

**Global Environment Facility**  
**Proposal for Project Development Fund (PDF) Block B Grant**

1. **Country:** Mauritania
2. **GEF Focal Area:** Land Degradation
3. **Operational Program:** OP#15
4. **Project Title:** Mauritania Support to Community-Based Watershed Management (Community Based Rural Development)
5. **Estimated Project Cost:** USD 63.5 Million
 

**Financing:**

**GEF:** USD 6.0 Million

**Beneficiaries** USD 7.5 Million

**Borrower:** USD 5.0 Million

**IDA:** USD 45.0 Million

*Total:* *USD 63.5 Million*
6. **Project Preparation**

**PDF Block B Request** USD 350,000

**PDRC-PPF (World Bank):** USD 140,000

*Total:* *USD 490,000.*
7. **Executing Agency:** World Bank and Ministry of Agriculture and Livestock, Mauritania
- Implementing Agency** World Bank
8. **Block A Award:** No
9. **Duration of Block B Activities:** 12 months
10. **Duration of Project Activities:** 6 years
11. **Financial Instrument** SIL

## 12. Background

With a GDP of \$370 per capita (2001), Mauritania supports a population of 2.5 million inhabitants with an increasing trend of rapid urbanization (largely a result of recent migrations due to drought). However, the agricultural sector still engages approximately half of the population. Within Mauritania, agricultural activities are concentrated on a thin strip of land 200 km wide, in the southern region of the country where precipitation averages 300 mm per annum. This strip of land is threatened by soil degradation, deforestation and an associated loss of biodiversity. The development of potential irrigated agriculture offers an avenue of increased production however this requires high investments and is not without environmental risk.

### Development Constraints and Issues

*Narrow Natural Resource Base Subjected to Degradation.* In this mostly Saharan country, crop and livestock activities take place within a narrow strip of a Sahelian zone, about 200 km wide. Rainfall in this band averages some 300 mm per year. The country is subject to extensive and recurrent drought spells (the most recent ones in 1984-85, 1991-92 and 2001-2002) and desert locusts attacks. Continued soil degradation and desertification from advancing dunes formations threaten to further reduce the already-limited stock of arable land. Encroachment and over-exploitation of the remnant forest formations are major threats to biodiversity. The Senegal River Valley to the south offers the potential for expanded and diversified irrigated agriculture, but such expansion entails significant investment and environmental challenges.

*Limited Transport Infrastructure to Access Markets and Services.* In such a large and sparsely populated country, the limited road infrastructure, particularly in rural areas, severely limits the access of rural populations to markets. Large areas lay fallow in terms of their potential for growth for lack of connecting feeder roads to markets. Poorly implemented transport policies, which result in monopolized transport services, further exacerbates their isolation. Limited road infrastructure also limits rural populations access to agricultural, and other business services.

*Limited Supply of Social and Productive (Public and Private) Services.* Limited access to services because of poor road infrastructure only reveal one side of the story. Often, services are simply in short supply, or in otherwise poor quality, or not aligned with the priority needs of rural populations. Access to potable water (for human and animal consumption), to health care, to sanitation, and to education fill the priority list of rural populations' wants. To a considerable extent, low agricultural productivity is caused by the lack or inadequacy of agricultural services (research and extension) provided by public agencies. The "Agricultural Delegations" of the Ministry of Rural Development (MDRE) have been implanted in all regions but provide insufficient services to crop and livestock producers. A study on the restructuring of the MDRE has been completed and the implementation of its recommendations is under discussion. Not be overlooked, the lack and poor quality of business services (contractor, repair, maintenance, and advisory services), provided by a rural private sector with little capacity, contribute to further reduce agricultural productivity and dampen rural populations' prospects to diversify into non-farm productive activities.

*Limited Investment and Operational Capital.* Despite recent expansion in scope (beyond irrigated rice) and volume thanks to Bank-financed PDIAIM, Mauritania's agricultural credit system (UNCACEM) remains circumscribed to the Senegal River Valley. There are no viable

rural micro-credit systems to complement UNCACEM. Forced to rely on their own sources of funds (often remittances and livestock revenues), rural populations, pressed hard to cover basic needs, engage little in productive investments. The low availability of investment and operational capital prevents rural communities to acquire needed productive assets and business services to boost agricultural productivity and diversify into higher value-added agricultural marketing and agro-processing activities. Outside the irrigated valley, the low availability of investment is in great part due to the high risk attached to the rainfed agriculture practiced under very erratic rainfed conditions.

*Limited Local Community Ownership in Public Investments.* In spite of recent progress in decentralization (and in programs such as the predecessor project--RNRMP), systematized full participation of local communities in the design and implementation of public investment programs remains limited. Administrative decentralization and political decentralization are being implemented but at a very slow pace, while fiscal decentralization has yet to be truly dealt with. As a result, empowerment of communes and local communities is still to become effective and a top-down approach still prevails.

*Land Tenure.* New provisions of the land tenure law have revised conditions for distribution of public land and recognition of rights on collectively-owned land, and reinforced the necessity of land registration to secure tenure (and to access credit). Thus far, the land tenure law has been implemented in the Senegal River Valley, but there, land registration has been at a more rapid pace in the Trarza region than in Upper River Valley. (Steps are being taken to correct this imbalance through the PDIAIM, however). In the rainfed area everything remains to be done, however and the potential for increasing conflicts between farmers and between farmers and herders means that the issue of land tenure must be addressed.

This project will build on the baseline activities and studies carried out through the Natural Resource Management in Humid Zones project implemented by the government of Mauritania with IDA funding (1998-2002). Although the Humid Zones project did focus on the improvement of ecological baseline conditions through the sustainable management and development of agro-pastoral systems coupled with increases in revenues to participating communities there remains much to be accomplished. First, given the scope of the project and its focus on broadly disbursed investments and village level interventions (with an average of a third of the villages covered by a commune) communities were not able to address issues of community based natural resource management. Second, inter-village, municipal and inter-commune level investments were not supported thereby limiting the effect of the project on overall ecosystem health.

