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Report No: 31638-MR

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR25.7 MILLION (US\$39.0 MILLION EQUIVALENT)

TO THE

GOVERNMENT OF THE ISLAMIC REPUBLIC OF MAURITANIA

FOR THE

SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

February 18, 2005

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CURRENCY EQUIVALENTS

(Exchange Rate Effective January, 2005)

Currency Unit = Mauritania Ouguiya UM 260 = US\$1.00 US\$1.51 = SDR 1.00

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
APL	Adaptable Program Loan
BAF	Bureau des Affaires Foncières (Bureau of Land Affairs)
CAS	Country Assistance Strategy
CBA	Cost Benefit Analysis
CBRD	Community-Based Rural Development Project
CFAA	Country Financial Accountability Assessment
CNRADA	Centre National de Recherche Agronomique et de Développement Agricole (National Agricultural
	Research and Development Center)
CU	Coordination Unit
DAF	Director of Administration and Finance
DAR	Direction de l'Aménagement Rural (Department of Rural Infrastructure)
DPCSE	Direction des Politiques, de la Coopération et du Suivi-Evaluation (Department of Policies,
	Cooperation and Monitoring and Evaluation)
F&V	Fruits and Vegetables
FAEM	Fédération des Agriculteurs et Eléveurs de Mauritanie (Federation of Mauritania's Crop and
	Livestock Producers)
FM	Financial Management
FMR	Financial Monitoring Report
FMS	Financial Management System
GIES	Groupes d'Intérêts Economiques (Economic Interest Groups)
GIRM	Government of the Islamic Republic of Mauritania
IC	Individual Consultant
ICB	International Competitive Bidding
ICR	Implementation Completion Report
IDA	International Development Association
IDB	Islamic Development Bank
IEC	Information-Education-Communication
IS	International Shopping
JICA	Japanese International Cooperation Agency
KPI	Key Performance Indicators
LCS	Least Cost Selection
LOC	Line of credit
MAED	Ministère des Affaires Economiques et du Développement (Ministry of Economic Affairs and
	Development)
M&E	Monitoring and Evaluation
MDRE	Ministère du Développement Rural et de l'Environnement (Ministry of Rural Development and
	Environment)

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NCB	National Competitive Bidding
NGO	Non-governmental Organizations
O&M	Operation and maintenance
ONS	Office of National Statistics
PDIAIM	Programme de Développement Intégré de l'Agriculture Irriguée en Mauritanie (Integrated
	Development Program for Irrigated Agriculture in Mauritania)
PDO	Project Development Objective
QBS	Quality Based Selection
QCBS	Quality and Cost Based Selection
PER	Public Expenditure Review
PIM	Project Implementation Manual
PIU	Project Implementation Unit
PREM	Poverty Reduction and Economic Management
PRSC	Poverty Reduction Strategy Credit
PRSP	Poverty Reduction Strategy Paper
SA	Special Account
SAFC	Service des Affaires Foncières et de la Cartographie (Land Affairs and Cartography Agency)
SBD	Standard Bidding Document
SOE	Statement of Expense
SONADER	Société Nationale de Développement Rural (National Development Corporation)
TOR	Terms of Reference
UCA	Union des Coopératives Agricoles (Union of Agricultural Cooperatives)
UNCACEM	Union Nationale des Coopératives Agricoles de Crédit et d'Epargne de Mauritanie (National Union
	of Agricultural and Savings and Credit Cooperatives)
UM	Mauritania Ouguiya
US\$	United States Dollar

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MAURITANIA INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

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MAURITANIA

Second Phase of the Integrated Development Program for Irrigated Agriculture in Mauritania

Project Appraisal Document

Africa Region

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Date: March 1, 2005			er: Ismael Ouédr		
Country Director: A. David Crai	g	Sector(s): General agriculture, fishing and forestry sector			
			Other social servi		
) percent);Sanitat	ion (10 percei	nt);Agro-industry
	D 1	(10 percent)			
Sector Manager: Mary A. Barton-	Dock		ural services and		
			(P);Other rural d private sector dev		
		(P)	private sector dev	elopinent (r),	Decentralization
Project ID: P088828			ital screening ca	tegory: A	
Lending Instrument: APL			creening categor		
	Program	m Financing I			
] Loan [X] Credit [] Grant [] Guarantee [] Other:			
Total Bank financing (US\$m.					
Proposed terms:		rd Credit			
Grace Period (Years):	10				
Years to Maturity:	40				
Commitment fee:	Standa	ard			
Service Charge:	Standa	urd			
	· · · ·				
	Financ	ing Plan (US\$	m.)		
					70 4 1
Source Borrower		Local 4.8	Foreign 0.0	L	Total 4.8
IDA		7.2	31.8		4.8 39.0
Beneficiaries		2.8	0.0		2.8
Total:		14.8	31.8		46.6
Borrower: Government of the Islan	mic Republic of I				
Responsible agency: Ministry of R					
Estimated disbursement (Ban		. –			
FY FY06	FY07	FY08	FY09	FY10	FY11
Annual 8.25	9.54	7.29	6.87	7.05	-
Cumulative 8.25	17.79	25.08	31.95	39.00	
Project implementation period	d: June 3	0, 2005 – Dec	cember 31, 2010)	
Expected effectiveness date:		0, 2005	-		
Expected closing date:	Decem	ber 31, 2010			
Does the project depart from the	CAS in conten	t or other sig	nificant	[0]	Yes [x] No
respects? Ref. PAD A.3		-			

Does the project require any exceptions from Bank policies? Ref. PAD D.7	[0] Yes [x] No
	[x] Yes [1] No
Is approval for any policy exception sought from the Board?	[¹] Yes [x] No

[x] Yes [] No

Does the project include any critical risks rated "substantial" or "high"? (i) Road transport costs remain high as new entrants face unfair competition from the old monopoly and (ii) Sea freight costs remain high due to the inefficient operation of Nouakchott's port. Relative to (i) the Bank is pursuing dialogue with Mauritania to ensure measures promoting competitive road transport services are fully implemented, as identified in the Transport Sector Project in preparation. It is one of PDIAIM II's triggers to go to Phase III. Relative to (ii), the Bank is working with Mauritania and other donors to improve the operation of Nouakchott's port, and is specifically assisting the improvement of the port as part of the proposed Transport Sector Project.*Ref. PAD C.5*

Does the project meet the Regional criteria for readiness for implementation? **Ref.** [x] Yes [] No **PAD D.7**

Project development objective Ref. PAD B.2, Technical Annex 3

The development objective of this project (Phase II of the APL) is three-fold: (i) consolidate key incentive measures, (ii) increase sustainable irrigation schemes, and (iii) intensify agricultural diversification for targeted actors engaged in irrigated agriculture. These objectives build on the results achieved and lessons learned during Phase I to further the objective of the overall three-phase APL.

Project description Ref. PAD B.3.a, Technical Annex 4

Component A: Rural Incentives and Capacity Building Component B: Infrastructure for Irrigated Agriculture Component C: Support to Agricultural Supply Chains Component D: Project Administration

Which safeguard policies are triggered, if any? Ref. PAD D.6, Technical Annex 10

Environmental Assessment (OP/BP/GP 4.01);

Pest Management (OP 4.09)

Cultural Property (OPN 11.03, being revised as OP 4.11)

Involuntary Resettlement (OP/BP 4.12)

Safety of Dams (OP/BP 4.37)

Projects on International Waterways (OP/BP/GP 7.50)

Significant, non-standard conditions, if any, for: Ref. PAD C.7

Board presentation: March 15, 2005

Credit effectiveness: June 30, 2005

Covenants applicable to project implementation:

Before Effectiveness, as negotiated, the Borrower will (a) revise and update accordingly the manual of financial and administrative procedures and the accounting software for each entity; (b) open Project Accounts and release initial deposits of counterpart funds; (c) ensure appointment of qualified external auditors by each implementing agency; (d) ensure appointment of an environmental and social safeguard specialist, an agricultural economist, and a communication specialist, each with qualifications, experience and terms of reference satisfactory to the Association; and (e) ensure the UNCACEM Subsidiary Loan Agreement and the SONADER Subsidiary Agreement have each been executed on behalf of the Borrower, and UNCACEM and SONADER respectively.

A. STRATEGIC CONTEXT AND RATIONALE

1. Country and Sector Issues

Over a decade ago, the Government of the Islamic Republic of Mauritania (GIRM) committed itself to a wide range of long-term economic and sector reforms. Staying the course, Mauritania presented in 2001—among the forerunners—a full Poverty Reduction Strategy Paper (PRSP). The PRSP lays out four pillars: (i) stimulating accelerated and redistributive growth; (ii) anchoring growth in the economic environment of the poor; (iii) developing human resources and ensuring universal access to basic infrastructure and services; and (iv) strengthening institutional capacities and governance. Notably, the second pillar stresses that developing and diversifying the rural sector is essential to developing trade, reducing production costs and enhancing the competitiveness of the whole economy.

The overall poverty level in Mauritania is estimated to have declined from 57 percent to 46 percent between 1990 and 2000 in a population of 2.7 million (2003). Poverty in rural rainfed areas decreased apace from 69 percent to 55 percent, but in the Rural River Valley region—hit hard by flooding in 1999—poverty regressed only from 74 percent to 72 percent. This indicates the need for stepped-up efforts in rural areas, which still harbor most of the poor despite continued urbanization. Ninety percent desert over its 1.1 million sq. km, Mauritania has designed its Rural Development Strategy (2001), Letter of Development Policy for Irrigated Agriculture (1999), and Agro-Food Strategy (2001)—the cornerstones of the PRSP's second pillar—to reflect a long-term shared vision of turning the Senegal River Valley into one of the main sources of development and economic growth.

Out of a potential of 135,000 ha of irrigated land in the Valley, 40,000 ha were developed in the 1970s and 1980s for rice production. At the inception of the Integrated Program for Irrigated Agriculture in Mauritania (PDIAIM) in the mid-1990s, half of these developed schemes were inoperative and the remaining ones were suffering from continuous degradation and low productivity. Mauritania's first priority with respect to irrigated agriculture has since been to promote the rehabilitation of degraded irrigation schemes still under production, together with the extension of collective schemes in which family parcels are too small to adequately cover the family's subsistence needs. Creating schemes from abandoned schemes, usually at high cost, is a secondary priority, except when these schemes are for diversification, i.e., for crops with much higher added value than rice.

Phase I of the PDIAIM has contributed to alleviating critical aspects of the key constraints identified at the initiation of the program as being responsible for the unfulfilled potential of Mauritania's irrigated agriculture, specifically,

The inefficient domestic rice support policies, which mostly benefited large producers and processors and discouraged the production of high-quality rice and the diversification of irrigated agriculture, were corrected by reducing tariff protection, abandoning administrative pricing, and eliminating marketing and credit subsidies for domestic rice.

The inadequate financing of irrigated agriculture, which narrowly focused on credit for seasonal inputs and some equipment for rice production, was overhauled by assisting an autonomous credit agency to operate year round and cover all agricultural speculations and borrowers' needs for short-, medium- and long-term credit—while still adhering to strict financial viability criteria. The low level implementation of the 1990 land tenure law was improved by supporting expanded and transparent land registrations, which are necessary conditions to access investment credit and subsidies, so that by late 2004, about 36,000 ha had been registered.

The poor design and/or rudimentary construction of irrigation schemes, which has resulted in plots with uneven irrigation and poor drainage, was addressed by instituting construction norms and standards technically and environmentally sound, yet not too rigid so they avoid unnecessary increase in investment cost.

The lack of empowerment of cooperatives on public irrigation schemes, which contributed to low organizational skills and encouraged an assistance mentality on the part of producers, was addressed by initiating capacity building programs and promoting a more participatory approach in public assistance to producers' organizations (PO).

The technological level of producers, who were using rice varieties that did not meet consumers' quality expectations or who lacked expertise in fruit and vegetable production that met export standards, was improved in these key areas.

The poor management and maintenance of schemes and irrigation equipment, which has resulted in inadequate maintenance of canals and frequent break-downs of pumps, was looked into by designing procedures for operation and maintenance (O&M).

Undoubtedly, however, to thoroughly control the deep-rooted constraints of irrigated agriculture in Mauritania, it is necessary to consolidate over time the progress of the PDIAIM's first phase. In particular, it is well understood that strengthening the capacities of public agencies and producers' organizations requires time and effort. Continued efforts are needed in the areas of Mauritania's land tenure in the Haut-Fleuve and road transport services in which full competition has yet to take hold, even as the transport liberalization decree did attract new entrants. Natural disasters (such as flooding and locust attacks) and cross-sectoral issues (such as road transport services) demand a global response at the national level.

2. Rationale for Bank Involvement

Resolute commitment to a long-term shared vision. Mauritania and the Bank have identified the three-phase PDIAIM as the best instrument to implement the Government's long-term policy for irrigated agriculture and the cornerstone of its rural development strategy to contribute to overall growth and reduction of poverty. The choice of an Adaptable Program Loan (APL) instrument is appropriate. It indicates Bank's willingness to support the country's long-term commitment to fight poverty, predicated, among others, on the efficient and sustainable use of the country's most valuable renewable natural resource: irrigated land.

Achievement of the first phase's triggers. Mauritania has substantially met the development objective of the first phase of the program and has complied with all triggers for moving from Phase I to Phase II. Having satisfied all criteria for Phase II, Mauritania requested and expects the Bank to keep its commitment, as proposed in the current Country Assistance Strategy (CAS). This project will complement the Bank-supported FY04 Community-Based Rural Development project—CBRD (which targets poor villages mainly located in rainfed areas), and the FY06 Capacity Building Project (which targets the strengthening of management capacities, good governance and environmental management) and the planned Transport Sector Project (FY07).

3. Higher Level Objectives to Which the Project Contributes

The project is fully aligned with the country's sector strategies and overall Poverty Reduction Strategic Framework. It constitutes an implementation tool of the CAS for FY03-05. The project addresses the enduring fact that Mauritania's poor disproportionately live in rural areas. Through increased incomes and employment and improvement of natural resource management in irrigated areas, the program will contribute to two Millennium Development Goals: eradicating extreme poverty and hunger, and ensuring environmental sustainability.

B. PROJECT DESCRIPTION

1. Lending Instrument

The APL supporting the PDIAIM aligns the financing process with the PDIAIM's key features: a long-term development perspective, a long gestation of irrigated land investments, a logical sequencing of events and phasing of activities with agreed milestones, and the flexibility needed in execution. Total project cost is US\$46.6 million over 5 years, with IDA contributing US\$39.0 million, the Government, US\$4.8 million and beneficiaries, US\$2.8 million. The African Development Bank (AfDB) and the Islamic Development Bank (IDB) support the overall PDIAIM with separate financing, but using the PDIAIM's procedures.

2. Program Objective and Phases

The development objective of the overall PDIAIM is to increase the value-added of irrigated agriculture and related incomes and employment in the Senegal River Valley through the judicious use of the country's most precious natural assets: water and arable land. The overall PDIAIM was expected to rehabilitate over 20,000 ha, including 13,000 ha with support from IDA and 10,000 ha with support from other donors. The part financed by IDA (PDIAIM-IDA) is the cornerstone of the overall PDIAIM. It is a three-phase, 11-year program funded by an APL, and contributes to the development of the above-mentioned 13,000 ha, through: 11,000 ha of existing irrigation schemes and the development of 2,000 ha of new irrigation schemes for agricultural diversification.

The project development objective (PDO) of the first phase was to lay the foundations for a sustainable development of irrigated agriculture in technical, financial, environmental and socioeconomic terms. Its implementation was satisfactory and particularly successful in: (a) initiating and maintaining sound rice policy measures, (b) improving access to sustainable rural financing for a wider range of borrowers, (c) boosting the quality of domestic rice, (d) improving the capacities of producers' organizations (PO), and (e) demonstrating the great potential of agricultural diversification, as 1,700 tons of fruits and vegetables were exported when 100 tons were expected. Phase I, however, experienced delays in the rehabilitation of irrigation schemes, realizing about 1,000 ha instead of 3,000 ha, due to: (i) limited capacities of both public agencies and private consulting and engineering enterprises; (ii) poor condition of rural roads, which turn to mud with the advent of a single rain and restrict civil works to about six months a year; and (iii) lack of interest on the part of private individual land owners, some of whom had suffered from the unusual adverse weather conditions experienced in 1999-2000 (flooding) and 2001-2002 (cold). Still, Phase I met all its triggers, as detailed in Annex 1.

The current CAS have operated under a significantly reduced allocation of IDA 13 to Mauritania. Consequently, IDA's allocation to Phase II in the CAS was also considerably reduced—to US\$10 million, from the anticipated US\$35 at the initiation of the APL. By mid-

FY05, however, when Mauritania received a higher allocation and operations under the CAS did not mature, Phase II was scaled-up, with US\$4 million added to the initial allocation of US\$35 million, for a total of US\$39 million. Using the flexibility of the APL instrument, the adjusted PDIAIM-IDA which reflects the results of Phase I is now cast as a three-phase, 15-year program targeting the development of irrigation schemes totaling 12,500 ha, including about 10,000 ha in existing schemes and 2,500 ha of new schemes for vegetables, fruit-trees, forage, and agroforestry production. The first phase, initially of three years but extended to five and a half years, will be followed by a second and a third phase of five years each.

3. Project Development Objective and Key Indicators

The development objective of Phase II is three-fold: (i) consolidate key incentive measures, (ii) increase sustainable irrigation schemes, and (iii) intensify agricultural diversification for targeted actors engaged in irrigated agriculture. These objectives build on the results achieved and lessons learned during Phase I to further the objective of the overall three-phase program. The success of Phase II will hinge on its performance in the three domains of its objective: the incentive structure (notably in land tenure and rural credit), investment in irrigation infrastructure, and cropping pattern related to irrigated agriculture. This will be measured by the following key outcome indicators: (i) regional land registries allow verification of transparent irrigated land awards on request; (ii) the rural credit agency maintains a financial self-sufficiency; (iii) sustainable irrigation schemes are increased by 5,000 ha by the end of Phase II; and (iv) irrigated area under diversified crops has doubled by the end of Phase II.

The triggers for moving from Phase II to Phase III have also been adjusted to reflect the results of Phase I, add clarity to their measurement, and commit the Government to effectively tackle major risks lying both within and outside the project's realm proper. The triggers are as follows:

- (T1) rice import tariffs are maintained or reduced throughout Phase II;
- (T2) measures promoting competitive road transport services are fully implemented, as identified in the Transport Sector Project in preparation;
- (T3) awards of irrigated land concessions are in accordance with land tenure legislation and the land use categories (*schemas de structure*);
- (T4) the charter of procedures for water and O&M charges of public infrastructure is implemented by SONADER (National Rural Development Corporation) and producers' organisations;
- (T5) UNCACEM (National Union of Agricultural and Savings and Credit Cooperatives) is reimbursing the Government line of credit.

