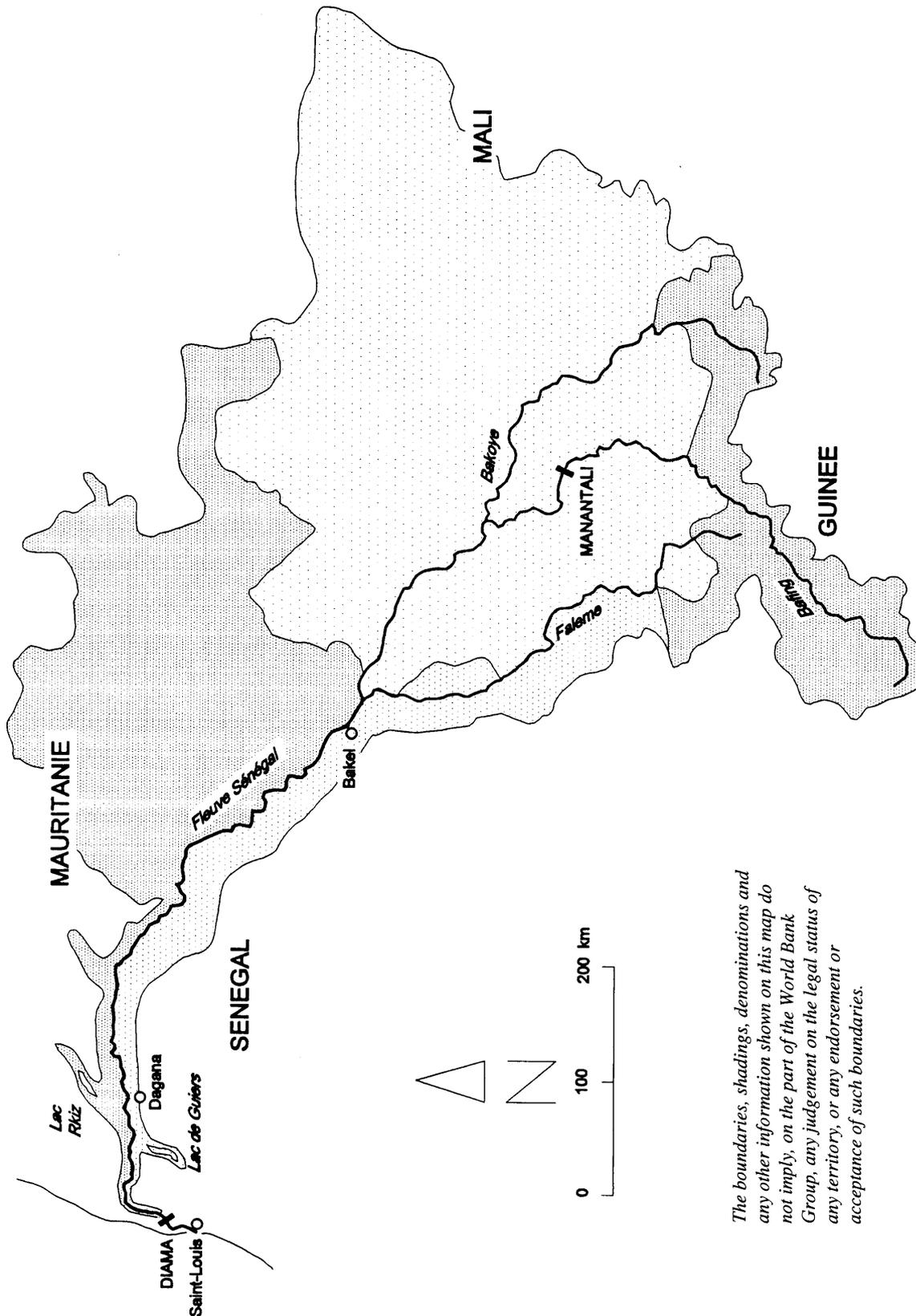
IMPLEMENTING AGENCY COORDINATION

74. An initial coordinating meeting between World Bank and UNDP and UNDESA staff was held in late 98 in New York to discuss this and other GEF River Basin projects. Early drafts of the working documents for this project, including this one, have been circulated informally among all three implementing agencies and UNDESA for comment and review.