The Rainfed Natural Resource Management Project also contributed to community based management (RNRMP, 1998-2003). The opportunity exists, however, for the scaling-up of the RNRMP's achievement, both in terms of geographical coverage and scope of intervention. There is also a need to intervene not only at the village level, but also at the levels of rural municipalities, public agricultural services (crops and livestock), and rural enterprises.

The World Bank is currently developing the Mauritania Community-Based Rural Development (CBRD) Project with a development objective to improve the living conditions of project-supported village communities in terms of sustainable income increase and access to basic social services. This project is building on the Humid Zones and RNRMP projects and will scale up

their achievements (CBRD targets 600 village communities, compared to 295 under the RNRMP). (This would contribute to the Millennium Development Goals (MDG) of eradicating poverty and hunger in rural areas, and ensuring environmental sustainability. The project would achieve its objective through community-centered capacity building and investments in economic, social and environmental activities.

The CBRD project includes three components:

- Component A. Capacity Building: includes support to village communities; rural municipalities; agricultural services; and micro-rural enterprises serving village communities
- Component B: provides investment funds and (i) includes the funding of village micro-projects and (ii) support for work on rural roads by with the participation of local communities.
- Component C: includes project's coordination/management and monitoring and evaluation.

However, the management of communal resources (such as pasture land), beyond the limits of the village, will not profit from the above project and will require detailed attention from an additional program. In response to this incremental need a GEF proposal is being put forth to build on the baseline activities of the CBRD project.

### **13. Global Significance**

While a large proportion of Mauritania is characterized as desert, the country has significant global environmental value. In particular, the Senegal River valley holds critical value in terms of international water supply and quality. Furthermore, the areas along the Senegal river and in the oasis scattered throughout the country are critical habitats for a variety of species including 20 threatened species (IUCN Redbook).

The agro-silvopastoral production activities of Mauritania are concentrated in the south-east of the country and in oasis scattered throughout. These ecosystems face intense pressure from high populations and overuse and competition for natural resources is high (competing uses include: grazing land, arable land, and fuel-wood production). Furthermore, the oasis are being increasingly exploited for their tourism potential. As a result of this pressure, the land in most of these critical areas is degraded and ecosystem functions are threatened. As a result of this, rural production yields are continuing to diminish and the expansion of agricultural activities into unsuitable areas is widespread. Additionally, damages such as soil erosion, bank erosion, and river siltation have occurred due to uncoordinated interventions and the failure to account for land degradation upstream of project areas.

Furthermore, the increasingly prevalent sedimentation of waterways and the large scale degradation of soils in many watersheds in Mauritania has effected the sustainability of rural investments as well as negatively impacting agricultural and pastoral production, local livelihoods and food security.

The root causes of land degradation in watersheds have been identified as:

- Poverty: The majority of poor people depend on the rural economy for survival, an economy that is based on the exploitation of natural resources. The continued settling of nomadic populations is compounding this problem;
- Lack of knowledge of sustainable land management practices and the non-existence of appropriate management institutions (lack of local or regional integrated management plans);
- Lack of resources for large scale investments;
- Lack of knowledge and awareness amongst local populations with regards to the implementation of communal management plans. (The few attempts at integrated management plans in Mauritania have not considered long-term environmental concerns);
- Poor integration of migratory people who are, for the most part, not included in development discussions;
- The lack of environmental information systems and the failure to integrate environmental indicators at the national, regional and local level;
- The low utilization of environmental economics tools combined with the lack of reliable environmental accounting limits the implementation effectiveness of the sustainable and decentralized management of natural resources.

This project will address these root causes and so, ensure the continued value of Mauritania as a key stakeholder in the Senegal River basin and as the source of critical habitat for globally important biodiversity and threatened species.

#### **14. Project Objective and Description**

The GEF project will build on the baseline established by the IDA CBRD project, the objective of which is to reduce poverty, improve livelihood conditions and increase access to services at the local level. The GEF project will specifically complement the development objective of the IDA project through support for sustainable livelihoods by reinforcing capacity, supporting sustainable land management investments in target communities, and targeting investments at the watershed level. The project although somewhat delayed in comparison to the IDA project is intended to be fully incorporated as part of the first phase of the APL. This implies an overall long term engagement in three 5-year phases, starting with phase 1 in 2005-2010. As such, one of the overall objectives of the project is to demonstrate environmentally and economically sustainable investments so as to create a demand for longer engagement with IDA resources.

The global environment objective of the GEF project is to introduce sustainable land management practices at the local and regional (commune) levels, in order to limit land degradation and desertification and to safeguard critical ecosystem functions. Specific project outputs include:

- The development of models for the participatory management of watersheds and landscapes
- The dissemination and incorporation of lessons learned from the testing and implementation of the watershed/landscape management model in selected pilot watersheds

- The mainstreaming of the watershed management approach in the decentralization process
- Improvements of the NRM related policies and regulations in Mauritania

Given the above objectives, broad activities to be supported under the GEF alternative include:

- Establishing a scientifically and technically sound method for watershed management which considers socio-economic dynamics
- Piloting the above approach including supporting capacity building and on-the ground investments.
- Disseminating results of the above pilots into scaled-up project areas.
- Proposing and supporting adaptations in policy and legislature to support sustainable land management at the watershed level.

In order to adequately address the identified issues, the project will employ the landscape approach within the framework of the watershed management approach. Landscapes are part of watersheds and ecosystem functions are more related to watersheds and to their sub-units (micro catchments) than to landscapes. Watersheds and their sub-units are geo-morphological land/water units and as such are more relevant entities for ecosystem function analysis than landscapes. However, landscape management cannot be undertaken in a vacuum, it will be more efficiently carried out within the watershed framework. So, landscape management approach, yes, but better to do it within the watershed management framework.