Phase II starts under favorable auspices because remedies to the first phase's shortcomings in irrigation development have been initiated. By appraisal, 36,000 ha (of the 40,000 ha previously developed) had been entered in the land registries, considerably expanding the pool of eligible beneficiaries for investment credit. The rehabilitation pipeline held over 700 ha ready for bids. An initial brainstorming workshop, to be followed by several others in Phase II, was held with engineering bureaus and contractors to find better ways to complete irrigation infrastructure on time and at a reasonable cost. Arrangements were made to ensure accountability and effective coordination of the core agencies involved in irrigation development. Thus, (a) the PDIAIM Coordination Unit, in addition to overall project administration, assumes responsibility for the timely availability of the investment matching grants; (b) the land registration agencies (SAFC-

BAF) assume responsibility for timely land registration for beneficiaries; (c) UNCACEM assumes responsibility for timely approval and disbursement of long-term investment credit; and (d) SONADER assumes responsibility for an effective and timely technical oversight of irrigation development. A Rehabilitation Dashboard was developed for a monthly review to ensure completion of civil works before the rainy season.

4. Project Components

Phase II retains the components of Phase I, which have been consolidated for more flexibility in implementation. Components' objectives, target beneficiaries, activities, and inputs are summarized below, with key result indicators detailed in Annex 3.

Component A: Rural Incentives and Capacity Building - US\$3.50 million (IDA: US\$2.76 million) would consolidate the policy measures and incentives initiated during Phase I and improve the capacity of national and regional rural institutions to implement the Program. It targets: (a) public providers of services to policymakers and agricultural producers, such as the Ministry of Rural Development and Environment's (MDRE) units of policy analysis and monitoring (DPCSE-Direction des Politiques, de la Cooperation et du Suivi-évaluation), land registration agency (SAFC), rural infrastructure (DAR), seed quality control agencies, regional rural delegations; (b) the project's autonomous implementing agencies (SONADER and UNCACEM); (c) producers' organizations at the national and regional levels, such as the Unions of Agricultural Cooperatives (UCAs), Mauritanian Federation of Crop and Livestock Producers (FAEM), and the Economic Interest Groups (GIES) engaged in rice marketing and fruits and vegetables (F&V) export; and (d) private engineering bureaus engaged in irrigation development. It focuses primarily on: (1) collection and analysis of annual agricultural statistics; (2) registration of land for candidates to irrigation development; (3) capacity building activities (training, workshops, etc); and (4) analytical works related to a rural finance expansion strategy in the Senegal River Valley. This component will finance expenses related to: consultant services; training programs; equipment and office supplies, and operating costs. Through a results-based mechanism, the project will support the collaborative work between SAFC and the other land registry agency (BAF) to ensure timely land registration.

Component B: Infrastructure for Irrigated Agriculture - US\$24.88 million (IDA: US\$21.11 million). This key component, which is the largest (53 percent) of Phase II aims primarily at providing technical services and investment funds to land owners to expand irrigation schemes, along with secure land tenure and capacity building provided in other components. Another objective is to build the basic public infrastructure to support private investment. This component targets small-medium cooperatives and individual farmers engaged in rice production and agricultural diversification. It focuses on: (1) the technical, economic, and environmental aspects of rehabilitation, extension and creation of private irrigation schemes initiated during Phase I; (2) priority public infrastructure identified during Phase I to improve the flow and drainage of water and the access to rural roads, electricity and basic market infrastructure; (3) R&D in water pumping; and (4) feasibility studies of investments to be implemented during Phase III. With respect to public infrastructure, the project will collaborate with the Transport Sector Project planned for mid-2006 (FY07). This component will finance: private and public infrastructure investments; supervisory services provided by SONADER through a performance-base mechanism; and R&D experimentations and studies requiring consultant services and operating costs. The investment cost for the rehabilitation or creation of irrigation schemes includes beneficiary's contribution, credit (through UNCACEM), and a one-time matching-grant, whose levels are detailed in the project's implementation manuals (PIM).

Component C: Support to Agricultural Supply Chains - US\$10.94 million (IDA: UD\$9.15 million) would provide the necessary assistance to the development of a competitive rice subsector and a diversified agricultural base, targeting rice and horticultural supply chain participants engaged in domestic and export markets. It includes three sub-components.

C1: Support in Basic Farm Management would meet farm-level demands for agricultural extension and managerial services of target beneficiaries, such as: (a) farm cooperatives and individual farmers that have invested in irrigation development with project's support; (b) large-scale public schemes' cooperatives to whom the Government is set to transfer the management of those schemes; (c) small women cooperatives engaged in crop diversification alongside male cooperatives; and (d) other farm cooperatives and individual farmers with identified potential for growth. This sub-component will implement activities related to the: (1) proper O&M of the newly rehabilitated and created irrigation schemes; (2) good agricultural practices in rice production; (3) good agricultural practices in crop diversification; (4) organization and management of farm enterprises; (5) support to women's income-generating activities; and (6) transfer of large-scale public schemes to producers' organizations. It will finance: training/extension services, through a performance-based mechanism with SONADER, NGOs and private service providers, and limited matching-grants to women cooperatives engaged in crop diversification.

C2: Support to the Rice Subsector would sustain the improvement of the domestic rice sector by meeting the credit needs of the sector's participants, such as seed farmers, producers, processors, and providers of agricultural custom services. It will finance the incremental source of funds needed by UNCACEM to provide short-, medium- and long-term credit to the sector's participants to finance seasonal inputs, paddy for processing, agricultural equipment, processing machines, and storage facilities.

C3: Promotion of Agricultural Diversification would increase the participation of actors in commercial horticultural production for domestic and export markets, by taking advantage of the achievements of Phase I (cold storage and packaging infrastructure built at Nouakchott's airport and at Rosso, creation of two producers/exporter GIEs, introduction of new irrigation systems and exports to regional and international markets). This sub-component also builds on the new irrigation schemes financed under Component B and the production-oriented activities of C1. It targets primarily commercial farmers and entrepreneurs engaged in horticulture, animal feed, and agro-forestry production for the domestic and export markets. It emphasizes the (1) efficient management of project-built infrastructure; (2) introduction of new products and processing techniques; (3) quality control system of fruit and vegetables at the farm, packaging and port of entry/exit levels; (4) market information; and (5) baseline studies and experimentations in irrigation systems. It supports civil works to rehabilitate regional centers' offices, consultant services for market studies and technical assistance, matching grants in pilot introduction programs, credit through UNCACEM to finance production and market operations and R&D experimentations, through performance-based mechanism with the National Agricultural Research and Development Center (CNRADA) and SONADER. A Nouakchott-based diversification specialist will supervise the regional centers at Rosso and Kaedi and coordinate the implementation of this sub-component at the national and regional levels.

Component D: Project Administration - US\$7.34 million (IDA: US\$ 5.98 million) would ensure the proper coordination of project activities, the monitoring of activities and evaluation of impacts, and the implementation of the social and environmental safeguards. It includes three sub-components.

D1: Project Management and Coordination. This supports activities related to the project's administration and coordination, including its communication policy. It will finance: training programs for capacity building, equipment, office supplies, and computerized financial management system, and operating costs of the project implementation unit (PIU).

D2: Monitoring and Evaluation would strengthen project management, reporting and monitoring of project's outcomes, triggers, safeguards and results. The project emphasizes an effective yet simple M&E system that is readily appropriated by implementing agencies and the Government. The key performance indicators (KPI) are assessed by quantitative measures or qualitative observations based on clearly defined data collection instruments and analytical methods detailed in the M&E implementation manual. The system relies on the project's M&E unit and collaborative third parties to provide an objective assessment of the project's performance and the overall PDIAIM's impact. The project will finance consultant services, equipment, office supplies, and computerized network, including a rural geographical information system (GIS), and operating costs. The M&E unit will produce scheduled reports and specific studies, such as a rural public expenditure review (PER) and budget, and surveys of land tenure implementation and rural employment, through MDRE's monitoring unit (DPCSE).

D3: Environmental and Social Safeguard Measures would mitigate the negative, and enhancing the positive environmental impacts of the project. It targets all populations that might be negatively impacted by the project. It will implement activities related to (1) the safety of the Foum Gleita dam; (2) the provision of potable water to poor farmers currently drinking water from irrigation canals; (3) an emergency fund targeting severe birds attacks on rice that could destroy the second off-season crop; and (4) the environmental and social safeguard measures identified in the four safeguard documents. These documents include the Environmental Assessment and Management Plan (EAMP) prepared before the start of Phase I, and three other documents prepared for Phase II: the Environmental Management Policy Framework (EMPF), Pest and Management Plan (PMP), and Resettlement Policy Framework (RPF). The project will implement these measures through SONADER, public agencies (Departments of Environment, Health, and others), NGOs and private firms as needed. It will finance civil works, consultant services, equipment, material and offices supplies, operating costs, and eventually compensation payments according to safeguard policies.

5. Lessons Learned and Reflected in the Project Design

The design of the second phase of the PDIAIM draws from the trials and errors experienced in implementing Phase I which are documented in the draft Implementation Completion Report (ICR). It also draws from Mauritania's decades-long experience in irrigated agriculture, and IDA's and other donors' assistance to Mauritania and other countries. The key lessons of these experiences include the following:

APL's key features of long-term commitment and flexibility in execution made it easier for Mauritania to initiate and maintain a dramatic shift to liberalization policies that were initially strongly resisted by misguided but powerful lobbies;

large participatory approach that empowers producers and their organizations in the design and implementation of development operations is needed for sustainability;

land registration, which is critical to the access of investment credit and subsidies for developing irrigation schemes, needs to focus more on cooperative farmers (particularly in the Haut-Fleuve) who most need, and are interested in, rehabilitation/extension.

effective accountability (e.g., in the form of results-based contracts) is needed from public and private service providers to ensure good quality and better service delivery;

civil works enterprises based outside Mauritania, which are regularly invited to bid but are given little incentive because of payment in local currency, should be encouraged to effectively participate and partner with Mauritanians to help increase the capacities of the latter, and exert downward pressure on the cost of building irrigation schemes;

capacity building programs targeting public and private providers remain necessary to ensure the quality and sustainability of service delivery;

agricultural diversification in Mauritania is a viable growth and employment strategy and should be strongly promoted;

flood control infrastructure must be supported, partly or entirely, by public funds given the risk of flooding and the absence of crop insurance.;

improved communication strategy is needed both to improve coordination within project implementing agencies and to promote project objectives to the general public; and

simple and efficient M&E system should be designed for the ease of application by project management and implementing agencies to provide timely information.

6. Alternatives Considered and Reasons for Rejection

The APL approach remains the most appropriate instrument to implement the PDIAIM. It is adequately aligned with a long-term development program that requires flexibility as it is being implemented, phase by phase, after meeting key targets. The APL's key features, of long-term commitment and flexibility, have enabled Mauritania to adopt and stay the course on necessary but difficult policies.

C. IMPLEMENTATION

1. Partnership Arrangements

The overall PDIAIM is open to all development partners, either with co-financing or separate projects. Thus, the AfDB is implementing a project of about US\$19.0 million to calibrate two rivers so to expand and control the area under recession flooding, create 110 ha for vegetable production, improve access to rural roads, control sand dunes, and provide potable water to villagers. The IDB is committed to financing a US\$6.4 million project to rehabilitate about 1,600 ha of 47 cooperative farmers. The Japanese International Cooperation Agency (JICA) has expressed interest in financing public infrastructure. During the preparation of PDIAIM II, the World Bank team and the Borrower collaborated with these development agencies to ensure a consistent approach to reaching the overall objectives of the PDIAIM.

2. Institutional and Implementation Arrangements

Phase II will use the core institutional arrangements implemented during Phase I. Overall responsibility for project implementation will rest with the Ministry of Rural Development and Environment (MDRE). Policy coordination of the PDIAIM will be handled by an Interministerial Coordinating Committee. Guidance will be provided by a Project Steering Committee chaired by the Ministry of Economic Affairs and Development (MAED). The Project Coordinating Unit (UC-PDIAIM) will be responsible for overall project management and coordination, financial management and monitoring and evaluation. SONADER, through a result-based mechanism, will oversee studies of public irrigated infrastructure, monitor implementation of irrigation scheme development financed by the project, and provide assistance to producers in extension and farm management. UNCACEM will handle credit for investment in irrigation development, crop production, processing and storage, given that it performed well during Phase I and that no other bank is willing to cover the needs of small and medium producers for long-term, medium and short-term credit. The Service of Land Affairs and Cartography (SAFC) within MDRE will be supported through a result-based mechanism to handle land registration in collaboration with the Bureau of Land Affairs (BAF) of the Ministry of the Interior. The UC-PDIAIM will collaborate with public agencies, NGOs and private enterprises to assist beneficiaries implement safeguard measures and monitor and evaluate the project's performance.

<u>Financial management</u>. The financial management (FM) of the project will continue to be carried out separately by the UC-PDIAIM and the two autonomous implementing agencies: UNCACEM and SONADER. Each entity has developed during Phase I an adequate Finance Department headed by a Director of Administration and Finance (DAF) and supported by accountants. Each DAF will be responsible for (a) preparing activity plans, monthly Special Account (SA) reconciliation statements, quarterly Statement of Expenditures (SOEs), Withdrawal Schedule, quarterly Financial Monitoring Reports (FMR), and annual financial statements; (b) ensuring that the project financial management arrangements are acceptable to the Government and IDA; and (c) timely submitting these reports and statements to the Government and IDA.

<u>Flow of funds</u>. The overall project funding will consist of IDA Credit and Counterpart Funds. With respect to banking arrangements, IDA will disburse the credit through three (3) Special Accounts (SA) opened and operated by the implementing entities. Each entity will maintain: (a) a SA in US Dollars to which the initial deposit and replenishments from IDA funds will be lodged; (b) a Current (draw-down) Account in Ouguiyas to which drawdowns from the SAs will be credited once or twice per month in relation with incurred eligible expenditures; and (c) a Current (Project) Account in Ouguiyas to which Counterpart Funds will be deposited. Interest income will be deposited to the respective accounts. Following the immediate payments of eligible expenditures, the balance on the accounts (a) and (b) should be zero.

<u>Financial reporting</u>. Besides quarterly financial management reports (FMRs), all bank accounts will be reconciled with bank statements on a monthly basis by each Finance Department. A copy of each bank reconciliation statement together with a copy of the relevant bank statement will be reviewed regularly with the FMRs by the external Auditors. The report-based disbursement method will apply only after a satisfactory assessment carried out by the Bank Financial Management System (FMS) within the first twelve months of implementation months. Meanwhile, the project will use the transaction-based disbursements procedures (i.e. direct

payment, reimbursement, and special commitments), as described in the World Bank Disbursement Handbook.

<u>Audits</u>. Each entity will prepare and submit to IDA Audited Project Financial Statements within six months after year end. <u>By Credit Effectiveness</u>, independent and qualified external auditors will be appointed by each entity on the basis of Terms of Reference (TORs) acceptable to IDA. The auditors will audit the project accounts and financial statements in accordance with International Standards on Auditing (ISAs). The audit reports will include a single opinion on (i) the Audited Project Financial Statements including quarterly FMRs, (ii) the accuracy and propriety of expenditures made under the SOE procedures and the extent to which these can be relied upon as a basis for loan disbursements, and (iii) the Special Accounts.

3. Monitoring and Evaluation of Outcomes/Results

The physical and financial Key Performance Indicators (KPI) of Phase II and arrangements for data collection are provided in Annexes 3 and 7. Scheduled evaluation of the performance-based contracts instituted with implementing agencies will ensure timely monitoring and dissemination of the project's implementation and performance indicators. Local institutions will receive project support as needed to collect and analyze data related to project's KPI. The M&E system will be reinforced and mainstreamed throughout Phase II. The impact of the 15-year PDIAIM will be monitored in collaboration with Bank's macro unit (PREM), which has developed a data collection and analysis system to measure employment in Mauritania. The Office of National Statistics (ONS) will provide indicators of agricultural value added in the irrigated area based on agricultural statistical data collected by the MDRE's *Direction des Politiques, de la Coopération et du Suivi-évaluation* (DPCSE) supported by the project. The poverty assessment carried for the PRSP exercises will provide measures of poverty reduction in the Valley.

4. Sustainability

The PDIAIM contributes to the sustainability of irrigated agricultural schemes in Mauritania. It supports investments on the basis of feasibility studies demonstrating financial and economic profitability and environmental soundness. The O&M of secondary and tertiary infrastructure under producers' responsibility is accounted for in these studies, and the project supports investors to effectively carry O&M on the realized schemes. The project also helps cooperatives on large-scale public schemes to implement the O&M of these schemes.

The PDIAIM also contributes to the sustainability of the rural credit system in Mauritania. Under Phase I, in compliance with OP 8.30, UNCACEM received a line of credit (LOC) on-lent by the Government at six percent interest rate, payable in 10 years with a two-year grace period. Phase I helped UNCACEM to cover a broader range of rural activities, add long-term credit for investment in irrigation development, while maintaining a sustainable interest rate policy to reach profitability—a major feat in the sub-region. Starting in 2000, UNCACEM achieved operational self-sufficiency, covering all its operating costs, including provisions for loan losses. Since 2002, it has achieved financial self-sufficiency, covering all operating and financial costs, including the cost of the source of fund and a market-based return on capital. Phase II will continue to work with UNCACEM, as no other Mauritanian bank is willing to cover the many credit needs of key actors engaged in irrigated agriculture. The LOC is in compliance with OP 8.30, as appraised by two rural finance experts on the project team and further reviewed by the Bank's Quality unit. The terms offered to UNCACEM include an interest rate of 4.5 percent (reflecting international market conditions), repayment period for the principal of 12 years with two-years grace period after the final drawdown, and annual interest payments following each drawdown (reflecting Bank's good practice). To further enhance UNCACEM's sustainability, Phase II will help UNCACEM develop a growth strategy by exploring expansion into rural micro-finance, mutation into a rural commercial bank, and addition of various financial services.

Finally, the PDIAIM contributes to the development of the capacity of the MDRE to collect and disseminate reliable agricultural statistics needed to inform decision makers of overall food balance, pockets of food deficits and eventual emergency food aid when required.

5. Critical risks and Possible Controversial Aspects.

As with Phase I, the main controversial issues concern eventual social tension related to the implementation of land tenure and potential environmental degradation. In other critical risks, the Country Financial Accountability Assessment (CFAA) indicated that the systems for planning, budgeting, monitoring and controlling public resources in Mauritania are improving but remain at a level that they do not provide sufficient reasonable assurance that funds are used for the purpose intended. The risk of waste, diversion and misuse of funds was assessed as partially high. The overall risk from a financial management perspective is considered partially high for all projects implemented in Mauritania. However, at the country level, various measures to mitigate these risks have been agreed on. At the PDIAIM, specifically, the financial management arrangements are designed to ensure that funds are used for the purpose intended, timely information is produced for project management and government oversight, and project's implementation is in compliance with IDA fiduciary requirements. Overall, financial management during Phase I has been remarkable. Phase II is designed to help ensure that the Borrower and project management will undertake the necessary risk mitigation measures. Triggers for moving from Phase I to Phase II account for critical risks to the PDO that can realistically be mitigated by the end of Phase II, and KPI account for major risks to components' results. The project risks are summarized below.