75. The UNDP offices in all four riparian countries were consulted in the development of both the earlier PDF A and the present PDF B requests. The preparatory workshop held 3-6 February 1999 at Saint-Louis was co-hosted by UNDP and attended by representatives of the Mali and Senegal UNDP offices.

76. A briefing meeting was held with UNEP and UNEP GEF in Nairobi after the UNEP Governing Council meeting which had coincided with the workshop in Saint-Louis. Further meetings are planned.

77. Coordination among UN-DESA and UNDP projects, at regional and national levels, will be institutionalised before the beginning of this PDF-B project to take into account relevant recommendations issued from the UN consultation of the basin population and other actors.



The boundaries, shadings, denominations and any other information shown on this map do not imply, on the part of the World Bank Group, any judgement on the legal status of any territory, or any endorsement or acceptance of such boundaries.

Senegal River Basin

**SUMMARY OF CONTENT AND STATUS OF PASIE
COMPONENTS**

March 1999

PROGRAM A: MITIGATION OF HYDROPOWER PROJECT IMPACTS

1. Program A concerns the development of directives and their application by the relevant parties in the areas of: (i) locating the power transmission lines with a view to minimizing the negative impacts; (ii) environmental protection and mitigation measures to be applied during construction; (iii) environmental monitoring of construction works; and (iv) continued environmental protection and monitoring to be practiced in the operation of Manantali Dam.
2. The directives have been designed by a joint venture of consulting firms. They were accepted by a workshop held in June 1998 at Bamako that was attended by representatives of OMVS, its member States, donors and NGOs active in the member countries. The directives are expected to be applied in the layout, design, construction and operation of the hydropower facilities.

PROGRAM B: ACQUISITION OF RIGHT-OF-WAY FOR TRANSMISSION LINES

3. Program B defines (i) the procedures for obtaining the rights required to construct transmission lines and substations on land belonging or assigned to individuals, and (ii) the conditions governing the use while executing the works of land occupied or used by individuals. The program also defines the principles and modalities for the installation of power lines on land belonging to or being administered by the State.
4. The procedures, taking into account each member country's relevant regulations, were defined by the same joint venture that elaborated the directives under Program A and were also approved at the June 1998 Bamako workshop. They have started being applied in Mali, after the Prime Minister signed in December 1998 a decree declaring construction of the Manantali-Kita-Bamako transmission line to be in the national interest.

PROGRAM C: OPTIMIZATION OF RESERVOIR MANAGEMENT

5. Program C aims to thoroughly understand the relevant hydrologic phenomena and their interaction with other natural resources in order to maximize the water's uses and benefits and to develop a corresponding Reservoir Management Manual. The resulting flow regulation is expected: (i) to correct in part the negative effects that came about with the completion of Diama and Manantali Dam; (ii) to result in an equitable allocation of water to its various uses; and (iii) to mitigate the negative impacts on the population's health and on the environment.

6. Three studies by separate consulting firms are currently underway. One is to develop the Reservoir Management Manual (essentially a computer model producing operating instructions as a function of observed hydrologic conditions and agreed-upon flow objectives). Another is to assess the Senegal River's fisheries resources and their dependence on the flood regime and a third is to study the influence of the flood on pasture, flood recession agriculture and the replenishment of aquifers.

7. The World Bank has agreed to finance a cost/benefit study of dam operating scenarios and to assist in the development of a Water Charter defining the principles and modalities of sharing the available water among the riparian countries and among the different water uses. The Terms of Reference (TOR) for both studies have been approved. The Water Charter's principles and modalities will be reflected in the flow objectives the Reservoir Management Manual must take into account. The Charter, which will require the approval of the Council of Ministers overseeing OMVS, is expected to become effective in the year 2000.