The project as a pilot, will search for the best and more relevant way to deal with watershed management associating the communities and taking into account the decentralization process, and the pertinent laws especially the Pastoral Code in preparation. Landscape approach will be documented and discussed with all the stakeholders to highlight advantages and constraints. It will take into account all the functions of the different ecosystems (agriculture, pastoralism, tourism, habitat for biodiversity) of the country and take benefits from others donors studies like the GIRNEM work for inventorying potential of eastern humid zones.

### Geographic focus of the project

Potential pilot sites for the preparatory phase (PDF-B activities) have already been identified in one oasis and in one agro-sylvo pastoral ecosystem (Dakhlet Nouadhibou and Guidimakha). Within these areas three potential watersheds have been identified based on the following criteria: type and extent of degradation; zones of interventions with the IDA projects; and current threats to ecosystem health (see attached map in annex 3). The methodological approach developed during the preparatory pilot phase will be applied within the CBRD intervention area during the project implementation period. It may also be applied outside the CBRD intervention area where necessary and appropriate.

### Project Description

The above described outputs and objectives will be achieved through activities implemented within the CBRD framework as detailed below:

#### *Component 1: Capacity Building:*

Baseline (IDA funding: \$11 million):

Village communities and their representatives lack skills to effectively develop, implement, manage and monitor development plans and administer their local institutions as promoted in the decentralization context. The proposed project would provide support to communities to build the necessary skills. These capacity building activities will be carried out in cooperation with government, non-government and private-sector institutions which will be engaged to assist the communities. Furthermore, if some of these institutions do not have adequate skills, they would benefit from institutional and capacity building through the project. Therefore this component includes two main sub-components: (1) Community Capacity Building and Empowerment and (2) Capacity Building for Community Support Institution/Agencies.

GEF alternatives activities (GEF funding: \$2 million):

Fragmented and spatially uncoordinated local development interventions are contributing to increased land and water resources degradation. As a result there is a need to (i) adopt an integrated approach to local development planning and implementation at scales beyond the village and (ii) combine both ecosystem and socio- economic decision making units.

The GEF incremental support will help to develop new watershed/landscape management approaches for two main Mauritanian ecosystems as pilots to adapt and replicate in other ecosystems through:

- Contributing to the development of watershed and landscape management decision support tools to assist communities and local government in their local development planning process, such as GIS-NRM data bases of watersheds and GIS-based indicative optimum watershed management plans (*Shémas directeurs d'aménagements*) with a focus on the optimisation of land use, natural resources conservation in general and the prevention of land degradation in particular;
- Piloting watershed management decision making units at both geographical and socio-political levels such as watershed stakeholders associations or committees, micro-catchments community-based organizations, etc.
- Strengthening the capacity of national and local research and extension services or producers associations to adopt a watershed management approach in developing and transferring sustainable land management technologies;
- Training communities, communes, NGO's, and regional planners on how to develop, implement and monitor watershed management plans;
- Developing communication tools for sensitising communities on land degradation issues (tours to most degraded areas to witness disastrous consequences of land degradation, etc.);
- Initiating and testing simple models for payments of environmental services (e.g, upstream-downstream externalities market); and
- Reviewing policies, laws, regulations, to identify reforms that will provide the right set of incentives to rural communities (such as improved tenure security) for the sustainable management of land resources at the watershed level

*Benefits of the GEF alternative:* The GEF alternative will strengthen the capacity of local communities and governments to adopt the watershed management approach in planning and implementing well coordinated local development interventions that will lead to a reduction in land degradation, desertification and to an accumulation of the natural resource base/ capital. This component would mainly provide watershed management decision support tools, institutions, regulatory/policy framework, training and information to all relevant stakeholders

*Component 2: Micro-project Investments:*

Baseline (IDA funding: \$28 million):

The primary focus of this component is on local communities. This component would manage the flow of local investment funds for the implementation of projects identified in the village Community Development Plans (CDPs), which will be prepared with the assistance and support of the agencies mentioned in component 1. The duration of the plans would be defined during preparation but it is expected to be three years. Also during preparation, based on results achieved under the predecessor project, the indicative amount per village community would be determined. Funding for the investments proposed under the CDP would be provided by the project in the form of matching grants. As initiated in the predecessor project, the share of the grant would vary depending on the nature of the investment (economic, social or environmental).

GEF alternative activities (GEF funding: \$3 million):

The GEF project will finance a demonstration and adoption fund for innovative and sustainable land management (SLM) investments, including investments in technologies and income generating activities, with a focus on interventions which improve or conserve critical ecosystem functions while ensuring the sustainability of local livelihoods. As such, this component would make available an earmarked SLM innovation adoption fund, to support (with matching grants) local investments proposed in the CDPs that include the application, at watershed or lower levels, of new, innovative SLM technologies and activities including:

- investment in conservation agriculture (CA) technologies , such as no-tillage, and in CA income generating activities such as multiplication and marketing of seeds of cover crops, that can minimize land degradation;
- scaled-up investments in new SLM technologies and activities (tree-based and others) developed by the GEF-funded Desert Margin Program and the pastoral pilot project, and pastoral management plan activities in line with the new pastoral code (*Code Pastoral*)
- upstream and river bank protection investments to minimize erosion, and sediment transport in the watersheds; and
- investment in other desertification mitigation and prevention technology adoption and/or activities
- investments in renewable energy activities (if assessed as feasible during preparation).

*Benefits of the GEF alternative:* GEF incremental funding will support the implementation of technologies and approaches capable of reducing, halting or reversing land degradation and/or desertification. Furthermore, it is expected that once the benefits from such technologies and activities become clear and attractive their demand in the CDPs will increase, as will the demand for other donor funding.