Risks	Risk Mitigation Measures	Risk Rating with Mitigation
To Project Development Objective		
(a) The incentive structure reverts to favor rice at the expense of agricultural diversification.	Bank pursues dialogue with GIRM to stay the course and strengthen liberalization measures.	N
(b) Unabated, large-scale fraudulent rice imports destabilize the domestic rice sector.	Mauritania implements border controls, aligns import tariffs with bordering countries' rates.	Ν
(c) Road transport costs remain high as new entrants face unfair competition from the old monopoly.	Bank pursues dialogue with Mauritania to implement liberalization of road transport services and a rural road strategy.	S
(d) Sea freight costs remain high due to the inefficient operation of Nouakchott's port.	Bank will work with Mauritania and other donors to improve the operation of Nouakchott's port.	S
(e) Inadequate enforcement of credit default regulations forces high costs upon UNCACEM.	Bank supports capacity building of Mauritania's Justice system to implement commercial laws.	М
To component Results		
A. Capacity Building (f) Producers' organizations lack support to strengthen their capacities.	PDIAIM implements capacity building activities.	М
B. Infrastructure for Irrigated Agriculture (g) The pace of land registration is slow, resulting in delays in the credit approval process and	PDIAIM implements performance-contracts with the Service of Land Affairs and Cartography (SAFC)	М
implementation of rehabilitation. (h) SONADER's technical oversight of rehabilitation is inadequate, leading to slow implementation of rehabilitation.	regarding land registration. PDIAIM implements performance-contracts with SONADER's rehabilitation unit.	Μ

(i) Procedures for the collection of water and O&M charges are not implemented, further degrading primary irrigation infrastructure.	Bank monitors implementation of agreed upon procedures for collection of water and O&M.	М
C. Agricultural Supply Chains		
(j) SONADER fails to deliver adequate agricultural services to smallholders that newly invested in	PDIAIM implements performance-contracts with SONADER's agricultural services division.	М
rehabilitation.		
(k) UNCACEM yields to outside interference,	Bank monitors UNCACEM for compliance with	М
accepting bad loans and jeopardizing its financial	internal procedures and sustainable interest rate	
self-sufficiency.	policy as agreed with Government and IDA.	
D. Project Administration		
(l) Key stakeholders lack information about	PDIAIM implements its information strategy.	N
PDIAIM, limiting their participation in the		
program. (m) Use of funds is inefficient or inappropriate due	Risk is reduced by experience of PDIAIM team;	м
to poor governance at the PIU.	PDIAIM's insertion of strong internal control	101
to poor governance at the 110.	procedures, where needed, in the revision of each	
	manual of procedures; and Bank's closely followed-	
	on Audit Reports.	
(n) Key financial management (FM) staff may	Implementing agencies provide adequate incentives	М
move and reduce existing capacity, so that teething	to stabilize the FM staff, particularly in SONADER,	
problems may jeopardize timely and accurate	and training especially for FMR.	
financial reporting and disbursement process.		
Overall Rating		M
H = High $S = Substantial$ N	= Moderate N = Low/negligible	

6. Loan/credit Conditions and Covenants

The conditions for credit effectiveness are for the Borrower to: (a) revise and update accordingly the manual of financial and administrative procedures and the accounting software for each entity; (b) open Project Accounts and release initial deposits of counterpart funds; (c) ensure appointment of qualified external auditors by each implementing agency; (d) ensure appointments of an environmental and social safeguard specialist, an agricultural economist, and a communication specialist, each with qualifications, experience and terms of reference satisfactory to the Association; and (e) ensure the UNCACEM Subsidiary Loan Agreement and the SONADER Subsidiary Agreement have each been executed on behalf of the Borrower, and UNCACEM and SONADER respectively.

Furthermore, (a) the UNCACEM Project Agreement and the SONADER Project Agreement should each be duly authorized and executed by UNCACEM and SONADER respectively, and should be legally binding upon UNCACEM and SONADER respectively in accordance with their respective terms; and (b) the UNCACEM Subsidiary Loan Agreement and the SONADER Subsidiary Agreement should each be duly authorized, ratified and executed by the Borrower, UNCACEM and SONADER respectively in accordance with their respective terms.

D. APPRAISAL SUMMARY

1. Economic and Financial Analyses

One cannot undertake a Cost Benefit Analysis (CBA) for the whole project because benefits of capacity building activities defy quantification, and benefits from investments in safeguard measures cannot be easily quantified in monetary terms. However, as with Phase I, one can undertake an illustrative CBA of irrigation development in rehabilitation, extension and new creation undertaken by cooperatives and private individual producers.

There is no prior knowledge of the demand-driven investment in irrigation development. The analysis considers three illustrative investment models (rice sole cropping, rice and diversified crops, and diversification in vegetables, fruits and forage production) undertaken by cooperative and private individual farmers operating in the Trarza and Haut-Fleuve. Most likely, only collective farmers would engage in horticultural production after a rice crop and individual farmers would engage in horticultural mono cropping. All models include windbreaks promoted by the project to protect crops (against winds and sand erosion) and increase revenues from wood products.

The positive results are indicative of the financial and economic profitability of private irrigation development (see Table below, Annex 9 and details in project files). They are particularly strong for poor collective farms engaged in rice production followed by horticultural production. The prospects for diversification are excellent for vegetables production and orchards, but riskier for forage production. The results are somewhat sensitive to variation in yield, less to fluctuation in product price (except to forage crop) and not at all to a one-time investment increase in investment cost. To mitigate risks, the project supports capacity building of producers to help them realize high product yields and make provisions to control granivorous birds that ravage rice crops. A Mauritania project aimed at combating locust attacks, such as the one that occurred in 2004, is also supported by the Bank.

	Eco	nomic	Financial		
Models	ERR	NPV	IRR	NPV	
Rice only					
Individuals with > 40 ha in Trarza	14%	907	17%	989	
Individuals with > 40 ha in Haut-Fleuve	15%	1,222	15%	693	
Individuals with < 40 ha in Trarza	14%	907	27%	1,507	
Individuals with < 40 ha in Haut-Fleuve	15%	1,222	22%	1,259	
Cooperative in Trarza	14%	763	72%	2,804	
Cooperative in Haut Fleuve	17%	1,622	74%	3,044	
Rice + diversification					
Cooperative in Trarza	22%	2,607	122%	4,537	
Cooperative in Haut Fleuve	22%	2,711	101%	4,056	
Diversification only					
Individual in Trarza: horticulture	62%	13,181	88%	6,244	
Individual in Trarza: orchard	23%	22,678	21%	19,070	
Individual in Trarza: forage	44%	8,011	44%	2,978	

Economic and Financial Analysis (NPV in US\$)

2. Technical

Rehabilitation, extension and new creation of irrigation schemes will be designed, implemented and maintained in accordance with the technical norms defined by the Government. These norms are meant to ensure the efficient use of public lands, which required considerable public investment (dams, dikes, drainage ditches, canals and roads), but were distributed in the past at low cost and accompanied with subsidies in credit and marketing. The norms account for the environmental particularities of the Valley (salinity and waterlogging) by emphasizing appropriate drainage systems. The norms, issued in 2000 and modified in 2001 in an official Circular, provide broad, rather than rigid, technical guidelines. The guidelines address the calibration of irrigation and drainage canals, and the size and leveling of parcels, but in such way that compliance does not unduly increase investment cost. Compliance with these technical guidelines is a condition for access to investment credit and subsidies.

3. Fiduciary

The financial management assessments conclude that the Bank's financial management requirements will be satisfied, provided the following conditions are met by the project prior to credit effectiveness: (a) revise and update accordingly the manual of financial and administrative procedures and the accounting software for each entity; (b) open Project Accounts and release initial deposits of counterpart funds; and (c) ensure appointment of qualified external auditors by each implementing agency. A financial management system, including records and accounts will be maintained by each entity. Financial Statements including quarterly FMRs will be prepared in a format acceptable to IDA and will reflect, in accordance with sound accounting practices, the operations, resources and expenditures in respect of the project.

4. Social

The PDIAIM targets poor agricultural producers (particularly cooperatives) and vulnerable groups (particularly women's groups). During preparation, the project team carried out an assessment of the project's social impact to deepen the understanding of the social issues related to the PDO. The assessment highlighted the difficult access to land and credit by women's groups and the small size of plots cultivated by each family in collective farms, particularly younger families. Phase II will improve these groups' access to productive assets (land and credit), and strengthen their technical, organizational and managerial capacities to engage in rice production and agricultural diversification to increase their revenues and improve their livelihoods. Phase II will work to have formal agreement of cooperatives, which are too small for UNCACEM to service at reasonable cost, will be encouraged to regroup so to create a critical mass to access credit. As for families' small plot sizes, Phase II will systematically require that extension be considered in the rehabilitation of cooperatives' irrigation schemes. It will contribute to empower poor and vulnerable groups by involving them in the assessment of service providers under performance-based contracts.

During preparation, key stakeholders participated in discussions and working sessions in the field and Nouakchott, including meetings with the PDIAIM's steering committee. Phase II will reinforce the demand-driven participatory approach to developing irrigation schemes initiated during Phase I. In this approach, beneficiaries contract with an engineering bureau, indicate their priorities and preferences, and then choose one among various alternatives suggested by the bureau. Beneficiaries interviewed during preparation showed an appropriation of the process, an understanding of the investment costs and credit repayment involved, and most important, an appreciation for the opportunity given to them—for the first time ever—to realize their priorities. In the words of one farm cooperative's leader, talking about the PDIAIM "the ears had long heard; the eyes that longed to see are now seeing…"

5. Environment

The impetus to the PDIAIM was the need to reverse the increasing environmental degradation and productivity decline of irrigated land in the Valley. The safeguard measures aim at mitigating the project's unintended environmental and social negative consequences and strengthening its positive spillover impacts. Phase I identified guidelines for irrigation development that ensure that environmental concerns are taken into account by private investors. Thus, feasibility studies for irrigation development include an environmental assessment, and investment subsidies are predicated on the building of infrastructure (e.g., drainage) that reduces environmental degradation. Furthermore, Phase II supports an awareness and Information-Education-Communication (IEC) program with regard to the application of these environmental guidelines. It also ensures, through extension services, that all completed project-supported irrigation schemes receive the proper O&M included in feasibility studies. In addition, in collaboration with other on-going and planned initiatives, Phase II will contribute to implement global environmental measures aimed at combating and controlling invading aquatic weeds, bird invasions that cause significant damage to rice crops, desertification in the Senegal River Valley, and at strengthening environmental management capacity building within national, regional and local implementing agencies.

6. Safeguard Policies

The PDIAIM is a Category A project, with possible significant negative impacts on the biophysical environment and human health. Phase II triggers the same safeguard policies (shown in the table below) that were treated during Phase I. The Safeguard documents (EAMP, prepared before the start of Phase I, and the EMPF, PMP, RPF) address the safeguard policies triggered by the PDIAIM. Irrigation development under the PDIAIM concerns already developed and ongoing schemes, which will be rehabilitated and created into more water-efficient and environmentally sound schemes. The project will not cause harm to the other riparians, as the demand for water and the risk to environmental degradation will decrease. It is not anticipated that the investments would ever lead to involuntary relocation or new land acquisition, but should such a possibility arise, a resettlement action plan with accompanying budget will be prepared. The actions to be taken are identified in sub-component D3 and in Annex 10.

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[X]	[]
Natural Habitats (<u>OP/BP</u> 4.04)	[X]	[]
Pest Management (OP 4.09)	[X]	[]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[X]	[]
Involuntary Resettlement (OP/BP 4.12)	[X]	[]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[]	[X]
Forests (<u>OP/BP</u> 4.36)	[]	[X]
Safety of Dams (OP/BP 4.37)	[X]	[]
Projects in Disputed Areas (<u>OP/BP/GP</u> 7.60)*	[]	Ĩ
Projects on International Waterways (OP/BP/GP 7.50)	[X]	[]

7. Policy Exceptions and Readiness

No policy exceptions are foreseen.

^{*} By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

Annex 1: Country and Sector or Program Background MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITNIA

1. Country and Sector Issues

In 1992, the Government of the Islamic Republic of Mauritania (GIRM) committed itself to a wide range of long-term economic and sector reforms. Staying the course, Mauritania presented in 2001—among the forerunners—a full Poverty Reduction Strategy Paper (PRSP). The PRSP lays out four pillars: (i) stimulating accelerated and redistributive growth; (ii) anchoring growth in the economic environment of the poor; (iii) developing human resources and ensuring universal access to basic infrastructure and services; and (iv)strengthening institutional capacities and governance. Of particular interest, the second pillar stresses that developing and diversifying the rural sector is essential to developing trade, reducing production costs and enhancing the competitiveness of the whole economy. In late 2004, however, Mauritania has slipped in its stewardship of its macro-economic and, consequently, was led to postpone its first Poverty Reduction Strategy Credit (PRSC), planned to support the education and health sectors.

Mauritania has experienced a steady growth of about 5 percent per annum with a yearly inflation rate in the 4 to 5 percent range (2003). However, after several years of strong macroeconomic management, macroeconomic policy implementation weakened between January 2003 and June 2004, during which period significant extra-budgetary spending was made. Authorities have justified the spending on emergency grounds, to protect rural dwellers and livestock from the effect of the harsh drought that affected Mauritania in 2003 and to strengthen national security.

Regarding budgetary spending, the analysis undertaken in the 2004 Public Expenditure Review shows that in recent years the Mauritanian government has considerably re-oriented public spending from unproductive activities (military spending, transfers) towards the promotion of human resources development (health and education). Social and poverty-related spending increased from 8 percent of GDP in 2001 to 11.4 percent of GDP in 2003 (estimate), and overall execution rate has improved.

The overall poverty level in Mauritania is estimated to have declined from 57 percent to 46 percent between 1990 and 2000 in a population of 2.7 million (2003). Poverty in rural rainfed areas decreased apace from 69 percent to 55 percent, but in the Rural River Valley region—hit hard by flooding in 1999—poverty regressed only from 74 percent to 72 percent. This indicates the need for stepped-up efforts in rural areas, which still harbor most of the poor despite continued urbanization. Ninety percent desert over its 1.1 million sq. km, Mauritania has designed its Rural Development Strategy, Letter of Development Policy for Irrigated Agriculture, and Agro-Food Strategy—the cornerstones of the PRSP's second pillar—to reflect a long-term shared vision of turning the Senegal River Valley into one of the main sources of development and economic growth.

Out of a potential of 135,000 ha of irrigated land in the Valley, 40,000 ha were developed in the 1970s and 1980s for rice production. At the inception of the Integrated Program for Irrigated Agriculture in Mauritania (PDIAIM) in the mid-1990s, half of these developed schemes had been abandoned and most of the balance was suffering from continuous degradation and low productivity. Mauritania's first priority with respect to irrigated agriculture has since been to

promote the rehabilitation of degraded irrigation schemes still under production, together with the extension of collective schemes in which family parcels are too small to be economically viable or even to cover the family's subsistence needs. Reclaiming abandoned irrigation schemes and developing new ones, usually at high cost, is a secondary priority, except when these schemes are for diversification, i.e., for crops with much higher added value than rice.

Phase I of the PDIAIM has contributed to alleviate critical aspects of the key constraints identified at the initiation of the program as being responsible for the unfulfilled potential of Mauritania's irrigated agriculture. Specifically,

The inefficient domestic rice support policies, which mostly benefited large producers and processors and discouraged the production of high-quality rice and the diversification of irrigated agriculture, were corrected by reducing tariff protection, abandoning administrative pricing, and eliminating marketing and credit subsidies for domestic rice.

The inadequate financing of irrigated agriculture, which narrowly focused on credit for seasonal inputs and some equipment for rice production, was overhauled by assisting an autonomous credit agency to operate year round and cover all agricultural speculations and borrowers' needs for short-, medium- and long-term credit, while still adhering to strict financial viability criteria, i.e., operational and financial self-sufficiency (see details in Line of Crecdit in Annex 4).

The low level implementation of the 1990 land tenure law was improved by supporting expanded and transparent land registrations, which are necessary conditions to access investment credit and subsidies, so that by late 2004, about 36,000 ha had been registered (Table on Land registration below). The land tenure law recognizes collective rights for pre-existing cooperatives, as well as individual rights. However, land registration to individual landowners is only possible in areas with established land categories (*schemas de structure*), which identify land to be set aside for future generations, park and natural reserves, and roads and other public use. Developed only for the Trarza, thus far, the *schemas de structures* are being planned for other regions.

Wilaya		Cases treated		Total area
(region)	Individual land	Collective land	Total cases	(ha)
Trarza	510	147	657	30,722
Brakna	0	62	62	2,513
Gorgol	0	47	47	2,515
Guidimaka	0	14	14	955
Total	510	270	780	36,704

Source: Bureau des affaires foncières (BAF): DPCSE/MDRE, 2004

Note: Land registration to individuals forbidden until a schema de structure is in place. Trarza, as a pilot area, is the only region for which a schema is in place.

The poor design or/and rudimentary construction of irrigation schemes, which has resulted in plots with uneven irrigation and poor drainage, was addressed by instituting construction norms and standards technically and environmentally sound, yet not too rigid as to unnecessarily increase investment cost.

The lack of empowerment of beneficiaries of state-financed schemes, which contributed to low organizational skills and encouraged an assistance mentality on the

part of producers, was addressed by initiating capacity building programs and promoting a more participatory approach in the assistance to producers' organizations.

The technological level of producers who were using rice varieties that did not meet consumers' quality expectations or who lacked expertise in fruit and vegetable production that met export standards, was improved in these key areas.

The poor management and maintenance of schemes and irrigation equipment, which has resulted in inadequate maintenance of canals and frequent break-downs of pumps, was looked into by designing procedures for O&M.

Undoubtedly, however, to thoroughly control the deep-rooted constraints of irrigated agriculture in Mauritania, it is necessary to consolidate over time the progress achieved during the first phase of the PDIAIM. In particular, it is well understood that strengthening the capacities of public agencies and producers organizations requires time and effort. Also, continued efforts are needed in the areas of Mauritania's land tenure in the Haut Fleuve, where the pace of land registration (21 percent for collective lands) is below than that for the Trarza (57 percent for individual and collective lands). In road services, the transport liberalization decree did lower barriers to entry, but the new entrants face unfair competition from the old monopoly. Natural disasters, such as flooding and the recent locust attacks are of a scope and magnitude beyond the sector and, like road services, demand global response at the national level.