PROGRAM D: ENVIRONMENTAL HEALTH

8. Program D has the objective to implement an action plan to considerably reduce in the medium term the prevalence of bilharzia and malaria. The World Bank has approved the TOR for the design of pilot structural measures intended to eliminate or reduce the risk of bilharzia infection. Also planned is the study and experimentation of fluctuations of the water level in the Manantali and Diama reservoirs to combat the snail acting as vector of the bilharzia parasite. The ministries responsible for public health in the three OMVS member countries are expected to jointly develop and implement an environmental health action plan combating water-borne diseases.

PROGRAM E: COMPLEMENTARY MEASURES

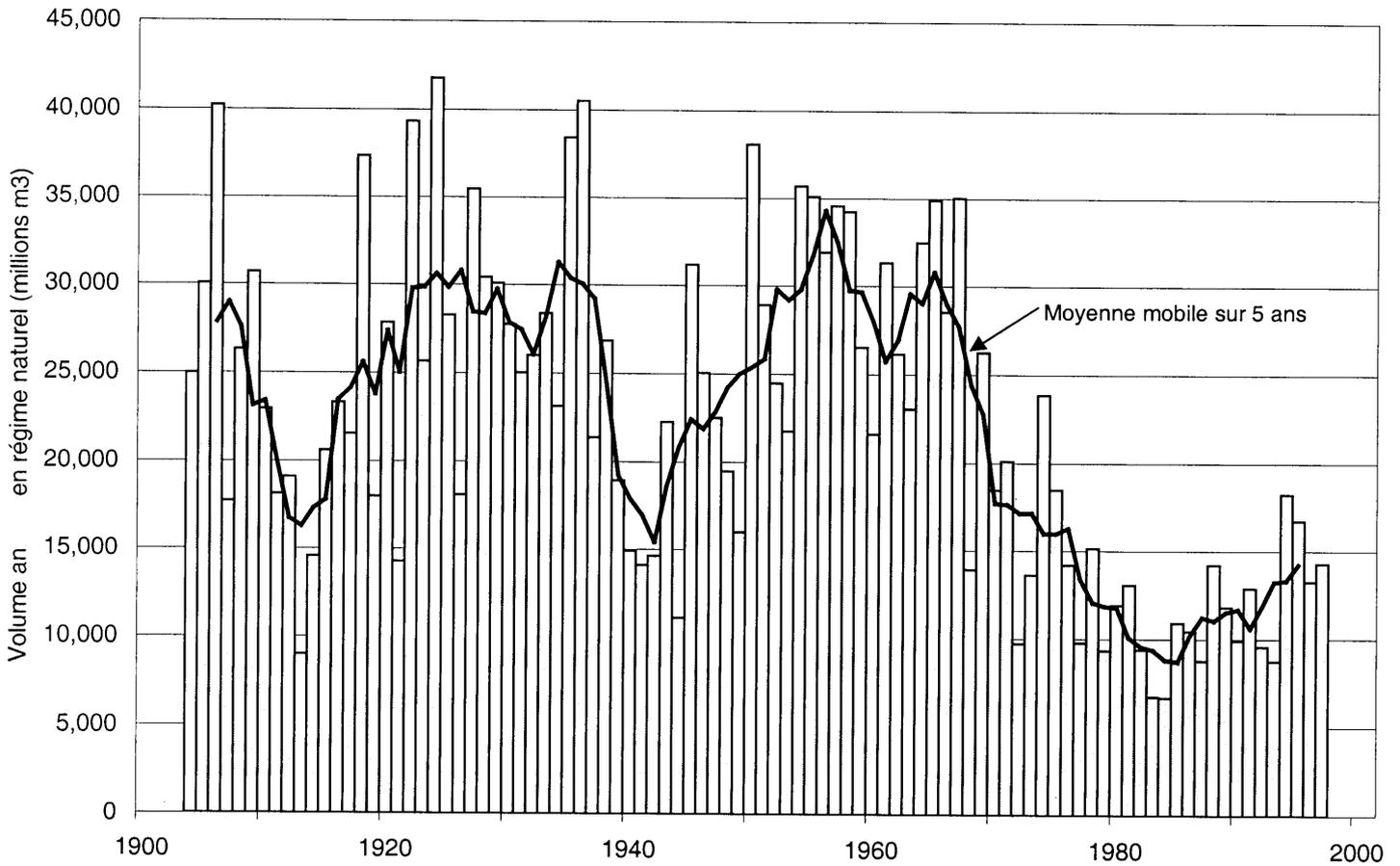
9. Program E includes the following activities: (i) the promotion of rural electrification; (ii) micro-projects targeting women with the objectives to generate revenues and reduce poverty; and (iii) the promotion of the development of next-generation hydro power sites (at the Felou and Gouina falls on the Senegal River).