### *Component 3: Project Management and M&E:*

#### Baseline (IDA funding: \$6 million):

The CBRD will support general project management, coordination and M&E activities for both projects (CBRD and GEF component)

#### GEF Alternative activities (GEF funding: \$1 million):

This component will focus on designing and implementing community and scientific M&E systems to monitor global and local environment indicators to assess their impact (desertification/ land degradation, carbon sequestration, biodiversity, international waters, climate change) in project areas. The GEF component will be focussed on specific activities such as:

- Establishment of a GIS database for monitoring trends in natural resources and land degradation
- Development of community-based and scientific monitoring and evaluation system (with indicators that can be monitored by communities, and scientific indicators on the other hand) for land degradation and watershed management assessment at the local and regional levels; and
- Local and global environmental impact assessment.

### **15. Rationale for GEF Involvement**

This project supports OP15 through its focus on addressing the root causes of land degradation and establishing mechanisms for the sustainable management of watersheds. In particular, the project seeks to preserve the agricultural, pastoral, forestry, and tourism functions of selected ecosystems thereby emphasizing a dual focus on sustaining environmental functions and rural livelihoods. The project will also have a positive impact on biodiversity in critical watersheds by incorporating identification and development of sustainable method to identify and protect rare species (vegetation and wildlife) in the arid ecosystem (especially through the incorporation of oasis management in local development planning).

Furthermore, targeting interventions at the watershed level will allow the project to address those land degradation issues which cut across different villages and communes in order to consider the larger ecosystem. Finally, given the strong focus of the project on innovative sustainable land management investments, the project supports the objectives set out in GEF strategic priority No 2 and, through the capacity building component, the project responds to GEF strategic priority No 1.

Furthermore, given the project components as described above, the project will generate both local and global environmental benefits as follows:

#### *Local and Regional Benefits:*

- Support for local livelihoods through revenue generation (poverty reduction).
- Introduction of sustainable land management methods to improve livelihood sustainability and reduce vulnerability and food insecurity
- Reduction of agriculture-livestock conflicts.
- Better planning for infrastructure, especially irrigation and roads
- Increased investment in local and regional infrastructure.
- Reduced rates of migration within and between regions

*Global Benefits:*

- Reduction in land degradation resulting in increased erosion control and improved steps to combat desertification.
- Protection of waterways through decreased sedimentation.
- Protection and rehabilitation of natural habitats.
- Safeguarding of agro-sylvopastoral ecosystems and their functions.
- A slight increase in carbon sequestration rates.

## **16. National Level Support**

The project, like the baseline IDA project PDRC, is firmly based in the national policy framework of Mauritania. In particular, the project conforms to the guidelines of the Poverty Reduction Strategy Paper, the “Stratégie pour le Développement du Secteur Rural à l’horizon 2010” (revised in 2001), the 2001 Agro-food Strategy; the 2002 Livestock strategy; the recently adopted (but not yet implemented) Pastoral Code (2003); and the 1994 Country Environmental Strategy Paper (CES); and soon to be updated Environmental Strategy. Other government policies supported by the project include the land tenure “Loi foncière et domaniale”, the Forestry Code, the forest action plan the bylaw for Game and Nature Protection “Législation sur la Chasse et la Protection de la Nature”, the Biodiversity National Strategy, and the National Action Plan for Adaptation to (NAPA) climatic change (in preparation) and the new environmental strategy to be implemented through the National Action for the Environment (PANE) with UNDP's assistance.

Furthermore, by implementing activities at a local level, the project supports the 1986 Decentralization Strategy which was applied to rural municipalities in 1989. In particular, the Decentralization process has led to the creation of 216 communes, of which 163 are rural. A *National Strategy of Decentralization and Local Governance* was prepared in 2002. It focuses on (i) legal and institutional framework, (ii) fiscal resources, (iii) financial transfers of the government to the communes, (iv) management capacities of the communes, and (v) the concepts of Decentralization and local development, good governance and sustainable development. The reforms proposed under this strategy intend to give the communes more responsibilities. Decentralization is viewed as an important issue in the PRS, as this strategy is now being implemented at the regional level. The participation process has been consolidated by the implementation of an integrated and negotiated communication strategy. Local development funds (fonds de developpement regional--FDR) are now managed directly by municipalities, but the allocation although growing remains small.

In response to threats to ecosystem functions, the government of Mauritania has emphasized the need to address sustainable land management in its National Action Plan (NAP) for the UNCCD.

Those priorities are included in its Strategic Framework for Poverty Reduction. The priorities of the NAP highlights that:

- There is an urgent need for scientific and technical methods to be developed to take in account environmental issues including land degradation.
- There is an urgent need to develop national capacity to address environmental issues (application of national environmental policies at every level )
- There is an urgent need to implement Environmental Impact Studies

The government also expressed concerns related to watershed management to the World Bank during the preparatory phase of the CBRD, but such concerns were not initially considered due to the limited availability of financial resources.

Finally, the project objective is also in line with the NEPAD priorities focused on environmental investment to develop strong environmental policy frameworks at the sub-regional level with the involvement of regional organizations such as ECOWAS and CILSS. The project also meet the Millennium Development Goals in supporting the rehabilitation of ecosystems important functions for food security and poverty alleviation.

## **17. Eligibility**

The Government of Mauritania is a signatory to the UNCCD (1996). The Government has also prepared and submitted a NAP (2002) and has included the priorities set out in the NAP in the Strategic Framework for Poverty Reduction (2001).

## **18. Stakeholder Participation**

Relevant project stakeholders include (same as CBRD):

- local communities and their representatives (quarters, hamlets, villages, etc.)
- rural and professional organizations
- decentralized state services
- the private sector
- NGOs and other relevant associations
- commune service providers
- research and extension institutions
- migratory herders.

Particular attention will be paid to gender issues in order to ensure adequate representation of women in watershed management activities and decision making.

For the purpose of project planning, a committee has been put in place including representatives of each of the above stakeholder groups. Furthermore, the GEF alternative will use the same stakeholder mobilization methodology and the same administrative and financial procedures as the CBRD project which fully integrates stakeholder interests. Finally, since the implementation of the project will be community based, mechanisms will be established for the engagement of all relevant local stakeholders.