2. Rationale for Bank Involvement

Resolute commitment to a long-term shared vision. The Bank and Mauritania have identified the three-phase PDIAIM as the best instrument to implement the Government's long-term policy for irrigated agriculture and the cornerstone of its rural development strategy to contribute to overall growth and reduction of poverty. The choice of an Adaptable Program Loan (APL) instrument is appropriate. It represents the Bank's long-term commitment to the country to support its fight against poverty and it is predicated on the efficient and sustainable use of the country's most valuable renewable natural resource: irrigated land.

Achievement of the first phase's triggers. Mauritania has substantially met the development objective of the first phase of the program and has complied with all triggers for moving from Phase I to Phase II. Having satisfied all criteria for Phase II, Mauritania requested and expects the Bank to keep its commitment, as proposed in the current CAS. This project will complement the Bank-supported FY04 Community-Based Rural Development project—CBRD (which targets poor villages mainly located in rainfed areas), the FY06 Capacity Building Project (which targets the strengthening of management capacities, good governance and environmental management) and the planned Transport Sector Project (FY07).

The triggers were attained as indicated below:

- liberalization measures for agricultural markets and road transport services as of 1999 remain in place, i.e., 45 percent import tariff on rice, no import quota, no administrative pricing, no interest subsidies on rice marketing;
- UNCACEM has achieved operational and financial self-sufficiencies, as detailed in Annex (Line of Credit). UNCACEM reached financial self-sufficiency in 2002, one year later than expected, because it had to reschedule the loans of the 1999-2000 flood victims.

- credit and investment subsidies are granted in accordance with procedures agreed upon with IDA;
- awards of land use concessions are in conformity with land tenure regulations. New changes were introduced in 2002 to shorten land distribution process from three to two stages (provisional and permanent concessions). The amended law also recognized land rights of cooperatives that developed land before the advent of the tenure law;
- transparent and accessible land registries are established allowing verification of land tenure. The functionality of land registries was verified by successive Bank supervision missions;
- procedures are established for the collection of water fees and operation and management charges for public infrastructure works: a charter for the operation and maintenance of public schemes was signed between SONADER and the rice producers' cooperatives;
- economic return on Government-supported irrigation infrastructures demonstrated satisfactorily: access to investment credit and matching grant for irrigation development is dependent on satisfactory financial and economic rates of return, as indicated in the commissioned feasibility studies; and
- performance of SONADER is judged satisfactory according to the criteria set out in the performance contract, i.e., set up of a financial management system, including the use of TOMPRO, and reduction of administrative costs, including staff cost.

Adjustment of the PDIAIM. The development objective of the overall PDIAIM is to increase the value-added of irrigated agriculture and related incomes and employment in the Senegal River Valley through the judicious use of the country's most precious natural assets: water and arable land. The overall PDIAIM was expected to rehabilitate over 20,000 ha, including 13,000 ha with support from IDA and 10,000 ha with support from other donors. The part financed by IDA (PDIAIM-IDA) is the cornerstone of the overall PDIAIM. It was designed as a three-phase, 11-year program funded by an APL, and was expected to contribute to the development of the above-mentioned 13,000 ha, including: 11,000 ha of existing irrigation schemes and the development of 2,000 ha of new irrigation schemes for agricultural diversification.

Using the flexibility of the APL instrument, the PDIAIM-IDA has been adjusted to reflect the results of Phase I. The adjusted PDIAIM-IDA is now cast as a three-phase, 15-year program targeting the development of irrigation schemes totaling 12,500 ha, including about 10,000 ha in existing schemes and 2,500 ha of new creation for vegetables, fruit-trees, forage, and agro-forestry production. The first phase, initially of three years but extended to five years and six months, will be followed by a second and a third phase of five years each.

Program	Initial Design	Current Design
Objective	To increase agriculture value-added, income and employment of the population living in the Senegal River Valley;	To increase agriculture value-added, income and employment in the Senegal River Valley;
PDO Indicators	(a) <u>overall agricultural growth</u> : increase in total value-added of agricultural production (average 7 % per annum);	Value added of irrigated agriculture increases by at least 25% from the year 2000 level by the end of the program;
	b) <u>agricultural diversification</u> : increase in the value-added of non-rice crops (average 10% per annum);	Fruits and vegetable exports to regional and international markets reaches 5,000 tons by the end of the program;

The Adjusted PDIAIM APL

	c) <u>productivity</u> : land and labor productivity increase;	
	d) <u>economic return</u> : improved competitiveness of the main crops;	
	e) <u>poverty alleviation</u> : reduction in the percentage of people below the poverty line in the targeted area (from 60 to 20%) by the end of the Program;	Poverty in the Fleuve region is reduced by at least 25% from the year 2000 level by the end of the program;
	f) <u>enhanced food security</u> : increased incomes and reduction of the gap between food demand and domestic food production;	
	g) <u>access to land, water, services and credit</u> by the poor;	Land registration is applied to women cooperatives and at least one federation of women's cooperation has access to agricultural credit;
	h) <u>environmental sustainability</u> : reducing water logging, salinity and waterborne diseases;	
Target	13,000 ha (11,000 ha in rehabilitation; 2,000 ha in new creation);.	12,000 ha (10,000 ha in rice schemes; 2,000 ha in crop diversification schemes);
Duration	11 years.	15 years
Phase I	Initial Design	Current Design
Objective	To lay the foundations for a sustainable development of irrigated agriculture in technical, financial, environmental and socioeconomic terms;.	No change.
PDO Indicators	8 KPI	No change.
Triggers	8 Triggers	No change.
Target	3,100 ha (3,000 ha in rehabilitation; 100 ha in new creation)	1,150 ha (1,000 ha in rehabilitation; 150 ha in new creation);
Duration		
D'ul auvil	3 years	5 years (2-year extension)
Funding	3 years US\$38.1 million	5 years (2-year extension) No change
Funding	US\$38.1 million	No change Current Design To (i) consolidate incentive measures, (ii) increase sustainable irrigation infrastructure, and (iii) intensify agricultural diversification for targeted
Funding Phase II	US\$38.1 million Initial Design To consolidate Phase I achievements and continue providing incentives and support to producers for increasing the area of rehabilitated schemes and	No change Current Design To (i) consolidate incentive measures, (ii) increase sustainable irrigation infrastructure, and (iii)
Funding Phase II Objective PDO	US\$38.1 million Initial Design To consolidate Phase I achievements and continue providing incentives and support to producers for increasing the area of rehabilitated schemes and the new creations; (1) satisfactory access of poor families to land and agricultural services, as determined by results of	No change Current Design To (i) consolidate incentive measures, (ii) increase sustainable irrigation infrastructure, and (iii) intensify agricultural diversification for targeted actors engaged in irrigated agriculture; Regional land registries allow verification of land
Funding Phase II Objective PDO	US\$38.1 million Initial Design To consolidate Phase I achievements and continue providing incentives and support to producers for increasing the area of rehabilitated schemes and the new creations; (1) satisfactory access of poor families to land and agricultural services, as determined by results of participatory surveys; (2) satisfactory repayment rate (continues to be at	No change Current Design To (i) consolidate incentive measures, (ii) increase sustainable irrigation infrastructure, and (iii) intensify agricultural diversification for targeted actors engaged in irrigated agriculture; Regional land registries allow verification of land awards from all interested parties;
Funding Phase II Objective PDO	US\$38.1 million Initial Design To consolidate Phase I achievements and continue providing incentives and support to producers for increasing the area of rehabilitated schemes and the new creations; (1) satisfactory access of poor families to land and agricultural services, as determined by results of participatory surveys; (2) satisfactory repayment rate (continues to be at least 95%) on loans granted by UNCACEM; (3) amount and collection of water fees and collective infrastructure charges judged adequate	No change Current Design To (i) consolidate incentive measures, (ii) increase sustainable irrigation infrastructure, and (iii) intensify agricultural diversification for targeted actors engaged in irrigated agriculture; Regional land registries allow verification of land awards from all interested parties;
Funding Phase II Objective PDO	US\$38.1 million Initial Design To consolidate Phase I achievements and continue providing incentives and support to producers for increasing the area of rehabilitated schemes and the new creations; (1) satisfactory access of poor families to land and agricultural services, as determined by results of participatory surveys; (2) satisfactory repayment rate (continues to be at least 95%) on loans granted by UNCACEM; (3) amount and collection of water fees and collective infrastructure charges judged adequate for maintenance of those infrastructures; (4) satisfactory management of collective	No changeCurrent DesignTo (i) consolidate incentive measures, (ii) increase sustainable irrigation infrastructure, and (iii) intensify agricultural diversification for targeted actors engaged in irrigated agriculture; Regional land registries allow verification of land awards from all interested parties;

	(and the second se	5 000 he had the and of Phase He
	/new development (over 75% of targeted areas);	5,000 ha by the end of Phase II;
	(7) economic return on Government-supported diversification efforts demonstrated satisfactorily	
	on the basis of initially available results;	
	(8) emergence and increase of new, non-farm	Crop diversification under irrigation has doubled
	activities (in number of activities and jobs, and in income-generation);	by the end of Phase II;
Triggers	(1) the favorable economic, legal and institutional	Rice import tariffs are maintained or reduced
Inggers	environment created during Phase I is maintained and improved;	throughout Phase II;
	(2) UNCACEM's financial self-sufficiency is maintained;	Measures promoting competitive road transport services are fully implemented, as identified in the Bank-financed Road Transport Sector Project;
	(3) UNCACEM reimburses the IDA credit line extended by the Government;	UNCACEM is reimbursing the Government's line of credit;
	(4) credit and investments subsidies are awarded in accordance with procedures agreed upon with IDA;	
	(5) awards of land use permits, temporary and permanent concessions continue to be in conformity with land tenure regulations;	
	(6) transparent and accessible land registries are maintained and are used for the verification of land-use permits, temporary concessions and permanent concessions;	Awards of irrigated land concessions are in accordance with land tenure legislation and the land use categories (<i>schemas de structure</i>);
	(7) adequate water fees and collective infrastructure charges are collected;	The charter of procedures for water and O&M charges of public infrastructure is implemented by SONADER and producers' organizations;
	(8) economic return on Government-supported diversification activities is demonstrated satisfactorily on the basis of available results;	
Target	4,700 ha (4,000 ha in rehabilitation; 700 ha in new creation);	5,000 ha (about 4,500 ha in rehabilitation and 500 ha in new creation);
Duration	4 years.	5 years
Funding	US\$35 million	US\$39 million
Phase III	Initial Design	Current Design
Objective	To achieve the sustainability of the scheme rehabilitation and development of production	To expand irrigation development and agricultural diversification and achieve the objectives of the
	systems introduced under the two preceding	overall program, which are to increase agricultural
	phases and apply the Program approach to other schemes in the Valley;	value-added, farm income, and rural employment in the Senegal River Valley;
PDO Indicators	(1) overall agricultural growth: increase in total value-added of agricultural production (at least 7% per annum);	Value added of irrigated agriculture increases by at least 25% from the year 2000 level by the end of the program;
	(2) <u>agricultural diversification</u> : increase in value- added of non-rice crops (averaging 10% per	Fruits and vegetable exports to regional and international markets reaches 5,000 tons by the
	annum);	end of the program;
		end of the program;

	main crops;	
	(5) <u>poverty alleviation</u> : reduction in percentage of the population living below poverty threshold in the target area (from 60% to 20%) by the end of the Program;	Income poverty in the Fleuve region is reduced by at least 25% from the year 2000 level by the end of the program;
	(6 <u>) environment</u> : reduction in water logging, salinity and waterborne diseases;	
	(7) <u>improved food security</u> : increased incomes and reduction of disparity between consumption and domestic production;	Land registration is applied to women cooperatives and at least one federation of women's cooperation has access to agricultural credit;
	(8) <u>access of poor populations</u> to land, water, services and credit;	
	(9) UNCACEM reimburses IDA line of credit extended by Government in accordance with conditions of credit agreement;	
Target	5,200 ha (4,000 ha in rehabilitation; 1,200 ha in new creation);	5,850 ha: (4,500 ha in rehabilitation; 1,350 ha in new creation)
Duration	4 years.	5 years
Funding	US\$28.9 million	TBD

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

	Implementation Progress (IP)	Development Objective (DO)
Livestock II	S	S
(Cr. 1658 – FY 1986)		
Ag Sector Adjustment and	S	S
Investment		
(Cr. 2093 – FY 1990)		
Agricultural Services Project	U	U
(Cr 2575 - FY 1994)		
Rainfed Natural Resource	S	S
Management		
(Cr. 2965 – FY 1997)		
Integrated Program for	S	S
Irrigated Agriculture		
Health Sector Investment	S	S
Project (PASS) 1998-2003		
Education Sector	S	S
Development Program Project		
(PNDSE) 2001-06		
Urban Development Program	HS	S
Project (PDU) 2001-06		
	 (Cr. 1658 – FY 1986) Ag Sector Adjustment and Investment (Cr. 2093 – FY 1990) Agricultural Services Project (Cr 2575 - FY 1994) Rainfed Natural Resource Management (Cr. 2965 – FY 1997) Integrated Program for Irrigated Agriculture Health Sector Investment Project (PASS) 1998-2003 Education Sector Development Program Project (PNDSE) 2001-06 Urban Development Program 	Progress (IP)Livestock IIS(Cr. 1658 – FY 1986)SAg Sector Adjustment andSInvestment(Cr. 2093 – FY 1990)Agricultural Services ProjectU(Cr. 2575 - FY 1994)URainfed Natural ResourceSManagement(Cr. 2965 – FY 1997)Integrated Program forSIrrigated AgricultureSHealth Sector InvestmentSProject (PASS) 1998-2003SEducation SectorSDevelopment Program Project(PNDSE) 2001-06Urban Development ProgramHS

Annex 3: Results Framework and Monitoring

MAURITANIA: SECOND PHASE OF HE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

Results Framework

PDO	Outcome Indicators	Use of Outcome Information
	Regional land registries allow verification of land awards on request.	Gauge the transparency of access to irrigated land.
To (i) consolidate incentive measures, (ii) increase sustainable	UNCACEM maintains a financial self- sufficiency.	Gauge the viability of agricultural credit.
irrigation infrastructure, and (iii) intensify agricultural diversification for targeted actors engaged in irrigated agriculture.	Sustainable irrigation schemes are increased by 5,000 ha by the end of Phase II.	Gauge efforts to reach the overall program's physical target.
	Crop diversification under irrigation has doubled by the end of Phase II.	Gauge overall progress made in agricultural diversification.
Intermediate Results	Results Indicators for Each	Use of Results Monitoring
One per Component	Component	
A: Incentives and Capacity Building	A: Incentives and Capacity Building	A: Incentives and Capacity Building
Land administration units provide timely services to collective and individual land owners.	SAFC/BAF process at least 75% of land registration requests within one (1) month.	Gauge effort to improve access to land, needed to access investment credit and subsidy.
UNCACEM identifies prospects in rural finance expansion.	Strategy for rural finance expansion is carried out.	Provide UNCACEM with a clear growth strategy for Phase III.
DPCSE (policy and statistical department) monitors satisfactorily the state of Mauritania's agriculture.	Annual agricultural statistics are produced on time.	Provide timely information for decision making (food balance) and analysis (growth projections).
Regional producer organizations educate local members of needs for O&M of public infrastructure.	75% of PO of large-scale public irrigation schemes collect adequate water and O&M charges.	Gauge willingness of large-scale schemes PO commit to O&M of transferred schemes.
B: Infrastructure for Irrigated Agriculture	B: Infrastructure for Irrigated Agriculture	B: Infrastructure for Irrigated Agriculture
SONADER provides satisfactory supervision in irrigation development.	No rehabilitation/creation work straddles the rainy season.	Gauge SONADER's performance in supervision of irrigation development.
Phase III's investment in irrigated infrastructure is adequately prepared.	Planned priority feasibility studies for Phase III completed.	Gauges preparedness of Phase III.
C: Agricultural Supply Chains	C: Agricultural Supply Chains	C: Agricultural Supply Chains
Producers consolidate the quality of domestic rice.	All rice rehabilitated area is sown with improved seed.	Measures the success of extension efforts to improve rice quality.
UNCACEM's overall loan reimbursement rate is improved	UNCACEM's loan reimbursement rate reaches a least 95% by the end of Phase II.	Gauge UNCACEM's ability to maintain financial self-sufficiency.

Needed cold chain infrastructure is provided to F&V exporters.	Project-built storage and packaging centers are functional.	Gauge effective use of project-built cold chain infrastructure.
Participation in commercial horticultural production increases.	Number of F&V producers linked to export markets has doubled by the end of Phase II.	Gauge participation in commercial horticultural production.
D: Project Administration	D: Project Administration	D: Project Administration
The PMU manages the project in an effective and satisfactory way.	Audits are produced on time and without major reserves.	Gauges transparency of financial management.
M&E system is functional.	M&E's periodic reports are produced on schedule.	Gauges the efficiency of monitoring and evaluation.
	Impact analysis studies are carried out (implementation of land tenure, social assessment, rural public expenditures).	Contribute to the analysis of project's impact and knowledge of the rural sector.

				>)		
			Ta	Target Values	es		Data C	Data Collection and Reporting	20
Outcome Indicators	Baseline	YRI	YR2	YR3	YR4	YR5	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
(01) Regional land registries allow verification of land awards on request	Restricted to land owners	Yes	Yes	Yes	Yes	Yes	Project quarterly and annual reports	Project M&E, supervision missions	UC-PDIAIM, BAF (DPCSE)
(O2) UNCACEM maintains a financial self-sufficiency	>100%	>100%	>100%	>100%	>100%	>100%	Project annual reports	Annual audit reports	UNCACEM; UC- PDIAIM
(O3) Sustainable irrigation schemes are increased by 5,000 ha by the end of Phase II	1,000 ha	2,000	3,000	4,000	5,000	6,000	Project quarterly and annual reports	Project M&E, supervision missions	UC-PDIAIM, SONADER
(04) Crop diversification under irrigation has doubled by the end of Phase II.	500 ha	600	700	800	006	1,000	Project quarterly and annual reports	Project M&E, supervision missions	UC-PDIAIM, SONADER, DPCSE
Results Indicators for Each Component									
A: Incentives and Capacity Building:									
(R1) SAFC/BAF process at least 75% of land registration requests within one (1) month	55%	75%	75%	75%	75%	75%	Project annual reports	Project M&E, consultant reports	UC-PDIAIM, DPCSE,
(R2) Strategy for rural finance expansion is carried out	Not applicable		-						
(R3) Annual agricultural statistics are produced on time	On time	On time	On time	On time	On time	On time	Project quarterly and annual reports	Agricultural statistics surveys	DPCSE
(R4) 75% of PO of large-scale public irrigation schemes collect adequate water and O&M charges	%0	25%	40%	55%	65%	75%	Project quarterly and annual reports	Project M&E	UC-PDIAIM, SONADER
B: Infrastructure for Irrigated Agriculture									
(R5) No rehabilitation/creation work straddles the rainy season	2	0	0	0	0	0	Project quarterly and annual reports	Project M&E	UC-PDIAIM, SONADER
(R6) Planned priority feasibility studies for Phase III are completed	Not applicable			7	7	_			

Arrangements for results monitoring

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C: Agricultural Supply Chains (R7) All rice rehabilitated area is sown with improved seed	100%	100%	100%	100%	100%	100%	Project quarterly and annual reports	Project M&E	UC-PDIAIM, DPCSE, SONADER,
(R8) UNCACEM's loan reimbursement rate reaches at least 95% by the end of Phase II	%06	%16	92%	93%	94%	95%	Project and UNCACEM's quarterly and annual reports	Project M&E	UC-PDIAIM, UNCACEM
(R9) Project-built storage and packaging centers are functional	0		7	3	ε		Project quarterly and annual reports	Project M&E	UC-PDIAIM
(R10) Number of F&V producers linked to export markets has doubled by the end of Phase II	8	×	10	12	14	16	Project quarterly and annual reports	Project M&E,	UC-PDIAIM, SONADER, producer organizations
D: Project Administration									
(R11) Audits are produced on time and without major reserves	100%	100%	100%	100%	100%	100%	Project quarterly and annual reports	Audit reports	UC-PDIAIM, UNCACEM, SONADER
(R12) M&E's periodic reports are produced on schedule	Not applicable	IIA	IIA	IIV	All	ΠA	Project quarterly and annual reports	Project M&E	UC-PDIAIM
(R13) Impact studies are carried out (implementation of land tenure, social assessment, rural public expenditures)									

Arrangements for Results Framework Monitoring

System Design. Monitoring and Evaluation is a management and decision-making tool that addresses, at various levels, the needs of key stakeholders, including the project's coordination unit, but also producers, private and public partners. The Monitoring and Evaluation system involves implementation monitoring and impact monitoring.