10. OMVS has drafted TORs for studies concerning activities (i) and (iii), which will be financed by the World Bank. Work with respect to activity (ii) will start when the anticipated financing is received.

PROGRAM F: COORDINATION AND MONITORING

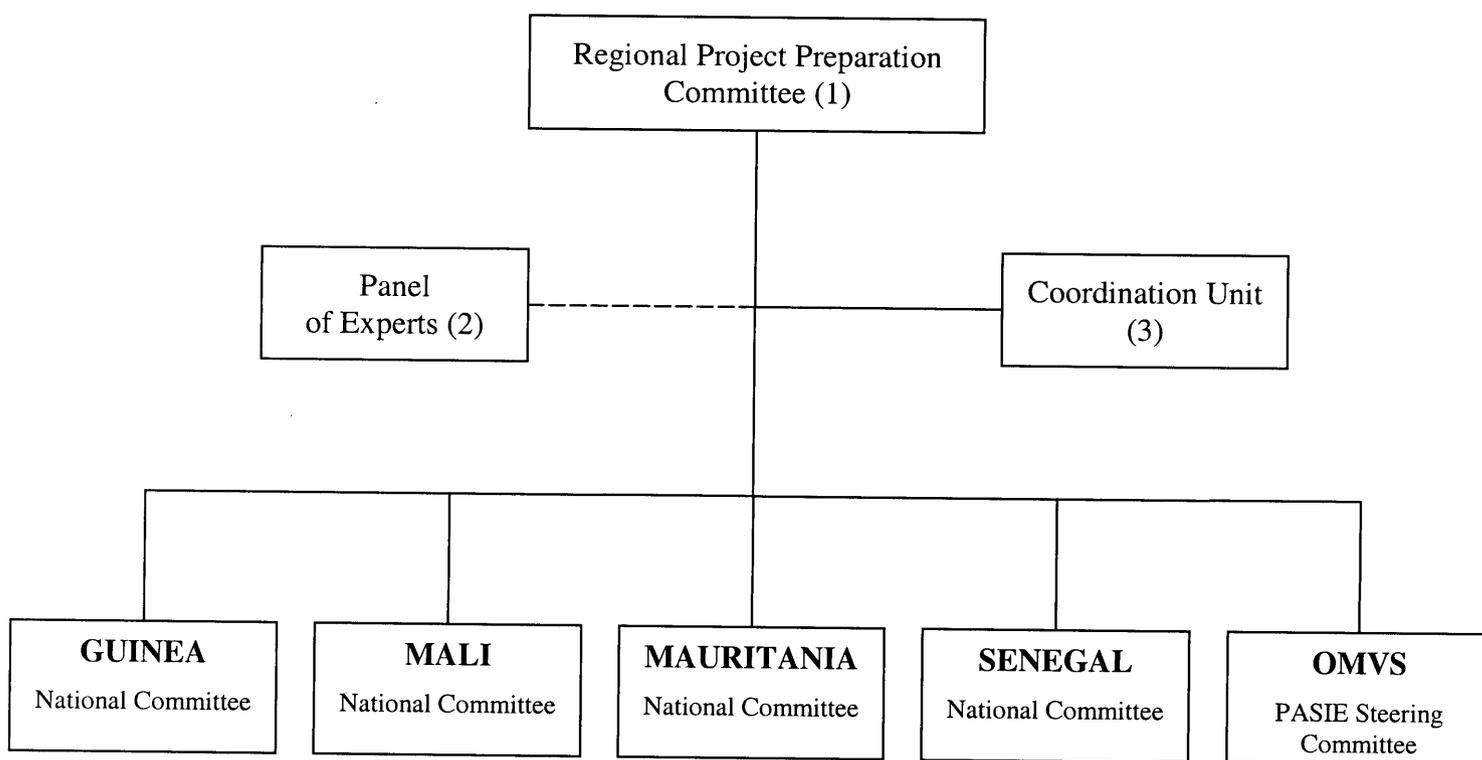
11. Program F concerns a set of environmental management and monitoring actions and the coordination mechanisms necessary for the effective implementation of PASIE. The environmental management and monitoring actions include: (i) the establishment of a data base in the framework of an *Observatoire de l'Environnement*; (ii) the reinforcement of the Manantali Limnology Unit; (iii) the establishment of a general environmental action plan and a *Code de l'Environnement* applicable to the part of the Senegal River basin occupied by the OMVS member countries; and (iv) a program of environmental monitoring of the reservoirs and of the downstream ecosystems.
12. A three-month study by a consulting firm on the implementation of the *Observatoire de l'Environnement* was completed at the end of 1998. The final report was to be available by April 1999. No other work concerning environmental management and monitoring has so far been undertaken.
13. The coordination mechanisms comprise: (i) a Steering Committee; (ii) a Panel of Experts; (iii) a Monitoring Committee; (iv) a mechanism to coordinate environmental health programs and monitoring the effects of the implementation of the health action plan; and (v) the creation of *Comités Nationaux de Coordination* (CNC) and of *Comités Locaux de Coordination* (CLC).
14. While the members of the Steering Committee, of the Panel of Experts and of the Monitoring Committee have been identified, these committees have yet to start functioning. The relevant ministries of all OMVS member countries have issued decrees and directives defining the establishment and functioning of the CNCs and CLC