## **19. Risks**

The project will be implemented in an arid zone that is described in the National Action Plan for Adaptation (NAPA) to climate change. Potential risks of the project are similar to those covered by the NAPA strategic document which is being elaborated. The recommendations will be included in the proposed watershed management methodology. Furthermore, improved soil/land and water management technologies and infrastructures in general improve water availability and thereby mitigate drought. Sustainable land and water management will be addressed by the GEF project and infrastructure improvements will be financed by the IDA baseline project.

## **20. Replicability and Sustainability**

### Replicability

This project will be implemented as a pilot with the intention for successful activities to be scaled up beyond the project area. In particular, this project will be implemented in close coordination with the CBRD however, not all of the sites which are covered by the CBRD will be included for GEF incremental funding. As such, a replication strategy will be developed in order to facilitate the scaling-up of project activities to other CBRD sites not included in the pilot.

Furthermore, it is expected that the capacity building of local institutions, watershed management units, and research and extension institutions will facilitate the replication of community-based watershed management methods and technologies both within and amongst these groups.

A detailed replication strategy will be developed during preparation.

### Sustainability

This project will be based on the same sustainability principles highlighted in the CBRD including:

- Employing a participatory approach to reinforce local empowerment; the GEF co-financed activities will develop a participatory approach to consider land degradation issues particularly, watershed and landscape management.
- Capacity building activities for: rural populations, local communities, communes, and national and decentralized technical service providers: the methodologies will be tested as a pilot in few watersheds then guidelines and training methods will be developed to scaled up the best practices in the local development planning.
- Inclusion of national associations in project development and activities (NGO's, rural enterprise groups, research and extension organizations, etc.); as important stakeholders such groups will be included during the preparation of the GEF alternative, starting with the root cause analysis, and participation will continue with through the monitoring and evaluation process.
- Demand-driven investments with beneficiary contributions (cash or in-kind): following the same criteria as the CBRD, investments made with the GEF co-financing will focus on income generation, and local contribution.

In addition, in order to increase institutional sustainability, this project will build on existing institutions and will frame interventions within the ongoing decentralization process of the Government of Mauritania.

In order to ensure financial sustainability, the economic aspect of managing land degradation will be taken into account and innovative financial mechanisms will be tested. Some examples of innovative financing mechanisms that will be explored include: national environment funds, regional partnership centers for communities, carbon finance, and returning environmental tax revenue to the local level.

## **21. Links to Other Initiatives**

A coordination mechanism will be put in place at the beginning of the preparatory phase, in collaboration with the GEF national focal point and the PDRC staff, in order to avoid duplication and reinforce synergies between national, regional and global related initiatives. This mechanism will also include a regional coordination mechanism. The role and responsibility of this structure will be reinforced by other ongoing projects supported by the UNDP and the WB. However, a national project preparation committee is already in place and can temporarily insure coordination with other initiatives.

### **Senegal-Mauritania Biodiversity Project**

The biodiversity project covers a 50 km strip of land along the Senegal River in Mauritania and Senegal. Within this area, the project is intervening in 100 villages. The objectives of the biodiversity project are the protection of biodiversity and the sustainable management of degraded land. The biodiversity project does not cover the same area as this project will, nor does it employ the same methods however, the experiences from the biodiversity project can provide invaluable lessons which will be incorporated into the final design of this project (e.g. lessons regarding land restoration and community awareness building).

### **Desert Margins Program**

The Desert Margins Program (DMP) has developed methodologies and technology packages for arid zone management in order to permit agricultural intensification and improved livelihoods. These new technologies will be examined for the feasibility of their application to watershed management within the framework of this project.

### **Domestic Energy Project**

The Domestic Energy Project is addressing domestic energy issues including charcoal production and the use of butane gas and, as such, many of the issues it addresses are similar to the land degradation issues to be addressed through this project. Because of this there are opportunities for lessons learned and shared support for the identification of areas to be protected for wood-fuel production.

### **Investing in Sustainable Land Management Through Mainstreaming and Partnership Building- A Pilot Approach in Sub-Saharan Africa (Senegal, Ethiopia)**

This WB/ GEF project is under preparation with specific aims to work as a pilot in two or three countries to incorporate SLM issues within existing national frameworks for development through: (1) developing the capacity in the target countries to mobilize resources for SLM and the management of drylands. (2) developing methodologies for the evaluation of the costs of

land degradation and the benefits of SLM.(3) improving the enabling environment to address land degradation in the target countries (policies, institutions and management practices). The results of this project will contribute to financial sustainability issues related to watershed management in Mauritania.

### **Senegal River Basin Water and Environmental Management Project**

The objective of the Senegal River Basin Water and Environmental Management Project, is to provide a participatory, strategic environmental framework for the environmentally sustainable development of the Senegal River Basin, and to launch a basin-wide cooperative program for trans-boundary land-water management. Project management will support, and facilitate experiences ' exchange of other GEF international waters projects, as well as technical capacity building, through regional efforts to assess invasive species (water weeds) management, and other issues. Studies, data assessment, monitoring, and knowledge baseline activities will be carried out in the four riparian countries. Regional collaboration will be enhanced, to further establish a cooperative basin-related data management protocol for information exchange on the Basin resource management. A Trans-boundary Diagnostic Analysis (TDA) will examine existing conditions, and management, and identify the Basin ' s trans-boundary issues. Discussions with the Senegal River Basin team have already taken place in order to foster collaboration and cooperation. During continued preparation activities opportunities for collaboration with the Senegal River Basin team will be sought.