Implementation monitoring is concerned with the progress of program activities in relation to forecasts. It provides updates on the status of the project's physical and financial implementation, as well as on difficulties/issues encountered and proposed solutions. The information gathered allows the reporting of three broad information types: (i) inputs or resources contributed by the project (cost figures by categories and components); (ii) the implementation process (timeliness and problems of work programs and procurement plans); and (iii) outputs, or the project's tangible accomplishments, as measured through direct observation and interviews of quantitative and qualitative nature.

Impact monitoring determines the extent to which the implementation of various project activities has contributed to the desired development objectives. By design, outcome indicators are hypothesized as the best proxies for the PDO. The M&E system is geared not only to measure these indicators but also to gather all relevant data, conduct (and make use of) analysis to substantiate this hypothesis. In addition, the PDIAIM being a program, the M&E system also partners with all relevant partners to gather all the necessary information and conduct (and make use of) an analysis that will help the overall program reach its intended objective.

Based on previous experience, Phase II emphasizes not an all-encompassing and centralized M&E system, but rather a network that is efficiently articulated around core M&E systems, each effective yet simple to be readily appropriated and managed by the respective implementing body. This M&E network comprises a main M&E system housed in the project unit, sharing and communicating—through common platforms (Access, GIS, other files) —information with key implementing agencies and partners, such as: DPCSE's (agricultural statistics and land registration), SONADER, UNCACEM, and the PDIAIM/CBRD-supported Rural GIS. Linking with these agencies' databases makes sense, as most use irrigation scheme as their units of inquiry. These M&E systems use and support the strengthened yet still streamlined M&E systems operated by primary beneficiaries themselves (irrigated agriculture-related producers and entrepreneurs). In addition, the project M&E system collaborates with other third parties (ONS, the Bank PREM unit) to help evaluate the program's impact.

Institutional issues. The UC-PDIAIM is responsible before the Government for implementing the project's Results Framework, i.e., running its central M&E system and enforcing the resultsbased contracts with third-party partners. The project M&E system comprises the physical M&E system and the Financial Management System (FMS). Indeed, the country's financial risk assessment requires that the project pays particular attention to financial monitoring as detailed in Appendix 7. The M&E central unit, however, is responsible for the collection, management, and analysis of data of the central database, and the production of the required M&E reports as defined in the M&E Implementation Manuals. The setup is such that the FMS report is to the Project's Coordinator and not to the head of the M&E unit, but the DAF that manages the FMS is mandated by the Coordinator to provide to the M&E unit, on pre-determined time periods, predefined information for the M&E reporting. In turn, the M&E unit is mandated to provide the FMS with information on project's outputs to prepare the financial reporting. This is a much clearer setup than the one used in Phase I, in which the head of the M&E unit was often perceived as also head of the FMS unit. The two regional units (Rosso and Kaedi) assist the M&E central unit. DPCSE will be contracted to coordinate the impact analysis of the project and perform other tasks. The communication department will be responsible for disseminating the project's results to the larger public.

Data collection. The M&E system relies on data collected at different levels, such as basecooperatives, regional socio-professional organizations and national entities. At the local level, irrigation schemes and social organizations may be the units of inquiry. Data collection instruments include records (budget and work plans, procurement plans, audits), results of studies, direct measurement and observations, including in participatory rural appraisals (areas, state of infrastructure), and interviews. The project relies on primary data as well as on secondary data collected by project staff and contracted third parties. The methods and instruments of data collection, management and analysis, as well as responsibilities of partners, are spelled out in the M&E Implementation Manual. For example, the project M&E draws on data collected by the MDRE's agricultural statistical and land administration units in DPCSE, other Government agencies, implementing agencies, and other projects. The Rural GIS, housed in a permanent public center, should facilitate the collaboration among various databases. Baseline data have been collected for the outcomes indicators and results indicators, when required.

Capacity. The PDIAIM will continually upgrade and strengthen the capacity of all staff of the M&E unit at the central and regional levels. The project will also strengthen the capacity of the MDRE's DPCSE, a key partner in the project M&E system. Because a GIS is truly efficient if built around a core system managed by a national agency, the PDIAIM will support such a core unit, in collaboration with other projects, including Bank-supported CBRD.

Annex 4: Detailed Project Description

MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

1. Project Components

Phase two has retained phase one's components, which, however, have been consolidated for more flexibility in implementation. Components' objectives, target beneficiaries, activities, and inputs are discussed below. Key results indicators are provided in the Results Framework (Annex 3) and additional details provided in project implementation manuals (PIM).

Component A: Rural Incentives and Capacity Building - US\$3.50 million (IDA: US\$2.76 million). It aims at consolidating the policy measures and incentives initiated during Phase I, and improving the capacity of national and regional rural institutions to implement the Program. It targets (a) public providers of services to policymakers and agricultural producers, such as the Ministry of Rural Development and Environment (MDRE), units of policy analysis and monitoring (DPCSE), land tenure administration (SAFC), rural infrastructure (DAR), seed quality control agencies, regional rural delegations; (b) the project's autonomous implementing agencies (SONADER and UNCACEM); and (c) producers' organizations (PO) at the national and regional levels, such as the Unions of Agricultural Cooperatives (UCAs) in Boghe, Kaedi and Foum Gleita, Mauritanian Federation of Crop and Livestock Producers (FAEM), and the Economic Interest Groups (GIEs) engaged in rice marketing and fruits and vegetables (F&V) export; and (d) private engineering bureaus engaged in irrigation development. It focuses primarily on: (1) registration of land for candidates to irrigation development; (2) collection and analysis of annual agricultural statistics; (3) capacity building activities (training, workshops, etc); and (4) analytical works related to the implementation of land tenure law and UNCACEM's strategy to diversify its sources of funds either through a foray in micro-finance or a mutation into an agricultural and commercial bank. This component will finance expenses related to: (i) consultant services; (ii) training programs; (iii) equipment and office supplies for public agencies and producers' organizations; and (iv) operating costs.

<u>Agricultural statistics</u> have improved considerably during Phase I, but need continued support to be firmly established in the MDRE.

<u>Land registration</u> covered over 36,000 ha during Phase I, but this mostly concerned more individual farms in the Traza and less the collective farmers in the Haut-Fleuve in part because the Haut-Fleuve still lacks land categorization (*schema de structure*). In addition, scores of landowners have yet to reach the final step of definite concession and land titles. The project will support the Service of Land Affairs and Cartography (SAFC) of the MDRE through a result-based mechanism to provide needed services to landowners to secure irrigated land.

<u>Capacity building</u> activities target MDRE's agencies in ways that complement support provided by other, particularly the CBRD, to the ministry, implementing agencies, producers' organizations and private sector actors. Capacity building of PO in Component A is distinct from that of sub-component C1 (discussed later) in that Component A targets PO operating at regional and national levels and focuses on helping these organizations better serve their members. Subcomponent C1 works at the farm level with cooperatives and individual farmers to inculcate them good agronomic practices. A cost-sharing arrangement will be initiated with the PO to prepare them to budget for recurrent costs.

<u>Analytical work</u> concerns a rural finance growth strategy to support UNCACEM's expansion prospects.

Component B: Infrastructure for Irrigated Agriculture - US\$24.88 million (IDA: US\$21.11 million). This key and largest component (54 percent) of Phase II pursues two primary objectives. The first is to provide technical services and investment fund to land owners to contribute, along with secure land tenure and capacity building provided in other components, to expand irrigation schemes. The second is to build the basic public infrastructure to support private investment. This component targets small-medium cooperatives and individual farmers engaged in rice production and agricultural diversification. It focuses on: (1) the technical, economic, and environmental aspects of rehabilitation, extension and creation of private irrigation schemes development initiated during Phase I; (2) priority public infrastructure identified during Phase I to improve the flow and drainage of water and the access to rural roads, electricity and basic market infrastructure; (3) R&D in water pumping; and (4) feasibility studies of investments to be implemented during Phase III. With respect to priority infrastructure, the project will collaborate with the Transport Sector Project planned for 2006. This component will finance: (i) private and public infrastructure investments; (ii) supervisory services provided by SONADER, through a performance-base mechanism; and (iii) R&D experimentations and studies requiring consultant services and operating costs.

<u>Rehabilitation, extention and creation of irrigation schemes</u>. As did Phase I, Phase II targets small collective and individual schemes and expects about 4,000 ha in rehabilitation/extension and 1,000 ha in new creations for crop diversification, with windbreaks—a standard feature of irrigation development, to add crop protection and revenues to the investment. Actual breakdown will be determined by investors' demand. To encourage individuals to participate in the program, Phase II will step up its communication efforts and offer incentives to individuals, including large ones with over 40 ha, by (i) supporting most of the costs of the feasibility study and the control of civil work and (ii) allowing investors to use their own construction equipment in the building of the infrastructure. These measures would ensure that irrigation schemes are designed and executed on sound environmental and technical grounds and that private investors make the best use of their own assets to reduce the overall cost of irrigation development.

Cooperat		tive farm	Individual with =< 40 ha		Individuals with > 40 ha	
Sources of funds	Study & control	Infrastruc- ture	Study & control	Infrastruc- ture	Study & control	Infrastruc- ture
Own contribution (at least)	0%	10%	20%	10%	20%	30%
Matching grant (at most)	100%	70%	80%	20%	80%	0%
Credit (at most)	0%	20%	0%	70%	0%	70%

Financing of rehabilitation, extension an	d creation under the PDIAIM's procedures
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At mid-term, limited rehabilitation of one large-scale public scheme could be envisioned if the following conditions are met: (i) land tenure security is clarified; (ii) the rehabilitation is

financially and economically sound, (iii) collection and use of water and O&M charges have been adequate, (iv) beneficiaries are credit worthy, and (v) beneficiaries are willing to undertake the rehabilitation (of the secondary and tertiary infrastructure) according to PDIAIM's procedures (Table above). The PDIAIM justifies the one-time, investment matching grants on environmental grounds (e.g., drainage to prevent waterlogging and salinity), poverty grounds (poor collective farms comprise dozens of families which have less than a quarter hectares to live on), and cash flow considerations in payment of long-term debt, an innovative but nonetheless risky instrument that needs for the rural credit institution if not carefully designed. The implementation manuals spell out the levels and conditions of the matching grants summarized above.

<u>Priority public infrastructure</u>. This concerns primarily priorities identified in Gorgol Watershed Feasibility Study carried during Phase I. Activities include: (1) hydraulic infrastructure to facilitate the flow of water and drainage to benefit irrigation schemes in the Lexeiba and Kaedi areas that depend on the Gorgol River; (2) rural electrification; and (3) critical rural road works to open access to Gani Dar El Barka. With respect to rural electrification, Phase II will work to increase access of project beneficiaries to rural electricity by providing incremental support, as needed, to two on-going national initiatives along the Rosso-Boghé and Boghé-Kaedi axes. The Rosso-Boghe project, financed by Spain, will provide energy to irrigate about 10,000 ha whereas the potential area is about 16,000 ha. The second project is under preparation, with financing still to be determined. Concerning rural road works, Phase II will finance the construction of works to ease access to the irrigation schemes, in accordance with the rural road strategy being developed under the sister project, the Community-Based Rural Development project (CBRD), and in collaboration with the Bank-financed Road Transport Sector Project.

<u>Experimentations in water pumping.</u> This will consolidate the R&D undertaken under Phase I to identify technologies adapted to the different levels of the Senegal River, accounting for the new configuration brought about by the completion of the Diama and Manantaly dams.

<u>Feasibility studies for Phase III</u>. Phase II will support feasibility studies needed to prepare Phase III and the groundwork for other donors to participate in the overall program. For example, the African Development Bank and Islamic Development Bank used feasibility studies carried out during Phase I to develop projects that contribute to the objective of the overall program. The Japanese International Cooperation Agency (JICA) has also expressed interest in such studies. Feasibility studies will include rehabilitation of large-scale public schemes, management plan for the Gouere watershed, and the redynamization of users of the Gouere drainage canal. In the case of Foum Gleita, a social and land tenure studies would be carried out in addition to the financial and economic feasibility study.

With regard to institutional arrangements (see also Annex 6), SONADER will assume responsibility for the supervision of project-supported rehabilitation/creation of irrigation schemes and public infrastructure. For this, SONADER will receive the customary fees it charges for supervision of studies (6 percent) and civil works (3.5 percent) through a result-based mechanism to ensure that services are provided. The PDIAIM National Coordinator will convene regular meetings (at least monthly) to review with other core implementation agencies (SONADER, UNCACEM and SAFC) the progress achieved in rehabilitation/creation.

Component C: Support to Agricultural Supply Chains - US\$10.94 million (IDA: UD\$9.15 million). It aims at providing the necessary assistance to the development of a competitive rice

subsector and a diversified agricultural base, targeting rice and horticultural supply chain participants engaged in domestic and export markets. It includes three sub-components.

C1: Support to Basic Farm Management. It aims at meeting the demands for agricultural technical and managerial support services of target beneficiaries at the farm level, such as: (a) small-medium farm cooperatives and individual farmers that have invested in irrigation development with the project's support; (b) large-scale public schemes' cooperatives to whom the Government is set to transfer the management of those schemes; (c) small women cooperatives engaged in crop diversification alongside male cooperatives; and (d) other farm cooperatives and individual farmers with identified potential for growth. This sub-component will implement activities related to the: (1) proper O&M of the newly rehabilitated and created irrigation schemes; (2) good agricultural practices in rice production; (3) good agricultural practices in crop diversification; (4) organization and management of farm enterprises; (5) support to women's cooperatives; and (6) transfer of large-scale public schemes to producers' organizations. It will finance, through results-based mechanisms, SONADER, NGOs and private service suppliers to provide extension services and farm management training to producers, and limited matching-grants to women cooperatives engaged in crop diversification.

<u>Proper O&M, good agronomic practices, and better farm management</u> are critical to long-term structural viability and profitability of the investment in rehabilitation/creation. Without them, the PDIAIM fails: degradation sets in, producers lack the mean to purchase inputs and to service their short and long-term debts, and the rural credit agency crumbles.

<u>Support to women's cooperatives</u> has long been envisioned but not systematically followed through during Phase I. Capacity building activities and extension services will open new opportunities to women. The project will work with the Bureau of Land Administration (BAF) and UNCACEM to help women's associations get access to land and credit. Phase II will provide limited matching grants to women's groups to acquire productive assets for income-generating activities.

<u>Transfer of large-scale schemes to PO</u> is a government policy that has yet to be fully implemented. As Phase II envisions the rehabilitation of some large-scale schemes, it is important that the PO meet all conditions for rehabilitation indicated in Component B.

The project will provide resources through a result-based mechanism to carry out these activities. SONADER is expected to implement these activities, but other service providers could be envisioned in complement in lieu of SONADER, should the latter fail to deliver. The project's M&E will periodically report on the performance of these service providers.

C2: Support to the Rice Subsector. It aims at sustaining the improvement of the domestic rice sector by meeting the credit needs of the sector's participants, such as seed farmers, producers, processors, and providers of agricultural custom services. It will finance the incremental source of fund needed by the rural credit agency, UNCACEM, to provide short, medium and long-term credit to the sector's participants. Thus, credit worthy borrowers would be able to finance seasonal inputs, paddy for processing, spare parts, agricultural equipment, processing machines, and storage facilities.

C3: Promotion of Agricultural Diversification. It aims primarily at increasing the participation of actors in commercial horticultural production for domestic and export markets, by taking advantage of the achievements of Phase I (cold storage and packaging infrastructure built at Nouakchott's airport and at Rosso, creation of two producers/exporter GIEs, introduction

of new irrigation systems and exports to regional and international markets). This subcomponent also builds on the new irrigation schemes financed under Component B and the production-oriented activities of C1. It targets primarily commercial farmers and entrepreneurs engaged in horticultural, animal feed, and agro-forestry production for the domestic and export markets. It emphasizes the (1) efficient management of project-built infrastructure; (2) introduction of new products and processing techniques; (3) quality control system of fruit and vegetables at the farm, packaging and port of entry/exit levels; (4) market information; (5) experimentations in irrigation systems baseline studies and market information system. It supports civil works, consultant services for market studies and technical assistance, matching grants in pilot introduction programs, credit through UNCACEM to finance production and market operations and limited R&D experimentations through performance-based service contracts with SONADER and CNRADA.

<u>Management of the project-built facilities.</u> Each facility must be tested during the guarantee period (first year after completion) to identify eventual flaws that the contractor will be required to correct. The project will bear the cost of the tests, with users being charged a minimal user fee on par with the likely thin export volume. Shortly thereafter, however, management of the facilities will be contracted out to a private company in a form to be finalized in year two of the project. This is to avoid bureaucratic red tape if management were to be given to a public agency, or conflict of interest and squabbling if management were to be given to the GIE or any other users' organization.

<u>Introduction of innovative techniques</u> emphasizes pilot operations on a limited scale in collaboration with other implementing agencies, such as SONADER, CNRADA and the plant protection agency. It includes introduction of plant materials, production and packaging techniques and equipment targeting both export and domestic markets. Cost-sharing is envisioned in the introduction phase and credit during the production and export phase. UNCACEM's line of credit accounts for this credit need. Consultant services will be provided to provide technical assistance in these and other related diversification activities.