Unregulated Annual Flow Volume of Senegal River at Bakel (1904-1997)



SOURCE: BASED ON DATA FROM OMVS/ORSTOM, ÉTUDES DE L'OPTIMISATION DE LA GESTION DES AMÉNAGEMENTS DE L'OMVS - CRUE 1997, ADDENDUM, AVRIL 1998

Organization Chart for Project Preparation (PDF B)



(1) Regional Project Preparation Committee

Chaired by OMVS High-Commissioner

- 1 Representative per country
- 1 Representative of OUA Office for Fouta Djallon Watershed Management Project
- 1 Representative per donor

(3) Coordination Unit

World Bank Task Manager
Regional Coordinator

(2) Panel of Experts

Experts from the fields of:

- Development Anthropology
- Environmental Economics
- Institutional Development
- Environmental Health
- Watershed Management
- Water Resources Management
- Biodiversity Management

Project-Preparation Component / Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Coordination																		
Establishment of NPPCs																		
Drafting of Master Work Plan (MWP)																		
MWP Approval by RPPC																		
MWP Approval by NPPCs																		
Drafting of National Work Plans (NWP)																		
NWP Approval by RPPC																		
Environmental Management Structure																		
Review of Basin-Management Experience																		
Drafting of Proposal for Regional Structure																		
Regional Synthesis Seminar																		
Preliminary Institutional Analysis																		
Definition of Project Component Features																		
Knowledge Base																		
Preliminary National Inventories																		
Definition of Project Component Features																		
Priorities & Opportunities Analysis																		
Preliminary Analysis																		
Local, National and Regional Workshops																		
Definition of Project Component Features																		
Action Program for the Global Environment																		
National Inventories of Ongoing Actions																		
Identification of Required National Interventions																		
Preliminary Definition of Key SEAP Interventions																		
Definition of Project Component Features																		
Identification and Design of Priority Projects																		
Identification of Elements Qualifying for GEF																		
Project Brief																		
Draft Preparation																		
Review by RPPC and NPPCs																		
Finalization																		

Meetings of Panel of Experts

First Meeting of RPPC

I Δ Δ Δ Δ

Proposed Time Schedule of Project Preparation Activities (Subject to confirmation by the RPCC)