A summary of GEF funded projects is provided below:

<b>Project name</b>	<b>Focal area</b>	<b>Agency</b>
National biodiversity Conservation Strategy Action Plan and first National report	Biodiversity	UNEP Enabling activity
Strengthening the Clearing house Mecanism focal point for the participation in the pilot phase of the CHM of the CDB	Biodiversity	UNEP
Assesment Capacity-building Needs for biodiversity Participation in CHM and preparation of the Second National Report	Biodiversity	UNEP Approved
ADRAR Solar Initiative and Decentralized Elecrification in the Northern coastline of Mauritania throught Hybrid	Climate change	UNDP Pipeline
Enabling activities for the preparation of Initial National Communications to the UNFCCC	Climate change	UNEP Enabling activity
Climate change Expedited Financing for (interim) Measures for capacity Building in Priority Area (Phase 11)	Climate change	UNEP Enabling activity
Enabling activities for the Stockholm Convention on Persisitent organic pollutants (POPs): National Implementation Plan for Mauritania	POPs	UNEP Enabling activity
Reducing reliance on Agricultural Pesticide Use and Establishing a Community Based Pollution Prevention System in the Senegal and Niger River Basins	POPs	UNEP Regional
Protection of the Canary Current Large Marine ecosystem	International Water	UNEP Regional
Enhancing Conservation of the Critical Network of sites of Wetlands Required by Migratory Birds on the African Eurasian Flyways	Biodiversity	UNEP Regional
Senegal River Basin Water and Environmental Management Program	International Water	IDRB Regional
Biological Biodiversity Conservation through Participatory	Biodiversity	UNDP

rehabilitation of the degraded Lands of arid and semi-arid Transboundary Areas of Mauritania and Senegal		Regional
Land Degradation Assessment in Drylands (LADA)	Land degradation	UNEP/FAO Global

The others WB and UNDP initiatives relevant to this project are:

<b>Project</b>	<b>Country</b>	<b>Status</b>
Community Based Integrated Ecosystem Management, a component of Chad's Rural Development Support Plan (PIDR – Plan d'Intervention pour le Développement Rural)	Chad	WB Multifocal area
Community Ecosystem Management Program (CEMP)	Guinea	UNDP Multifocal
Integrated Ecosystem Management in Four Representative Landscapes of Senegal, Phase 1	Senegal	UNDP Multifocal
Coping with Drought and Climate Change: Best Use of Climate Information for Reducing Land Degradation and Conserving Biodiversity	Senegal	UNDP Multifocal Regional

### **Other Agency Programs**

1. Pastoral guidelines are being elaborated and a GTZ financed program will disseminate the information to rural communities.
2. A second project addressing development of oasis, to be financed by FIDA, is being elaborated; While this project will not directly deal with land management, it will allocate resources for investments for development and for the environment at the community level.
3. The Integrated Natural Resource Management of East Mauritania (GIRNEM) has conducted an inventory of the wet regions and is proposing the creation of a number of blueprint management plans for certain zones.
4. The previous PGRNP project has had some experience with investments conducted by the communities (Community development associations) at the village level (maintenance and rehabilitation of dykes, restoration of soil and fauna); while a number of technicians of the decentralized services were technically trained, they lacked an eye for the bigger picture.

## **22. Timetable**

<b>Deliverable</b>	<b>Date</b>
PDF B activities completed	July 2005
Expected GEF council submission	November 2004
Expected Board date	December 2005

## **23. Description of Proposed PDF Activities and Outputs**

The PDF-B funds will finance a one-year preparatory pilot phase in two watersheds. PDF B activities will pilot project activities in limited areas within the two watersheds selected by the Government (see black arrows in attached map), and will help prepare the full-size project brief.

It will provide the design elements to finalize the description of the components and other operational details such as implementation arrangements as well as in setting the baseline.

The PDF-B will support the following activities.:

1- Pilot Project Coordination

A GEF project coordinator will be recruited and added to the base project coordination unit to coordinate the PDFB activities. In particular, this position will coordinate the definition and implementation of the pilot activities.

2- Baseline Studies and GIS Database/Decision Support Tools

This activity would include:

- Baseline studies on the existing natural resources, threats, root causes, ecosystem functions, and on-going activities in the selected watersheds within the proposed project area. This will include both a desk study, stakeholders interviews/surveys and the exchange of experiences with other relevant programs and projects and a review of specific activities of other national and regional projects;
- Establishment of pilot GIS databases covering part or all of the two pilot project watersheds (including land and water use information, land degradation, an inventory of natural resources, a review of natural habitats, and project areas for ongoing initiatives). (GIS data base will be considered as a baseline activity however the additional data related necessary for the implementation of the methodology will be supported with preparation resources)
- Establishment of GIS-based optimal indicative watershed/landscape management plans for the two pilot watersheds (*Schémas directeurs d'aménagement*)
- Communication and information sharing activities and modules to begin the awareness raising and mobilization of project stakeholders
- Institutional gap analysis: an evaluation of existing capacity, the identification of gaps, and preliminary capacity building activities to fill these gaps in local, regional, and national institutions.

3- Background analysis

- root cause analysis of land degradation
- sustainability analysis
- stakeholder analysis
- risk analysis
- analysis of the role of migratory herders (including conflict resolution)

4- Pilot Community Development SLM Planning and Implementation

Pilots are small scale project implementation exercises that require the testing and validation of activities that will take place during the project implementation phase

- Identification and mobilization of appropriate watershed CBOs (community-based organizations)
- Selection and training of service providers
- SLM/ GIS data base and optimal land use plan information dissemination
- Participatory rural appraisal for revision or design of CDP,



- Establishment of pilot adoption funds, selection and financing of SLM investments
- Processing and supervision of pilot sub-projects

#### 5- Environmental Management Studies and Dissemination

- Support to government expenses for carrying out the environmental management studies related to the GEF alternative for translating and disseminating the results locally;

#### 6- Incremental Cost Analysis

- Payment of consultant services for incremental cost analysis.

#### 7- Evaluation of the Pilots

- Evaluation of the pilot community development planning and investment activities to draw lessons to improve project design.