<u>Quality control management</u> will be introduced at all levels: farm, processing center and points of export/import entry points. The project will develop quality control procedures in collaboration with local agencies (e.g., crop protection agency). These will include methods and techniques to establish traceability, a requirement in export markets. This will be complemented by tests of maximum residue limits (MRL).

<u>Market information</u> activities include information mission in export markets, materials showcasing market opportunities for Mauritanian exporters, dissemination of market information, including prices and market conditions in domestic markets. The project will make use of local media (written press, radio, TV) newsletters and posting in its website to enhance overall project's communication.

<u>**R&D</u>** is envisioned in collaboration with CNRADA to test irrigation and production techniques developed elsewhere. <u>Studies</u> include a soil aptitude map to guide F&V producers, categorization (size, structure, and prospects) of local markets to complement that of Nouakchott, and transport networks (including costs) linking major production zones to local consumption markets.</u>

The PDIAIM Coordinator will delegate responsibility to a Nouakchott-based specialist within the central PIU to supervise regional centers at Rosso and Kaedi and coordinate the implementation of this sub-component at the national and regional levels. The two regional centers will be relocated within the MDRE's regional delegations at Rosso and Kaedi to enhance the sustainability of the project's results. To this end, the project envisions the rehabilitation or construction of offices within these delegations.

Component D: Project Administration - US\$7.34 million (IDA: US\$ 5.98 million). It aims at ensuring the proper coordination of project activities, implementation of the social and environmental safeguards, and the monitoring of activities and evaluation of impacts. It includes the following sub-components.

D1: Project Management and Coordination. This supports activities related to the project's administration and coordination, including its communication policy. It will finance training programs for capacity building, equipment, office supplies, and computerized financial management system, and operating costs of the project implementation unit (PIU).

The PDIAIM Coordinator assumes responsibility for overall project implementation and not just for activities carried out at the level of the central PIU. In particular, he will coordinate, through regular scheduled meetings, the activities of SAFC (land tenure), UNCACEM (credit), and SONADER (technical supervision) to ensure that the rehabilitation/creation program is carried out on a timely basis. He will also pay close attention to the implementation of the project's communication strategy as well as that of the safeguards measures. All three areas were identified as needing improvement in the Phase I's ICR.

The project will implement a communication strategy to disseminate the project's activities, approaches, and results, through rural radio, national radio, mobile video and television. The institutional arrangements that concern the Coordination Unit are described in Annex 6 and detailed in the implementation manuals. The financial management system of the project, a key element of this component, is described in Annex 7 and detailed in the financial system implementation manual.

D2: Monitoring and Evaluation. It aims at strengthening project management, reporting and monitoring of project's outcomes, triggers, safeguards and results. The project emphasizes an effective yet simple M&E system that is readily appropriated by implementing agencies and the Government. The KPI are assessed by quantitative measures or qualitative observations based on clearly defined data collection instruments and analytical methods detailed in the M&E implementation manual. The system relies on the PIU's M&E unit and collaborative third parties to provide an objective assessment of the project's performance and the overall PDIAIM's impact. The project will finance: consultant services, equipment, office supplies, and computerized network, including a rural GIS, and operating costs.

The M&E unit is responsible for producing the periodic scheduled M&E reports to benefit all key stakeholders, and for supervising studies and surveys documenting the project's progress and impacts and contributing to knowledge about the rural sector. Notably, it will supervise surveys documenting the implementation of the land tenure measures, estimating the impact of the project on rural employment in the valley, and supervising analytical works to enhance knowledge of the rural sector, such as rural public expenditure review (PER) and medium-term expenditure framework (MTEF). To do so, the unit will contract and collaborate with local and international agencies and consultants, such as DPCSE, BAF, ONS, World Bank PREM unit, and academic units.

D3: Environmental and Social Safeguard Measures. It aims at ensuring the implementation of the environmental and social safeguard measures identified in the three safeguard documents. The central PIU will have the responsibility for the implementation of these mitigating measures

through, and in collaboration with, public agencies (Departments of Environment, Health, and others), NGOs and private firms as needed. It will finance: civil works related to dam safety and forage of wells, material and equipment related to aerial seeding, reforestation, and fire breaks, training, consultant services for studies, and operating costs. The project also provides provision related to the control of granivorous birds and pests that ravage crops. Acting upon a recommendation made during implementation of the preceding phase, the project will put a safeguard specialist within the PIU to coordinate the implementation of the environmental and social safeguard measures. Annex 10 on Safeguard issues provides details about the activities that will be implemented under this component.

2. The Line of Credit - LOC (US\$10.78 million)

Under the PDIAIM, agricultural credit cuts across components and sub-components, rather than being a component itself. The PDIAIM's credit activity is related to a Line of Credit (LOC) to be on-lent to one or several private finanancial intermediary institutions (FIL), which must rely on standard bank practices to provide non-subsidized credit to a broad range of agricultural supply chains' participants in the project area: the Senegal River Valley. The LOC is open to all financial institutions that comply with the eligibility criteria of Bank Operation Policy (OP) 8.30, which provides specific guidance on (a) objectives of operation; (b) policy framework; (c) coordination with the International Finance Cooperation (IFC); (d) PFI (Participating Financial Intermediary) eligibility; (e) usage of Bank funds; (f) appraisal of FIL; (g) onlending terms; and (h) monitoring. Todate, other than UNCACEM, no other financial institution in Mauritania is interested in financing agricultural under the terms of the PDIAIM. As with Phase I, the Bank conducted a review of the LOC of Phase II from the perspective of compliance with the Bank's OP 8.30 that governs the Bank's financial intermediary lending (FIL). The review indicates that a LOC provided to UNCACEM is in complicance with OP 8.30. However, should a FIL emerge in the future, IDA will examine the possibility of extending also a LOC to such an institution from the remaining funds to provide, alongside UNCACEM, agricultural credit to project's beneficiairies. A summary of the appraisal of the LOC is provided below. The review of the LOC and the clarifications requested by the reviewer are in the project files.

Overview of the Banking and Financial Sector

Only a small portion of the population (about 200,000 people, i.e., less than 18 percent of the population over 19 years old) has an account relationship with various financial institutions (banks, micro finance units, Post Office). The financial sector has great difficulties in covering the country's needs for financial services and, more specifically, the needs for financing investments and foreign trade. Mauritania's banking sector consists of eight commercial banks – four are the privatized successors of failing state banks and the other four were newly established banks. The eight banks have a combined total client base of 123,000 clients. The privatized bank with the largest client base is the *Banque Mauritanienne pour le Commerce et l'Industrie* (BMCI), created in 1986 with 38,000 clients. The *de novo* bank with the largest client base is Banque pour le Commerce et l'Industrie (BCI, created in 1999) with 17,500 clients. As the banks are closely linked or even controlled by business conglomerates, they focus primarily on the needs of their own group's associates and are not really extending services to the rest of the economy. Only two banks have branches in regional capitals.

In addition, credit distribution is hampered by less than reliable business accounting practices and by underdeveloped legal, judicial, and fiscal systems. Banks' dislike for paying interest on deposits together with wariness of the public towards commercial banks (supported by the nontransparent management style of the banks), have an adverse effect on the volume of deposits collected. With the introduction of new currency bills, the Central Bank is trying to encourage the public to open bank accounts.

Micro and Rural Finance

Micro finance units are numerous outside Nouakchott – especially in rural areas – but are scattered and of variable quality due to a lack of clear status and an adequate regulatory framework. The existing applicable law (under review) covers only the case of "mutual units" and ignores the non-mutual ones which consequently have no supervision. An important effort, within the framework of the fight against poverty, has been recently launched and, pending its outcome, the micro finance sector remains fragile and the professional capacity weak. However, two networks are sizeable and professional and are both regulated by the Central Bank: one is linked with the State (CAPEC), but the other (UNCACEM) is private and autonomous. Some institutions, specializing in small-size credit distribution to women, have positive achievements.

The social security agency (*Caisse Nationale de Sécurité Sociale*-CNSS), which could be one of the leading players of a financial market to be created, is in the process of a complete financial restructuring including restoration of its statutory reserves which were severely reduced during the 1990s. The Post Office is the only financial institution present in each of the Mauritanian regions. Through its postal check books and its saving accounts, it provides counter services which are appreciated but of limited usage.

Regulation of the Financial Sector

There is a meaningful regulatory framework which is fairly adequate but still lacking comprehensiveness. Monetary authorities lack the means, both human and technical, to properly supervise compliance with regulations, especially those of a prudential nature. Liberally-inspired foreign exchange regulations do not appear to be well-fitted to the scarcity of foreign currencies and this has contributed to currency speculation initiated by the sizeable informal sector. Recently, however, Central Bank authorities have begun to crack down on non-compliant "bureau de change" which have until recently contributed to such a speculation.

<u>Prevailing interest rate regime.</u> The supply of and demand for funds in the commercial banking sector is preponderantly short-term; lending is oriented mainly to financing domestic trade and commerce, with a fairly high collateral requirement (about 200 percent collateral cover). Interest rates on short-term commercial loans charged by the commercial banks to their best clients range from 15 to 18 percent; the interest rates charged by UNCACEM on seasonal crop production, cultivation and commercialization loans for rice are competitive with the market and average at about 15 to 16 percent.

The bulk of deposits (about 90 percent) with commercial banks is predominantly short-term sight and demand deposits (on which banks do not pay any interest). Fixed-term deposits (up to 2 years maturity) could fetch interest rates between 6–8 percent, but both the supply and demand for this type of deposits is rather limited. Banks do not have a demand for medium-term deposit funds in large measure because of both their inability and lack of interest to match this type of funds with medium- to long-term loans. Inter-bank loans are at 11 percent p.a., and advances from the Central Bank to meet deficiencies in mandatory reserves carry a 7 to 8 percent interest rate. Mandatory reserves on deposits are currently at 8 percent, up from the previous level of 4.5 percent. With respect to banks' excess liquidity positions, the longest maturity for treasury bonds and bills offered by the Central Bank is eight weeks, with the other maturities at two weeks and six weeks, with a yield range of 6 to 8 percent.

<u>Prevailing conditions on access to agricultural credit.</u> In general, commercial banks in Mauritania are averse to the risks posed by loans and credits to the agricultural sector and, traditionally, have focused their banking services on loans to the larger commercial and corporate sectors which are well-positioned to provide acceptable and readily-marketable security, usually at 200 percent cover of the loan amount. Moreover, because of the dearth of even medium-term funds and the preponderance of short-term sources of funds bank lending is almost exclusively short-term. There is one commercial bank that has provided medium-term credit to a fruit-and-vegetable producer-exporter, to which UNCACEM has co-financed a long-term credit for its infrastructure and equipment investment. This enterprise, with direct foreign investment currently exports to Europe through shipment to Senegal. Another commercial bank has provided a long-term loan to an individual to support the rice milling investment. The funding for this 10-year loan came from the bank's participation in the Euro 3.0 million fund pool provided by European Investment Bank, where the Government of Mauritania is absorbing foreign exchange risk.

Given the agriculture risk-averse position of commercial banks, and the lack of access to local medium and long-term funds, it is not realistic to expect commercial banks to now change from their adverse position in Phase I and to participate actively and increasingly in financing agricultural credit during Phase II. While the progressive development and commercialization of the crop-diversification component may present new commercial opportunities (similar to the expansion and commercialization of the traditional rice sector) for banks in the down-stream marketing/distribution and processing agri-businesses, commercial banks' engagement will depend on their own perception of credit risks, technical capacity in evaluating and administering such credits, and availability of acceptable collateral.

Rationale and Design of the LOC under Phase II

Project's quantitative and financial targets. Similar to Phase I, Phase II targets small collective and individual schemes and expects about 4,000 ha in rehabilitation/extension and 1,000 ha in new creations for crop diversification, with windbreaks-a standard feature of irrigation development, to add crop protection and revenues to the investment. Actual breakdown will be determined by investors' demand. To encourage individuals to participate in the program, Phase II will step up its communication efforts and offer incentives to individuals, including large ones with over 40 ha, by (i) supporting most of the costs of the feasibility study and the control of civil work, and (ii) allowing investors to use their own construction equipment in the building of the infrastructure. These measures would ensure that irrigation schemes are designed and executed on sound environmental and technical grounds and that private investors make the best use of their own assets to reduce the overall cost of irrigation development and, as such, ensures the financial viability of the investment and compliance by investors to contribute to the investment. On the other hand, the matching grants available to borrowers/investors for certain activities and projects eligible for financing are handled and administered by a separate entity/agency, thus precluding the possibility of a borrower confusing the features of the matching grant and the obligation to repay loan financing. As a rule, the credit provided by UNCACEM loan does not exceed 70 percent of the total investment cost.

The projected project cost needed to support the attainment of the target of 5,000 ha in irrigation development is US\$19.31 million. Of this, the long-term credit requirement amounts to about

US\$7.41 million. In addition, the project provides US\$3.37 million for medium and short-term credit for rice production, commercialization (marketing and storage) and for crop diversification into fruits and vegetables.

Phase II will provide a LOC to UNCACEM, an eligible financial intermediary and the only financial institution focusing on agricultural credit. The LOC of US\$10,766 million provided to UNCACEM includes US\$7.41 million, representing 100 percent of the long-term credit needs for investments in infrastructure and US\$3.31 million, representing 50 percent of the total incremental short-term and medium-term credit needs for rice production and crop diversification. The allocations for support to credit operations are summarized in the table below. However, one should note that while UNCACEM is required to provide long-term credit for development of irrigation infrastructure, its lending to support other activities in irrigated agriculture is determined on the basis of its clients' needs and prudential requirements.

	Short-term	Medium-term	Long-term	Total
Component B – irrigation schemes	0	0	7,407	7,407
Component C1 – rice	1,500	700	372	2,572
Component C3 – diversification	400	398	0	798
Total	1,900	1098	7,779	10,777

Breakdown of LOC to UNCACEM under Phase II (US\$'000)

<u>Eligible end-borrowers</u>. The eligible end-borrowers of the credit facilities available from UNCACEM are cooperatives of small land-holding farmers with an average of 0.5 ha of irrigated land for each farm-family in the cooperative, individual farmers with less than 40 ha of irrigated land farmed and cultivated, and individual farmers with more than 40 ha of irrigated land under cultivation in irrigated-systems areas.

Interest rates from Government to Credit Agency and from Credit Agency to end-borrowers.

The Mauritanian Government will make the Line of Credit available to UNCACEM under the terms and conditions of a Subsidiary Loan Agreement (acceptable to and approved by IDA) at 4.5 percent and repayment period of principal of 12 years with two years grace period following the last drawdown, but with annual interest payment following each drawdown.

UNCACEM will make loans to eligible borrowers under the eligibility criteria, and terms and conditions approved under the IDA-UNCACEM Project Agreement at interest rates that reflect market conditions. Loan disbursements to borrowers are in accordance with the Credit and Operations Manual that are in force. Currently UNCACEM provides credit at the following conditions.

- Short-term crop cultivation and production loans: 15 percent p.a., with loan releases scheduled in accordance with crop production activities and repayment of principal due within two months after the end of the harvest period.
- Short-term commercialization loans: 15 percent p.a., with repayment of principal due in six months.
- Medium-term loans: 15 percent p.a., with amortization of principal scheduled for payment on an annual basis.
- Long-term loans: 15 percent p.a., with a loan maturity/repayment period of up to eight years from harvest of the first crop following the end of civil works.

Overview of UNCACEM

The Union Nationale des Coopératives Agricoles de Crédit et d'Epargne de Mauritanie (UNCACEM) was created in 1992 as an autonomous credit agency owned by its cooperativemembers, the Caisses Agricoles d'Epargne de Credit (CACE) at Rosso and Kaedi. The CACEs are regional federations of local cooperative organizations of farmers in the Senegal River Valley. The two CACEs cover the four regions (wilayas) in the Senegal River Valley. UNCACEM's headquarters are in Nouakchott, but all loans are initiated and processed by the regional CACEs. UNCACEM is governed by a Board of Directors, made up of members of the CACEs. UNCACEM operates under the guidelines of an Operations Manual, which the Association has found adequate.

UNCACEM is in good regulatory standing. As a registered Specialized Financial Institution under the Mauritania's 1998 Banking Law, UNCACEM is subject to prudential regulation by the Central Bank of Mauritania. Among others, UNCACEM is mandated to submit an audited financial statement annually, and comply with the Central Bank's prudential standards on classification, aging and provisioning of loan accounts. UNCACEM is examined annually by supervisors from the Central Bank of Mauritania and a Financial Management Specialist on IDA's project team. There is no instance on record where UNCACEM has been cited for noncompliance.

Each end-borrower (smallholder farmers in a collective or cooperative group and individual farmers) must be member of an Agricultural Credit and Savings Association (CACE). The membership bases of the two CACEs which constitute UNCACEM (as of end December 2003) are summarized below:

Number of Members	Cooperatives	Individuals	Total
CACE – Trarza	233	533	766
Total number of individual members of cooperatives	10,000		
CACE – Haut Fleuve	333	45	378
Total number of individual members of cooperatives	15,000		
Total, Members of CACE	566	578	1,144
Outreach: total number of borrowers (individual members in coops and individual farmers)	25,000	578	25,578
Loans Outstanding (in million UM)	Short Term	Medium Term	Long Term
CACE – Trarza	897.44	2,075.63	2,973.94
CACE – Haute Fleuve	256.83	744.05	1,000.87
Total Loans	1,154.27	2,819.67	3,975.94

Overview of UNCACEM's client base and credit operations:

The number of individual borrowers who are members of the CACE – Trarza far outnumber the base cooperative members of the CACE (although the total number of beneficiaries/loan recipients from the base cooperatives will be more numerous). The reverse is true for borrowers from the CACE – Haut Fleuve region of the valley.

Prior to the PDIAIM, UNCACEM provided credit only for seasonal inputs and limited mediumterm credit for pumping equipment in rice production. With the PDIAIM, UNCACEM has been able to diversify its activities to cover all activities in irrigated agriculture, and investor's needs in short-, medium- and long-term credit. The nature and amount of investment credit requirements for agriculture production and marketing, commercialization, rehabilitation, and diversification drive the amounts of loans outstanding as of the end of 2003 in short-term loans, medium-term loans and long-term loans.

Performance of UNCACEM

Under Phase I, the LOC to UNCACEM was determined by the Bank and IFC to be in compliance with the requirements of OP 8.30, as UNCACEM already showed remarkable improvement in loan recovery performance since 1997, and the need for a substantial increase in interest rates (that were below market rates) in order to achieve operational and financial self-sufficiency.

However, for UNCACEM to participate in the activities of Phase I, it was further agreed that UNCACEM will have:

(a) furnished to the Association, before July 31, 1999, a non-qualified audit report for its fiscal year 1998, undertaken by auditors acceptable to the Association;

(b) appointed, before July 31, 1999, an independent auditor, acceptable to the Association, under terms of reference acceptable to the Association, for the purpose of auditing its accounts until the completion of the execution of the Project;

(c) entered, before December 31, 1999, into an agreement with a consultant firm acceptable to the Association, for consultant services under the Project, in form and substance acceptable to the Association;

(d) maintained at all times, until the completion of the execution of the Project qualified and experienced staff, acceptable to the Association, in the positions of director general and expert in charge of finances/accounting.