Project-Preparation Component / Activity	RPPC	Coordination Unit	Regional Consultants	NPPCs	National Consultants	Outputs
Coordination						
Establishment of NPPCs						Functioning NPPCs
Drafting of Master Work Plan (MWP)						
MWP Approval by RPPC						
MWP Approval by NPPCs						Master Work Plan
Drafting of National Work Plans (NWP)						
NWP Approval by RPPC						National Work Plans
Environmental Management Structure						
Review of Basin-Management Experience						
Drafting of Proposal for Regional Structure						Basin-Management Report
National Workshops						Regional Structure Report
Regional Synthesis Seminar						Workshop Proceedings
Preliminary Institutional Analysis						Seminar Proceedings
Definition of Project Component Features						Institutional Analysis Reports
Knowledge Base						Component Design
Preliminary National Inventories						
Definition of Project Component Features						Inventory Reports
Priorities & Opportunities Analysis						Component Design
Preliminary Analysis						
Local National & Regional Workshops						TDA Report
Definition of Project Component Features						Workshop Recommendations
Action Program for the Global Environment						Component Design
National Inventories of Ongoing Actions						
Identification of Required National Interventions						Preliminary SEAP
Preliminary Definition of Key SEAP Interventions						
Definition of Project Component Features						Component Design
Identification and Design of Priority Projects						Priority Project Briefs
Identification of Elements Qualifying for GEF						GEF Project Portfolio
Project Brief						
Draft Preparation						
Review by RPPC and NPPCs						Project Brief
Finalization						



Responsibility Matrix

Project-Preparation Component / Activity (Riparian Countries and Coordination Unit)	Consultants				Workshops			
	(p-m)		(US\$)		(units)		(US\$)	
	Regional	National	Regional	National	Regional	National	Regional	National
Coordination								
Drafting of National Work Plans (NWP)		4.0		12,000		4		20,000
Environmental Management Structure								
Review of Basin-Management Experience	1.0		5,000					
Drafting of Proposal for Regional Structure	0.5		2,500					
National Workshops		3.3		10,000		4		20,000
Regional Synthesis Seminar						1		25,000
Preliminary Institutional Analysis		8.0		24,000				
Definition of Project Component Features	1.5		7,500					
Knowledge Base								
Preliminary National Inventories		8.0		24,000				
Definition of Project Component Features	1.5		7,500					
Priorities & Opportunities Analysis								
Preliminary Analysis	1.5		7,500					
Regional Workshop						1		25,000
Definition of Project Component Features	1.0		5,000					
Action Program for the Global Environment								
National Inventories of Ongoing Actions		6.0		18,000				
Identification of Required National Interventions		6.0		18,000		4		20,000
Preliminary Definition of Key SEAP Interventions	1.0		5,000					
Definition of Project Component Features	1.0		5,000					
Identification and Design of Priority Projects		8.0		24,000				
Identification of Elements Qualifying for GEF	1.0		5,000					
Total (units)	10.0	43.3				2	12	
Total Amount (US\$)			50,000	130,000			50,000	60,000
PDF B Allocation to Riparian Countries and Coordination Unit								290,000
PDF B Allocation to OMVS								60,000
Total PDF B Amount (US\$)								350,000

PDF B Budget Allocation

ANNEX H

Project-Preparation Component / Activity	National Consultants		Workshops	
	(p-m)	(US\$)	(units)	(US\$)
Coordination				
Drafting of National Work Plan (NWP)	1.0	3,000	1.00	5,000
Environmental Management Structure				
National Workshop	0.8	2,500	1.00	5,000
Regional Synthesis Seminar			0.25	6,250
Preliminary Institutional Analysis	2.0	6,000		
Knowledge Base				
Preliminary National Inventory	2.0	6,000		
Priorities & Opportunities Analysis				
Regional Workshop			0.25	6,250
Action Program for the Global Environment				
National Inventory of Ongoing Actions	1.5	4,500		
Identification of Required National Interventions	1.5	4,500	1.00	5,000
Identification and Design of Priority Projects	2.0	6,000		
Total (units)	10.8		3.50	
Total Amount (US\$)		32,500		27,500
Total PDF B Country Allocation (US\$)				60,000