#### 7 - Project documents preparation and negotiation

- Design of Monitoring and Evaluation System (including consideration of M&E systems already in place through other projects)
- Draft Project Briefs and Project Appraisal Document Production by Client

## 24. PDF B Budget

The estimated cost of preparation of the project is US\$ 490,000. A PDF-B preparation grant of US\$350,000 is requested for the preparation of the GEF Sustainable Land Management project. Other confirmed grant sources include the World Bank's project preparation facility (US \$140,000).

<b><i>Output</i></b>	<b><i>(US\$ '000)</i></b>	<b><i>PDFB</i></b>	<b><i>PPF</i></b>
Pilot Project Coordination	50,000	20,000	
Baseline Studies and GIS data base/Decision Support Tools	70,000	30,000	
Analysis	30,000	10,000	
Pilot Community Development SLM Planning and Implementation	100,000	40,000	
Evaluation of Pilots	20,000	10,000	
Environmental management studies and dissemination	35,000		
Incremental cost Analysis	5,000		
Design of Monitoring and Evaluation System	10,000	15,000	

Design of Project Implementation Manuals	10,000	15,000
Draft Project Briefs and Project Appraisal Document Production by Client	20,000	
<i>Total</i>	350,000	140,000

## Annex 1: Financing plan

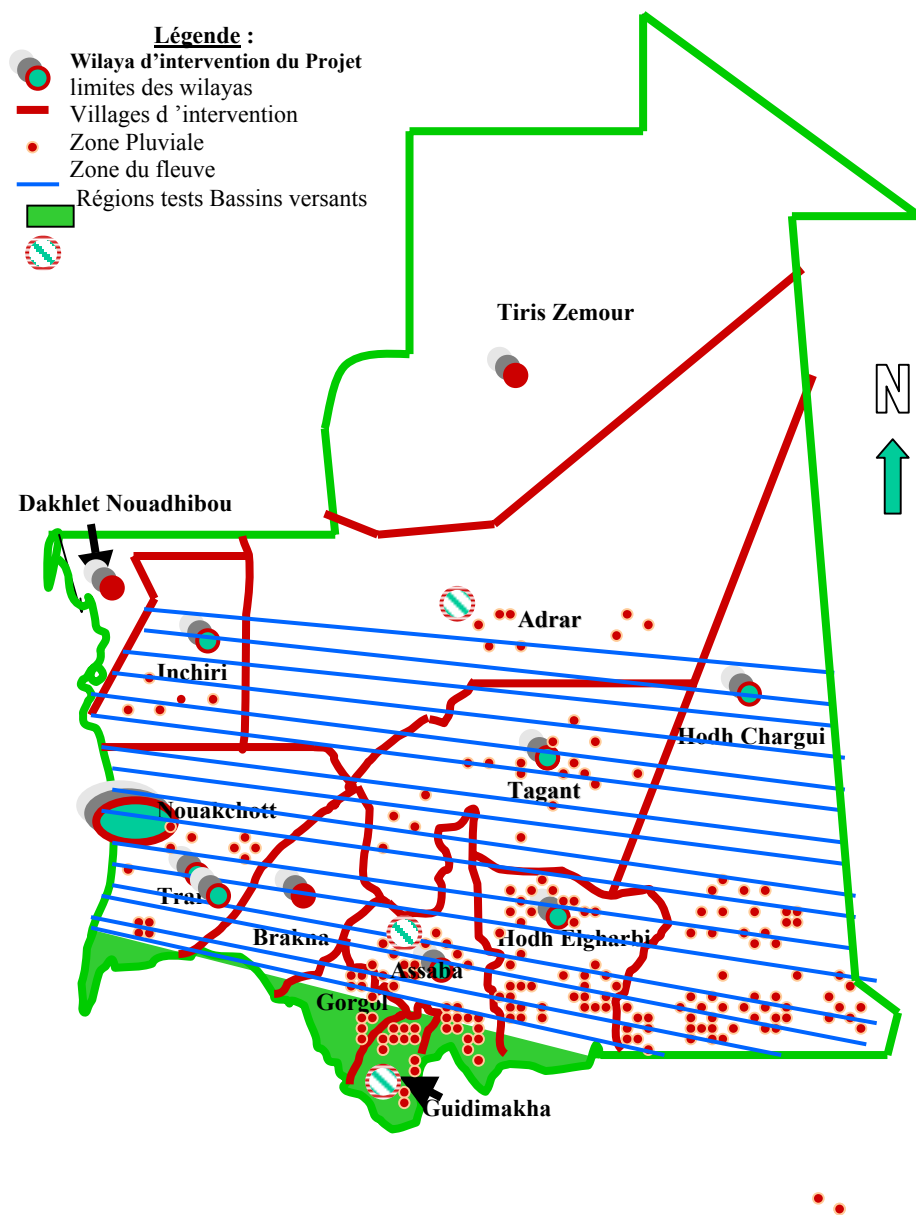
The estimated cost of the project is US\$63.5 million and the duration is 6 years.

<i>Component millions)</i>	<i>(in US\$</i>	<i>GEF</i>	<i>IDA</i>	<i>Govt.</i>	<i>Beneficiaries</i>	<i>Total</i>
A. Capacity Building and Community Empowerment		2.00	11.00	2.00	1.50	16.50
B. Implementation of sustainable Community Development Plans (CDPs)		3.00	28.00	2.00	5.00	38.00
C. Project Management and Monitoring & Evaluation		1.00	6.00	1.00	1.00	9.00
<i>Total</i>		6.00	45.00	5.00	7.50	63.50