(e) utilized all amounts received in repayment of agricultural credit provided under the Project to finance further agricultural projects undertaken by private and/or cooperative community customers in the Project Area.

It was further decided that UNCACEM would continue to evaluate and assess the credit risks in the projects submitted to it for financing under the Project. The design of Phase I adequately provided for appropriate institutional capacity building and strengthening, especially of related project implementation agencies and UNCACEM. Key government agencies involved in the Project, such as MDRE and SONADER played indispensable roles especially in identifying the eligibility of applicants for the investment subsidy schemes envisioned, facilitating the use of qualified engineering bureaus to carry out the feasibility studies, and providing the counterpart matching grants as subsidy payments. However, responsibility for credit risk assessment and exposure will still rest with UNCACEM.

UNCACEM has complied with all these requirements and achieved financial self-sufficiency in 2002 and 2003, a trigger from moving from Phase I to Phase II.

UNCACEM's use of the Phase I's LOC

Phase I's LOC was instrumental in helping UNCACEM meet two important new needs, in rice marketing and agricultural diversification. UNCACEM has provided credit to the private rice millers and producers' economic interest groups (GIE) engaged in rice marketing. This activity helped sustain the quality of domestic rice, while providing rice producers with adequate price incentives to improve productivity. The LOC also helped UNCACEM cover the needs of the nascent fruit and vegetable export drive. Loans were provided according to UNCACEM's implementation manual, in compliance with all prudential and other relevant laws and regulations. The reimbursement rate (averaging 93 percent) is satisfactory given that many producers suffered adverse weather conditions in the early 2000s.

	Number of Loans	Loan amount (UM'000)	Average loan (UM'000)	Repayment rate
Collective farmers	113	342,201	3,028	93%
Individuals with < 40 ha	101	316,000	3,129	92%
Individuals with > 40 ha	62	409,349	6,602	90%
Rice marketing	42	866,247	20,625	98%
Agricultural diversification	6	320,411	53,402	100%
Total	324	2,254,208	6,957	93%

Source: UNCACEM (January 2005)

Disbursement of the LOC was slow at the start of Phase I, but increased later. IDA's LOC accounts for 60 percent of UNCACEM's portfolio, while UNCACEM's own resources account for 40 percent and other sources 10 percent.

More importantly, UNCACEM was able to meet the two performance measures of operational and financial self-sufficiencies. Operational self-sufficiency is achieved when revenues cover operational expenses (administrative and salaries). Financial self-sufficiency is achieved when revenues cover operational expenses and financial charges (sources of capital and market-based return on capital, here 16 percent).

UNCACEM's Indicators of	Operational and Financial Self-Sufficiency , 1999-2003
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Millions UM	1 999	2 000	2 001	2 002	2 003
Operational Self-sufficiency	(56.38)	25.25	40.28	112.78	183.66
Operational Self-sufficiency Ratio	69%	116%	120%	152%	172%
Financial self-sufficiency	(80.32)	(6.49)	(23.58)	12.04	25.94
Financial self-sufficiency Ratio	61%	97%	9 1%	104%	106%
Social Capital at end of period	138.54	149.64	172.01	201.29	231.95
Return on social capital	-41%	12%	2%	22%	27%

Source: UNCACEM's audited accounts, 1999-2003

Impact of Line of Credit on Competitive Environment in the Financial Sector

Phase I's Line of Credit to UNCACEM has not curtailed the competitive environment in the Mauritanian financial sector. The commercial banks, by and large, are still focused on short-term credits for commerce and trade, or to agriculture producers with very large farms (who have the tangible collateral to provide, and who usually belong to the same business groups that own the banks). UNCACEM's focus continues to be on the broad range of agricultural producers and entrepreneurs in irrigated agriculture: small-holder farmers in cooperative associations, and small (< 40 hectares) and medium-size (> 40 hectares) landholders, and the millers, storage facility operators and rice buyers and sellers in the irrigated areas of the Senegal River Valley. UNCACEM and the commercial banks in the financial sector are not competing for the same categories of customers/borrowers. In effect, UNCACEM is demonstrating that the risks of financing agriculture production can be adequately mitigated and covered, in a financially-sustainable manner – so much so that at least two commercial banks have co-financed with UNCACEM medium- to long-term credit to a large-scale rice miller and a large-scale fruit and vegetable producer-exporter.

Implementation and Monitoring Arrangements for Phase II's LOC

<u>Relationship between the Government and the UNCACEM</u>. UNCACEM is subject to prudential regulation by the Central Bank of Mauritania as a Specialized Financial Institution under the Banking Law. Among others, UNCACEM must submit an audited financial statement annually, and comply with the Central Bank's prudential standards on classification, aging and provisioning of loan accounts.

<u>Monitoring of UNCACEM</u>. Monitoring of UNCACEM is embedded in the project's M&E and fiduciary requirements (see Annexes 3 and 7).

- UNCACEM's financial self-sufficiency is one of the project's development objectives (PDO), which is assessed annually on the basis of audited reports.
- UNCACEM's loan repayment rate is a key intermediary result.
- Repayment of the LOC by UNCACEM is a trigger from moving from Phase II to Phase III.

<u>Reporting requirements for UNCACEM</u>. The Project Agreement between IDA and UNCACEM mandates UNCACEM to have its financial statements (balance sheets, statement of income and expenses and related statements), including other related records and accounts for each fiscal year audited by independent auditors and using consistently applied auditing standards acceptable to IDA.

UNCACEM is also required to furnish IDA certified copies of the audited financial statements within six months after the end of each fiscal year.

UNCACEM is required to submit and furnish to IDA a financial monitoring report (FMR), on a quarterly basis, on; (i) sources and uses of funds both for the quarter and cumulatively, showing separately funds provided under the project with explanations on variances between actual and planned uses of funds; (ii) description of physical progress in project implementation, both for the quarter and cumulatively, and with explanation of variances between actual and planned implementation; and (iii) report on the status of procurement under the project.

The subsidiary loan agreement between UNCACEM and the State requires UNCACEM to make available to IDA, on an annual basis, copies of UNCACEM's reimbursement of the LOC to the Government and all accompanying documents of these payments. UNCACEM provides the project quarterly reports and an annual audit report by an external auditor.

Annex 5: Project Costs

MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

Project Cost By Component and/or Activity	Local US \$million	Foreign US \$million	Total US \$million
A: Rural Incentives and Capacity Building	1.80	1.34	3.14
B: Infrastructure for Irrigated Agriculture	4.07	18.66	22.73
C: Agricultural Supply Chains	3.59	6.33	9.92
D: Project Administration and Safeguards	3.51	3.14	6.65
Total Baseline Cost	12.97	29.47	42.44
Physical Contingencies	0.31	0.47	0.78
Price Contingencies	1.44	2.00	3.44
Total Project Costs¹	14.72	31.94	46.66.
Interest during construction	0	0	0
Front-end Fee	0	0	0
Total Financing Required	14.72	31.94	46.66

Note: Identifiable taxes and duties are US\$4.05 million, and the total project cost, net of taxes, is US\$42.60 million. Therefore, the share of project cost net of taxes is 90.49 percent.

Project Cost By Component and/or Activity	Indicative Costs (US\$million)	% of Total	Bank Financing (US\$million)	% of Bank Financing
A: Rural Incentives and Capacity Building	3.50	7.5	2.76	78.9
B: Infrastructure for Irrigated Agriculture	24.88	53.3	21.11	84.9
C: Agricultural Supply Chains	10.94	23.4	9.15	83.6
D: Project Administration and Safeguards				
-	7.34	15.7	5.98	81.5
Total Project Costs	46.66	100.0	39.00	83.6

Project financing

Annex 6: Implementation Arrangements

MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

Phase II uses the core institutional arrangements implemented during Phase I. Overall responsibility for project implementation will rest with the Ministry of Rural Development and Environment (MDRE). Policy coordination of the PDIAIM will be handled by an Interministerial Coordinating Committee. Guidance will be provided by a Project Steering Committee chaired by the Ministry of Economic Affairs and Development (MAED). The implementation manuals detail the implementation arrangements for all key participants in the project.

The Project Coordinating Unit ("Unité de Coordination du PDIAIM" or UC-PDIAIM) will be responsible for overall project management and coordination, financial management and monitoring and evaluation. The UC-PDIAIM will collaborate with other public agencies, NGOs and private enterprises to provide assistance to beneficiaries, to implement safeguard measures and evaluate and to monitor the project's performance. In particular, the UC-PDIAIM will ensure that private irrigation development program is implemented on time by actively engaging the collaboration of the other key agencies involved in rehabilitation: the service of land registration (SAFC), which works closely with the Bureau of Land Affairs (BAF), SONADER, and UNCACEM. It will also ensure that the PDIAIM develop an effective communication.

SONADER will have technical oversight of the feasibility studies' control and implementation of private and public irrigation infrastructure supported by the project, and provide assistance to producers in extension and farm management services. For its technical oversight of irrigation infrastructure development, SONADER will receive the customary fee established in its contract-program, which is 6 percent for studies and 3.5 percent for civil works. It will develop with the UC-PDIAIM a work program for extension services. In both cases, however, a resultbased mechanism will be put in place with performance indicators to evaluate SONADER's performance and determine the allocation of funds to SONADER's special account.

UNCACEM, which performed well during Phase I, will handle credit for investment in irrigation development, crop production, processing and storage (Mauritanian commercial banks are still not ready to take on long-term loans or to cater to short-term credit needs of small and medium producers). It will receive a line of credit (LOC) determined on credit needs for irrigation development, production, processing, and marketing of agricultural products.

<u>Financial management</u>. The financial management (FM) of the project will continue to be carried out separately by the UC-PDIAIM and the two autonomous implementing agencies: UNCACEM and SONADER. Each entity has set up and developed during Phase I an acceptable Finance Department headed by a Director of Administration and Finance (DAF) and supported by accountants. Each DAF will be responsible for (a) preparing activity plans, monthly Special Account (SA) reconciliation statement, and quarterly Statement of Expenditures (SOEs), Withdrawal Schedule, quarterly financial monitoring reports (FMR), and annual financial statements; (b) ensuring that the project financial management arrangements are acceptable to the Government and IDA; and (c) timely submission of these reports and statements to the GIRM and IDA. <u>Flow of funds</u>. The overall project funding will consist of IDA Credit and Counterpart Funds. With respect to banking arrangements, IDA will disburse the credit through three (3) Special Accounts (SA) opened and operated by the implementing entities. Each entity will maintain (i) a SA in US Dollars to which the initial deposit and replenishments from IDA funds will be lodged; (ii) a Current (Draw-down) Account in Ouguiyas to which drawdowns from the SAs will be credited once or twice per month in respect of incurred eligible expenditures. Following the immediate payments of eligible expenditures, the balance on these accounts should be zero; and (iii) a Current (Project) Account in Ouguiyas to which Counterpart Funds will be deposited. Interest income will be deposited to the respective accounts.

<u>Financial reporting</u>. Besides quarterly FMRs, all bank accounts will be reconciled with bank statements on a monthly basis by each Finance Department. A copy of each bank reconciliation statement together with a copy of the relevant bank statement will be reviewed regularly with the FMRs by the external Auditors. The report-based disbursement method will be applied only after a satisfactory assessment carried out by the Bank FMS within the first twelve implementation months. Meanwhile, the project will use the transaction-based disbursements procedures (i.e., direct payment, reimbursement, and special commitments), as described in the World Bank Disbursement Handbook.

<u>Audits</u>. Each entity will prepare and submit to IDA Audited Project Financial Statements within six months after year end. <u>By Credit Effectiveness</u>, independent and qualified external auditors will be appointed by each entity on the basis of Terms of Reference (TORs) acceptable to IDA. The auditors will audit the project accounts and financial statements in accordance with International Standards on Auditing (ISAs). The audit reports will include a single opinion on (i) the Audited Project Financial Statements including quarterly FMRs, (ii) the accuracy and propriety of expenditures made under the SOE procedures and the extent to which these can be relied upon as a basis for loan disbursements, and (iii) the Special Accounts.

Annex 7: Financial Management and Disbursement Arrangements

MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

A. SUMMARY OF FINANCIAL MANAGEMENT ASSESSMENT

Implementing Entity

This second phase of PDIAIM will be implemented by former entities, i.e., SONADER, UNCACEM and a Coordination Unit (UC). Each entity will be in charge of all aspects of financial management of the project with additional consolidating responsibility to be played by the UC. Thus, the Project will benefit from its previous FM capabilities in term of managing IDA funds. Only appropriate revision and up-date of the main information system organization (implementation manuals and accounting and financial software) should be implemented before the effectiveness to better match with the project's new structure.

Staffing

The existing human resources are adequate to carry out the financial management tasks for the second phase of the project. No more change in quality and quantity of existing staff is required as a condition of effectiveness, provided this staff is maintained until effectiveness.

Risk Analysis

The Country Financial Accountability Assessment (CFAA) revealed that the systems for planning, budgeting, monitoring and controlling public resources in Mauritania are improving but remain at such a level that they do not provide sufficient reasonable assurance that funds are used for the purpose intended. The risk of waste, diversion and misuse of funds was assessed as "partially high" but is quite moving to "moderate" given ongoing progress. The overall project risk from a financial management perspective is, therefore, considered relatively low. Nevertheless, various measures to mitigate these risks have been agreed upon. The financial management arrangements below are designed to ensure that funds are used for the purpose intended, and timely information is produced for project management and government oversight, and facilitate the compliance with IDA fiduciary requirements.

Control Risks

The main control risks, ratings and mitigating measures are tabulated below. The project risk from a financial management perspective is considered "moderate" provided the risk mitigating measures below are properly addressed.

Control Risks	Risk Rating	Risk Mitigating Measures
Implementing Entity As a follow up of the first phase, PDIAIM II will build and capitalize on the existing capacity of each implementing agency but will need to reinforce its management with an update of the FM system (Implementation manual and accounting & financial software).	М	The FM System (including the integrated accounting and financial software and implementation manuals) will be revised and updated according to the new structure of the 2^{nd} phase
Flow of Funds	Risk Rating	Risk Mitigating Measures

D. 1 MOE (Tricer Dublic)	N	(a) The MOE will establish clear measure
Delays in transfer of funds from MOF (Trésor Public) to PDIAIM in respect of Counterpart Funds	М	 (a) The MOF will establish clear procedure and service standards for funds transfer to PDIAIM II that meet the FM requirements, and monitor compliance with the procedures and service standards (b) Follow up by the DAFs
Staffing a) The turnover at SONADER FM staff may compromise its capacity.	М	a) Specific incentives are expected to be discussed with FM staff to reduce this risk.
b) The FM staff is no longer used to FMR routine; this may slow down the move to the report-based disbursement method.		b) Training and capacity building activities are required to enable FM staff to face this challenge accordingly and timely.
Accounting Policies and Procedures Adequacy of controls over the preparation and approval of transactions, payments, basis of accounting, accounting standards, cash and bank transactions, project assets, etc.	N	 a) Control procedures will be reinforced in the revised manual of financial and administrative procedures. b) FAPM will be regularly updated according to audit recommendations. c) Accurate basis of accounting will be used. f) Fixed Assets Register will be established. e) Contract Register will be maintained.
Internal Controls a) Internal controls may not be fully complied with.	М	a) Due segregation of functions and clear manual of procedures should considerably reduce this risk.
External Audit Project audit reports will be in arrears particularly those related to quarterly FMRs.	Ν	 a) Annual external audit will be undertaken on TORs acceptable to the Bank. b) Relevantly qualified external auditors will be appointed by each entity. c) Annual audit reports on the financial statements will be submitted to the Bank within six (6) months after year-end; quarterly audit review reports will be required on FMRs.
 Reporting and Monitoring a) Management report will not be prepared timely. b) Bank Reconciliation Statements will not be prepared timely. c) Budget monitoring: Comparison of actuals with budget will not be carried out on a regular basis. 	М	 a) Annual and quarterly financial statements and FMRs will be produced. b) Financial statements will be produced in a timely manner for planning, control and decision-making purposes. c) A Financial Management Consultant will be retained to advise and assist on the revision and update of the project's Financial Management System. d) The new system will have the capability of linking physical and financial data. e) Quarterly reporting arrangements, including contents of reports, will be documented in the FAPM. f) Bank reconciliation statements will be prepared on a monthly basis. g) Reports comparing budget with actual expenditures will be prepared on a monthly basis and reviewed regularly.

	Systems ect's information system need to be erms of timeliness and accuracy	М	a) Appropriate efforts are expected to confirm progress underway in generating FMR and also the stress on the consolidation of the existing information system
H – High	S - Substantial M - Moderate	N/L -	- Negligible or Low

Strength and Weakness

Strength: The first phase has created real internal capacity so that the 2nd phase will build and capitalize on it.

Weakness: The main weakness is related to the slow speed in mastering the FMR system and shifting quickly to the report-based disbursement method.

Information Systems

The existing computerized accounting and Financial Management Systems are well functioning and thus will only need additional update to match with the second phase's structure. In that regard, a Financial Management Consultant (FMC) will be appointed where need be to assist FM team in achieving this before effectiveness.

Financial Reporting and Monitoring

Monthly, quarterly and annual reports will be prepared by the Finance Department and submitted to project management and IDA for the purpose of monitoring project implementation.

Monthly: (i) Bank Reconciliation Statement, (ii) Statement of Cash position, (iii) Statement of expenditures, (iv) Statement of Sources and Uses of funds.

<u>Quarterly</u>: (i) Financial Reports, (ii) Physical Progress Reports, (iii) Procurement Reports, (iv) SOE withdrawal schedule, (v) Special account statement/reconciliation.

<u>Annually</u>: An annual project financial statements consisting of the following: (i) Statement of Sources and Uses of funds (by Credit Category/by Activity showing IDA and Counterpart Funds separately); (ii) Statement of Cash Position for Project Funds from all sources; (iii) Statements reconciling the balances on the various bank accounts (including IDA Special Account) to the bank balances shown on the Consolidated Statement of Sources and Uses of funds; (iv) SOE Withdrawal Schedule listing individual withdrawal applications relating to disbursements by the SOE Method, by reference number, date and amount; (v) Notes to the Financial Statements.

Indicative formats for the reports are outlined in two Bank publications: (a) quarterly FMRs in the FMR Guidelines, and (b) monthly and annual reports in the Financial Accounting, Reporting and Auditing Handbook (FARAH).

Accounting Policies and Procedures

Project accounts will be maintained on an accurate basis, augmented with appropriate records and procedures to track commitments and to safeguard assets. Accounting records will be maintained in dual currencies (i.e., Ouguiyas and SDRs or US\$). The Chart of Accounts will facilitate the preparation of relevant monthly, quarterly and annual financial statements, including information on the following:

- total project expenditures,
- total financial contribution from each financier,

- total expenditure on each project component/activity, and
- analysis of that total expenditure into civil works, various categories of goods, training, consultants and other procurement and disbursement categories.