Allocation of PDF B Funds for Typical Country

MINISTERE DE L'ENVIRONNEMENT

REPUBLIQUE DU MALI
Un Peuple - Un But - Une Foi

CABINET



N° 0 0 7 4 /ME-CAB

Bamako, le 10 FEV. 1999

Le Ministre de l'Environnement

A

Monsieur Lars Vidaceus, Coordinateur
Exécutif du Fonds pour l'Environnement
Mondial
Banque Mondiale
1818 H Street NW
Fax N°001 224 522 3256
WASHINGTON DC 40433 USA

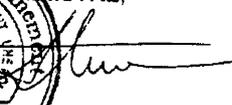
OBJET/ Atelier sur le bassin du fleuve Niger.

Monsieur,

L'Organisation pour la Mise en Valeur du Fleuve Sénégal (OMVS) nous a saisi à propos d'une requête pour la tenue d'un atelier sur la gestion durable de l'environnement et des ressources en eau en février 1999 et pour la préparation d'un programme d'intervention.

En notre qualité de point focal opérationnel du FEM pour le Mali, nous exprimons notre soutien à cette initiative de l'OMVS et n'avons pas d'objection à la voir conduire la préparation et les travaux afférents à l'organisation de l'atelier et à la mise en place du programme.

Je vous prie de croire, Monsieur le Coordinateur Exécutif, à l'assurance de ma considération distinguée.

MINISTRE,

MOHAMED AG ERLAF
Ministre
Officier de l'Ordre National

REPUBLIQUE DU SENEGAL
UN PEUPLE - UN BUT - UNE FOI

N° /MEPN/D.ENV

MINISTERE DE L'ENVIRONNEMENT
ET DE LA PROTECTION DE LA NATURE

DAKAR, le 2

Direction de l'Environnement

Le Directeur

//-) **Monsieur Lars VIDAEUS**
Coordinateur Exécutif du Fonds
pour l'Environnement Mondial
Banque Mondiale, 1818 H St NW
Washington D.C. 40433, USA
Fax : 001 224 522 3256

O B J E T : Atelier sur le Bassin du Fleuve Sénégal

Monsieur le Coordinateur Exécutif,

L'organisation pour la Mise en Valeur du Fleuve Sénégal (OMVS) nous a saisi à propos d'une requête pour la tenue d'un atelier sur la gestion durable de l'environnement et des ressources en eau en février 1999 et pour la préparation d'un programme d'intervention.

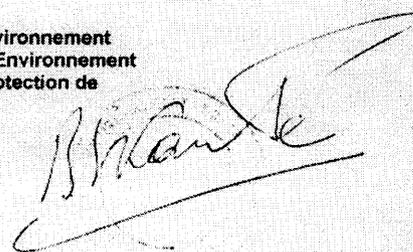
Point Focal GEF pour le Sénégal autorise l'OMVS à soumettre la requête et à conduire les préparations et travaux affairant à l'organisation de l'atelier et à la mise en place du programme.

Soyez assuré de tout l'intérêt que les Autorités Sénégalaises accordent aux activités susmentionnées.

Tout en vous remerciant de votre bonne collaboration.

Je vous prie de croire, Monsieur le Coordinateur Exécutif, à l'assurance de ma haute considération.

Point Focal National du Fonds pour l'Environnement
Monsieur Bakary KANTE, Directeur de l'Environnement
Ministère de l'Environnement et de la Protection de
la Nature
République du Sénégal
Tél : (221) 821 07 25
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Point Focal National du Fond pour l'Environnement Mondial
Monsieur Mohamed Mahmoud Ould El Ghaouth
First Counsellor
Ministry of Foreign Affairs & Cooperation
Nouakchott
MAURITANIA

République Islamique de Mauritanie

To: Franklyn Curdy
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Monsieur LARS VIDAËUS
Coordinateur Exécutif du Fonds pour
l'Environnement Mondial
Banque Mondiale
1818 H Street,
NW Washington D.C. 40433
Fax : 001(224) 522 32 56 U.S.A

Objet. : Atelier sur le Bassin du fleuve Sénégal

Monsieur le Coordinateur Exécutif,

L'Organisation pour la Mise en Valeur du fleuve Sénégal nous a saisi à propos d'une requête pour la tenue d'un atelier sur la gestion durable de l'environnement et des ressources en eau en février 1999 et pour la préparation d'un programme d'intervention.