## Annex 2: Draft Incremental Cost Analysis

Baseline activities	GEF Global benefit activities
<b>A) Community capacity building and empowerment</b>	
<p>Community capacity building and empowerment local level.</p> <p>Support to communities to conceive implement manage and monitor their local development plans</p> <p>Support to communal council in the administrative fiscal and technical management</p> <p>Support to professional and socioeconomic groups: literacy program participatory planning procedures</p>	<p>Capacity building of technical agents in the field in order to promote new techniques</p> <p>Integration of environmental concerns in Local Development plan; support and training for the communities to integrated watershed management in their local development plans</p> <p>Development Plans Capacity building of technical agents in the field in order to promote new management techniques</p> <p>Introducing new structures and organizations related to geomorphologic and environmental concerns</p> <p>Introducing decision tools like Natural Resources data base and water management Plans</p>
<p><b>A.2 National capacity building (national level).</b></p> <p>Assist Direction des Collectivités locales to accelerate the process of decentralization; communication program</p> <p>Assist research services for agricultural program</p>	<p>Integration of global and IEM concerns in the revision of the land tenure regulation ;</p> <p>Communication program on land degradation and watershed management</p> <p>Building capacity of national research regarding watershed management techniques (training, field trips, special competitive research funds)</p>
<b>B) Implementation of sustainable Community Development Plans (21 M \$)</b>	
<p>Public socio-economic infrastructure</p> <p>Private income-generating infrastructure</p> <p>Natural resource management and environment investments such as village level tree plantation</p>	<p>Targeted grants to trigger off the use of new environmentally friendly agricultural techniques that could seem to have lower yields in the first time as No till, technologies developed by the Desert Margin Program, production and marketing of soil cover seeds, eco-tourism, community forest, testing of new methods for pasture management, upstream and river bank protection</p> <p>Introducing externalities like NRM in the municipal development plan</p>
<b>C) Project Management and Monitoring &amp; Evaluation (0.5M\$)</b>	
<p>General monitoring of CBRD NRM Data base</p>	<p>GEF reports and targeted analysis</p> <p>Conception and implementation of a participatory M E system adapted for watershed</p>

### Annex 3



## Annex 4

### Description of the baseline IDA project

The GEF project will not be fully blended with the IDA project because the timing of the two projects is unfortunately not compatible and it is not anticipated that the GEF project will be able to go to the Board at the same time as the IDA project.

The IDA project includes three main components selected to directly contribute to the project outcome and simplify project's implementation: Component A: Capacity Building; Component B: Investment Funds; and Component C: Management and Monitoring and Evaluation.

**Component A. Capacity Building** reflects the fact that the long-lasting impact of community investments critically depends (i) on the organizational and managerial capacities of village communities to design and implement effective development plans, and (ii) on the technical capacity of providers of services to these communities. It comprises four sub-components.

- Sub-Component A1, Capacity Building of Village Community Associations (ADC for *Associations de développement communautaire*) targets village communities.
- Sub-component A2: Capacity Building of Rural Municipalities targets a selected number of rural communes. The project supports a limited number of rural municipalities to enhance its prospects of successfully integrating village development plans into communal development plans.
- Sub-component A3: Capacity Building of Agricultural Services targets research-development, crop services, livestock services and agricultural departments at the central and decentralized regional levels.
- Sub-component A4: Capacity Building of Rural Micro-Enterprises targets rural micro-enterprises (in villages, rural communes and small market centers) that directly supply investment goods and maintenance service to ADCs, as well as providers of Business Development Services to these direct suppliers.

**Component B: Investment Funds** is key to the project's success, as it provides the means to implement village and communal development plans, while providing these communities the opportunity to put into practice their strengthened capacities. The borrower planned for this component represent at least 60 percent of total project cost. It comprises two sub-components.

- Sub-component B1: Village Investment Fund targets poor village communities, providing them with capital input to implement their development plans.
- Sub-Component B2. Rural Communal Road Fund targets the selected rural communes (in A2), by providing them capital input earmarked for the removal of critical constraints to access rural roads at the local level.

**Component C: Project Management and Monitoring and Evaluation**, is not a component per se, but rather the required set of activities for the project's management and accountability as to the evaluation and monitoring of outcome, outputs and inputs.

## World Bank Portfolio in Mauritania

<b>Project Name</b>	<b>ID number</b>	<b>Status (march 2004)</b>
1MR:IDA PRG FOR SOMELEC PRIVATIZATION	P078182	Pipeline
PRSC	P087828	Pipeline
MR Pub Sector Capacity Building Project	P082888	Pipeline
MR Water Supply and sanitation Sector	P079475	Pipeline
Sustainable Energy Program Project	P070377	Pipeline/ GEF
Higher Education Project	P087180	Pipeline
Mining Sector Capacity Building	P078383	Pipeline
Multisector HIV Aids Control project	P078368	Active
Governance of Senegal River Basin	P080045	Active/Africa
Global Distance Learning Center Project	P071881	Active
Urban Development Project	P069095	Active
Education Sector Development Project	P071308	Active
Legal Reform and Private Sector Capacity building Project	P074582	Active
Cultural Heritage Project	P064570	Active
Energy, Water, and Sanitation sector Reform Technical Assistance Project	P066345	Active
Integrated Development Project for Irrigated Agriculture	P044711	Active
Nutrition, Food Security and Social Mobilization Project	P055003	Active
Health Sector Investment Project	P0 35689	Active

## Acronyms

ADB	Africa Development Bank
BSAP	Biodiversity Strategy and Action Plan
CBRD	Community-Based Rural development project
CDD	Community Driven Development
CDP	Community Development Plan
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Geographical Information System
IDA	International Development Association
IEM	Integrated Ecosystem Management
IFAD	International Fund for Agricultural Development

LDP	Local Development Plan
M&E	Monitoring and Evaluation

NEAP	National Environment Action Plan
NGO	Non-Governmental Organization
NRM	Natural Resources Management
OP	Operational Program
PA	Protected Area
PCMU	Project Coordination and Monitoring Unit
PDF	Project Development Fund
POs	Producers' Organizations

SLM	Sustainable Land Management
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UNDP	United Nations Development Program
UNEP	United Nations Environment Program
WB	World Bank