Point Focal GEF pour La Mauritanie autorise l'OMVS à soumettre la requête et à conduire les préparations et les travaux afférent à l'organisation de l'atelier et à la mise en place du programme.

Soyez assuré de tout l'intérêt que les autorités Mauritanienes accordent aux activités susmentionnées.

Tout en vous remerciant de votre bonne collaboration,

Je vous prie de croire, Monsieur le Coordonnateur Exécutif, à l'assurance de ma haute considération./



Mohamed Mahmoud Ould El Ghaouth

Conakry, le199...



28 MAI 1999

Le Ministre

RÉPUBLIQUE DE GUINÉE
Travail - Justice - Solidarité
MINISTÈRE DU PLAN
ET DE LA COOPÉRATION

Direction Nationale de la Programmation
des Investissements Publics

N°:SPMC/CAB/DM/P/97

A
Monsieur Lars Vi DAEUS
Coordinateur Exécutif du Fonds
pour l'Environnement Mondial.
Banque Mondiale 1818 street.nw
Washington DC
S/C Représentant Résident
de la Banque Mondiale en
République de Guinée
- CONAKRY -

Objet : Requête d'un financement bloc B
pour la préparation d'un projet FEM
pour la Gestion intégrée de l'environnement
du Bassin du Fleuve Sénégal.

Monsieur le Coordinateur Exécutif,

Au nom du Gouvernement de la République de Guinée, je tiens à vous remercier pour la contribution du Fonds pour l'Environnement Mondial (FEM) au niveau Bloc A pour le financement de l'atelier tenu à Saint-Louis (Sénégal) du 3 au 6 Février 1999.

Cet atelier, auquel mon pays a été représenté par une délégation du Conseil National de l'Environnement avait pour thème « Problématique de la gestion de l'environnement du bassin du Fleuve Sénégal ».

Compte tenu des conclusions de cet atelier ainsi que des résultats d'entretiens subséquents que nos services concernés ont eu avec les consultants de la Banque Mondiale, chargés d'assister les pays riverains et l'OMVS dans l'élaboration de la requête mentionnée en rubrique, nous confirmons que les éléments du projet FEM envisagé qui concernent notre pays pourront s'inscrire entièrement dans le cadre d'actions nationales visant à mettre en œuvre la politique environnementale de la Guinée.

Les Autorités Guinéennes souhaitant la mise en œuvre diligente de ce projet pertinent, nous vous prions de bien vouloir accorder une subvention de 350.00 US\$ au niveau du Bloc B comme contribution au financement de la préparation du projet prenant en compte la totalité du bassin du Fleuve Sénégal.

Nous sommes d'avis que la coordination des travaux de préparation sera efficacement réalisée par la Banque Mondiale. Par conséquent nous sommes d'avis qu'elle gère le processus de préparation du projet et donnons notre accord de principe aux arrangements suivants :

- La coordination par une personne ressource indépendante des activités de préparation de projet menées par les pays riverains du Fleuve Sénégal et l'OMVS ;
- La supervision technique de ces activités par un groupe d'experts indépendants,
- L'affectation d'un budget de 60.000 US\$ à chaque pays riverain et à l'OMVS pour défrayer les coûts encourus par les travaux de préparation du projet,
- Une réserve de 50.000 US\$ pour le recrutement de consultants qui aideront les pays à déterminer les composantes susceptibles d'être financées par le FEM,
- L'administration des fonds réservés par les Bureaux de la Banque Mondiale,
- L'animation par une structure indépendante des travaux des comités nationaux de préparation.

Dans l'attente d'une suite favorable à cette présente requête, je vous prie d'agréer, Monsieur le Coordinateur Exécutif, l'assurance de ma considération distinguée.

P.J. : Mémoire sur
le Fleuve Sénégal.



H. TH. M. COLLOU-DIALLO
Ministre
du Plan et de la Coopération