Annual financial statements will be prepared in accordance with International Accounting Standards (IASs). All accounting and control procedures will be documented in the manual of procedures, a living document that will be regularly updated by each FM Staff.

B. AUDIT ARRANGEMENTS

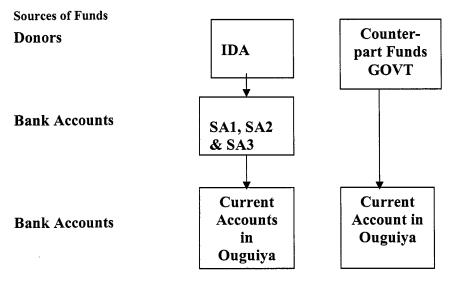
The IDA Agreement will require the submission of Audited Project Financial Statements for each entity to IDA within six (6) months after year-end. Independent and qualified external auditors will be appointed on TORs acceptable to IDA. A single opinion on the Audited Project Financial Statements in compliance with International Standards on Auditing (ISAs) will be required, including the accuracy and the propriety of expenditures made under the SOE procedures and the extent to which these can be relied upon as a basis for credit disbursements. In addition to the audit reports, the external auditors will be expected to prepare a Management Letter giving observations and comments, and providing recommendations for improvements in accounting records, systems, controls and compliance with financial covenants in the IDA agreement. Specific reviews will be required on quarterly FMRs as disbursement based report.

C. DISBURSEMENT ARRANGEMENTS

The overall project funding will consist of IDA Credit and Counterpart Funds. The following accounts will be maintained:

- (i) Three (3) Special Accounts (one per entity) in US Dollars with respective equivalent in current account in Ouguiyas which will be managed separately and used to make payments to suppliers in the respective contract currencies;
- (ii) A Project Account in Ouguiyas with a commercial bank to which Counterpart Funds will be deposited.

Interest income received on the Special Account will be deposited to the respective project accounts or any other account of borrower.



Summary of Funds Flow Diagram

Advances will be made to each implementing entity when the conditions for credit effectiveness are met. All bank accounts will be reconciled with bank statements on a monthly basis by the Finance Departments. Detailed banking arrangements, including control procedures over all bank transactions (e.g., check signatories, transfers, etc.) will be documented in the FAPM.

Method of Disbursement

By effectiveness, the Project will not be ready for report-based disbursements. Thus, at the initial stage, the transaction-based disbursement procedures (as described in the World Bank Disbursement Handbook) will be followed, i.e., direct payment, reimbursements, special commitments and replenishments of the Special Account.

When project implementation begins, the quarterly Financial Monitoring Reports (FMRs) produced by the project will be reviewed. Where the reports are adequate and produced on a timely basis, and the borrower requests conversion to report-based disbursements, a review will be undertaken by the Bank FMS to determine if the project is eligible. The adoption of report-based disbursements by the project will enable it to move away from time-consuming voucher-by-voucher (transaction-based) disbursement methods to quarterly disbursements to the Project's Special Account, based on FMRs. Detailed disbursement procedures will be documented in the FAPM.

Use of Statements of Expenditures (SOEs)

Disbursements for all expenditures will be made against full documentation, except for items claimed under the Statement of Expenditures (SOE) procedure. SOEs will be used for payments claimed under contracts for: (a) works in an amount inferior to US\$500,000, (b) goods in an amount inferior to US\$150,000, (c) consulting firms in an amount inferior to US\$100,000, (d) individual consultants in an amount inferior to US\$50,000. SOEs will likewise be utilized for all small equipment, office supplies and training. Documentation supporting all expenditures claimed against SOEs will be retained by the implementing entity, and will be made available for review when requested by IDA periodic supervision missions and project external auditors. All disbursements are subject to the conditions of the Development Credit Agreement and the procedures defined in the Disbursement Letter.

Special Account

To facilitate project implementation and reduce the volume of withdrawal applications, three Special Accounts in US dollars with respective equivalent in local currency current account (Ouguiyas) would be opened in a commercial bank on terms and conditions acceptable to IDA. The authorized allocations would be US\$1,000,000 for Special Account A, US\$1,000,000 for Special Account B, and US\$310,000 for Special Account C. The respective allocations will cover about four months of eligible expenditures. Each entity will be responsible for submitting monthly replenishment applications with appropriate supporting documents for expenditures. To the extent possible, all of IDA's share of expenditures should be paid through the Special Accounts. The Special Accounts will be replenished through the submission of Withdrawal Applications on a monthly basis and will include reconciled bank statements and other documents as required until such time as the borrower may choose to convert to report-based disbursement. In lieu of SA, the borrower may also choose to pre-finance project expenditures and seek reimbursement from IDA.

Upon credit effectiveness, IDA will deposit the amount of US\$500,000 into Special Account A, US\$287,000 into Special Account B, and US\$155,000 into Special Account C representing 50 percent of the authorized allocations. The Special Accounts will be used for all payments inferior to 20 percent of the authorized allocation and replenishment applications will be submitted monthly. Further deposits by IDA into the Special Accounts will be made against withdrawal applications supported by appropriate documents.

Counterpart Funds and Taxes

The Government of Mauritania, the Borrower, will finance counterpart funds including taxes due for other expenditures.

D. NEXT STEPS

Action Plan

The action plan to be implemented before Credit Effectiveness is tabulated below.

Before Credit Effectiveness

Action	Target Completion Date
Revise and update the Manual of procedures and customize accordingly the accounting software	By End June 05
Current (Project) Account in Ouguiyas opened and UM 81.0 million of counterpart funds released. MAED and IDA advised of authorized bank signatories/specimen signatures.	By End June 05
Recruit external auditors.	By End June 05

Financial Covenants

A financial management system, including records and accounts will be maintained by each implementing entity of the project. Financial Statements will be prepared in a format acceptable to IDA, and will be adequate to reflect in accordance with sound accounting practices the operations, resources and expenditures in respect of the project.

Supervision Plan

Supervision activities will include: review of quarterly FMRs; review of annual audited financial statements and management letter as well as timely follow up of issues arising; and participation in project supervision missions as appropriate. The Bank FMS in charge will monitor the timely implementation of the financial management arrangements.

Conclusions

The overall conclusion of the financial management assessments is that, the Bank's financial management requirements will be fulfilled, provided the following conditions are met prior to credit effectiveness: (a) revised and updated manual of financial and administrative procedures and accounting software for each entity; (b) Project Accounts opened and initial deposits of counterpart funds released; and (c) qualified external auditors appointed by each entity.

The report-based disbursement method will apply only after a satisfactory assessment is carried out by the Bank FMS within the first 12 implementation months. Meanwhile, the project will use the transaction-based disbursement procedures (i.e., direct payment, reimbursement, and special commitments), as described in the World Bank Disbursement Handbook.

Annex 8: Procurement Arrangements

MAURITANIA: SECOD PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

A. GENERAL

Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated May 2004; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, and the provisions stipulated in the Legal Agreement. The general descriptions of various items under different expenditure category are described below. For each contract to be financed by the Loan/Credit, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank project team in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Procurement of Works: Works procured under this project, would include works for rehabilitation, extension and creation of infrastructures of irrigation schemes, critical rural road works for communication and for marketing, works for hydraulic infrastructure to facilitate the flow water and drainage to benefit irrigation schemes, works for rural electrification and other works for land development in small areas. Some of those works are large scale contracts which will likely attract foreign bidders. The procurement will be done using the Bank's Standard Bidding Documents (SBD) for all ICB and National SBD agreed with (or satisfactory to) the Bank.

National Competitive Bidding (NCB) advertised locally, may be used for contract estimated to cost less than US\$500,000 equivalent, and will be carried out with procedures acceptable to the Bank and ensuring the following: (i) bids are advertised in national newspaper with wide circulation; (ii) bid evaluation, bidder qualification and award criteria are specified clearly; (iii) bids are awarded to the lowest evaluated bidders; (v) eligible bidders, including foreign bidders, are not precluded from participating; and (vi) no preference margin is granted to domestic contractors.

Small works estimated to cost less than US\$50,000 equivalent per contract may be procured through shopping, based on price quotation obtained from at least three contractors in response to a written invitation to qualified contractors.

Works for community-based subprojects will be procured in accordance with paragraph 3.15 of the Bank's procurement guidelines (Community Participation in Procurement) and the Bank's *Guidelines for Simplified Procurement and Disbursement for Community-Based Investments* (February 1998). The Project Implementation Manual (PIM) would describe in details the specific procurement arrangements of the Community based component.

Procurement of Goods: Goods procured under this project would include: field survey equipments, equipments for laboratories, equipments for perishable export centers, equipments for irrigated, field transport equipment, vehicles, office supply, computers, etc. The procurement

will be done using Bank's SBD for all ICB and National SBD agreed with (or satisfactory to) the Bank.

National Competitive Bidding (NCB) advertised locally, may be used for contracts estimated to cost less than US\$250,000 equivalent (this threshold has been agreed with the World Bank by a letter dated February 19, 2004 raising the Prior Review Threshold for all projects of the portfolio), and will be carried out with procedures acceptable to the Bank and ensuring the following: (i) bids are advertised in national newspapers with wide circulation; (ii) bid evaluation, bidder qualification and award criteria are specified clearly; (iii) bidders are given adequate response time (minimum four weeks) to prepare and submit bids; (iv) bids are awarded to the lowest evaluated bidders; (v) eligible bidders, including foreign bidders, are not precluded from participating; and (vi) no preference margin is granted to domestic suppliers.

Small quantities such as office supply, consumable materials and spare parts available off the shelf and which cannot be grouped into packages of a least US\$30,000, will be procured through shopping, based on price quotation obtained from at least three reliable suppliers in response to a written invitation to qualified suppliers. Office equipment, computers and vehicles estimated to cost less than US\$100,000 per contract, may also be procured from IAPSO.

Goods for community based subprojects will be procured in accordance with paragraph 3.15 of the Bank's procurement guidelines (Community Participation in Procurement) and the Bank's *Guidelines for Simplified Procurement and Disbursement for Community-Based Investments* (February 1998). The Project Implementation Manual (PIM) would describe in details the specific procurement arrangements of the Community based component.

Procurement of Non-consulting Services: Non-consulting services are likely not to exceed the equivalent of US\$100,000 per contract. The procurement of such services will be done using bidding documents agreed with (or satisfactory to) the Bank. For those contracts, NCB will be carried out. For contracts estimated to cost less than US\$30,000, shopping procedures may be used, in the same way for the procurement of goods.

Selection of Consultants: Consultant services under this project would include: (i) monitoring, supervision and project management, (ii) setting-up accounting management system, financial and contract management, (iii) project coordination staff, technical advisory services for capacity building and support, (iv) technical and financial audit, (v) training and workshop, (vi) feasibility studies, (vii) technical studies for the design of infrastructures, (viii) consultancy for supervision of infrastructures construction, (ix) contract management, and (x) individual consultants services for small studies and specialized advisory services (special assignments, technical assistance).

Short lists of consulting firms for services estimated to cost less than US\$100,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. Specific consultant services involving any special arrangement for the use of universities, Government research institutions or NGOs, will follow special arrangements regarding the selection of such entities.

Regarding Training, Workshops and Study Tours if any, at the beginning of each year, each beneficiary will submit its proposed plans in the form of an annual training plan for the coming year, to be reviewed by IDA. The plan would indicate the persons or groups to be trained, the type of training to be provided, indicative learning outcomes, the provider or location of the training, its estimated cost, and as the case may be, the financial contribution from the

beneficiary(ies). Selection of training institutions for workshops/training should be based on a competitive process, using the Consultant's Qualification Method of selection.

The Standard Request for Proposal (RFP), as developed by the Bank, will be used for the selection of consultants.

The Project Agency (or any Contract Management Agency involved in the project execution) will ensure widely publicized Requests for Expressions of Interest (REI) for all contracts for consultants firm estimated to cost the equivalent of US\$200,000 or more and for all contracts for individuals estimated to cost the equivalent of US\$100,000 or more.

Operating Costs: which would be financed by the project and would be procured using the implementing agency's administrative procedures which were reviewed and found acceptable to the Bank

Reference to the National Procurement System: The Mauritanian Procurement Code is regulated by Decree n° 2002-08 of February 12, 2002. This code was reviewed with IDA assistance. In general, the country's procurement procedures do not conflict with the Bank Guidelines. No special permits or licenses need to be specified in the credit documents, since Mauritania procurement practices allow IDA procedures to take precedence over any contrary local regulation or practice.

A Country Procurement Assessment Review (CPAR) carried out in Mauritania in June 2002 flagged the main issues: the lack of capacity among the borrower staff, absence of standard bidding documents at the national level, insufficient capacity of local contractors for contracts subject to ICB, and corruption practice. Recommendations were made to address these issues. In addition, an IDF Grant was provided to strengthen the Borrower capacity in procurement, modernize the procurement process and improve the regulation.

B. ASSESSMENT OF THE AGENCY'S CAPACITY TO IMPLEMENT PROCUREMENT

Procurement activities will be carried out by three entities: the Project Coordination Unit (UC-PDIAIM), SONADER, and UNCACEM. Those entities are already in place and have executed the previous PDIAIM project. Each of them will be in charge of the execution of the components under its responsibility, and will handle the procurement activities, except UNCACEM which will not have any procurement activity.

The assessment reviewed the organizational structure for implementing the project and the interaction between the procurement staff members in each implementation unit dealing with procurement, and their relation with the Ministry's relevant central unit for administration and finance.

Most of the issues and risks concerning the procurement component for implementation of the project have been identified:

UC-PDIAIM has a procurement unit consisting of two staff: a Procurement Specialist and a Procurement Assistant. The unit performed reasonably well during the implementation of Phase I. However, with regards to the experience of the unit, the major parts of its contracts were not large contracts, and some improvement would be necessary in the processing of large contracts, in particular, the use of Bank Standard Bidding Documents (SBDs). This unit was not involved in the procurement activities concerning SONADER and UNCACEM. The Unit has an autonomy vis-à-vis the central unit for administration and finance.

SONADER has, for its procurement activities, some operational staff (about five Engineers) in charge of the sub-projects for which they are responsible, an engineer in charge of an overall advice to the operational staff, and a Procurement Committee consisting of seven people. Each operational staff elaborates the procurement documents regarding its sub-projects (bidding documents, requests for proposals) and send them to the advising engineer for review, and then to the Procurement Committee which handles the bidding process: launching of bids, evaluation of bids, and contract award, contract negotiation and contract signing. The system has not functioned well during the previous project, due to insufficient procurement planning, quality of the procurement documents, and management of contracts--all related to the level of proficiency of the concerned staff in procurement. SONADER has autonomy vis-à-vis the central unit for administration and finance.

The corrective measures to be agreed upon are:

- to reinforce the procurement unit of the UC-PDIAIM in order to have sufficient qualified Procurement Specialists covering the procurement needs of the Coordination unit and of SONADER;
- to recruit a qualified Procurement Specialist in SONADER, which will elaborate/review all procurement documents concerning SONADER; and
- to have an intense capacity building action including clinics on procurement and handson trainings in order to alleviate all the weaknesses that are identified.

In addition, the Project Implementation Manual (PIM) to be prepared by the Borrower will include a specific section on procurement, detailing the procurement procedures, the SBDs to be used for each procurement method as well as model contracts for works and goods procured, and the terms of the advice to be provided to SONADER by the UC-PDIAIM. While the risk might be considered as average for the UC-PDIAIM, it is high for SONADER so that the overall project risk for procurement is high.

C. PROCUREMENT PLAN

The Borrower, for the appraisal, is developing a Procurement Plan for project implementation, which provides the basis for the procurement methods. This Procurement Plan will be discussed with the Bank's Team, and finalized prior to negotiations. After the project negotiations, it will be available in the Project's database and in the Bank's external website. The Procurement Plan will be updated in agreement with the Project Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

D. FREQUENCY OF PROCUREMENT SUPERVISION

In addition to the prior review supervision to be carried out by the Bank's Country Office, it is recommended to carry out one (1) supervision mission each quarter during the 1st year of the project, and one (1) supervision mission each semester after the 1st year, to visit the field and to carry out post review of procurement actions, particularly since the procurement capacity of the Implementing Agency is weak.

E. DETAILS OF THE PROCUREMENT ARRANGEMENTS INVOLVING INTERNATIONAL COMPETITION

1. Goods, Works, and Non Consulting Services

(a) List of contract packages to be procured following ICB and direct contracting:

Goods

1	2	3	4	5	6	7	8	9
Ref. No.	Contract (Description)	Estimated Cost	Procurement Method	P-Q	Domestic Preference (yes/no)	Review by Bank (Prior / Post)	Expected Bid-Opening Date	Comments
1	Vehicles	753	ICB	NO	NO	Prior	11/01/05	On demand
2	Seeds and inputs	34						Lot 1
3	Packing and processing equip.	16	NCB	NO	NO	Prior	9/15/05	Lot 2
4	Drying and shed equip.	215						Lot 3
5	Computer equipment	108					7	Lot 1
6	Video-audio equip.	16						Lot 2
7	Office furniture	25	NCB	NO	NO	Prior	9/30/05	Lot 3
8	Office equip.	26						Lot 4
9	Cold storage equipment	195	NCB	NO	NO	Post	10/15/05	
10	Office supplies	28	NS	NO	NO	Post		Marché à
11	Spare parts	29	NS	NO	NO	Post	9/01/05	clientèle
12	Computer supplies	22	NS	NO	NO	Post		(2)
13	Documents and extension support	15	NS	NO	NO	Post	9/30/05	
14	Lab equipment	79	IS	NO	NO	Post	12/30/05	

(b) (1) Goods: ICB Contracts estimated to cost above US\$200,000 equivalent per contract and all Direct contracting will be subject to prior review by the Bank.

For NCB contracts, the first 3 contracts irrespective of value will be subject to prior review by the Bank.

Works

1	2	3	4	5	6	7	8	9
Ref.	Contract	Estimated	Procurement	P-Q	Domestic	Review	Expected	Comments
No.	(Description)	Cost	Method		Preference (yes/no)	by Bank (Prior / Post)	Bid-Opening Date	
1	Dredging of Gorgol	1410	ICB	No	Yes	Prior	4/15/05	
2	Drainage work (Kaedi)	56	NCB	No	Yes	Prior	4/15/05	
3	Electrificatio n PPG II	296	NCB	No	No	Prior	4/15/05	
4	Safety Dam works	42	NCB	No	No	Post	10/15/05	
5	Wells	137	NCB	No	No	Post	12/12/05	
6	Rosso diver. center	174						Lot 1
7	Kaédi Diver. Center	174	ICB	No	No	Post	6/30/06	Lot 2

8	Packinghous e Kaedi	430						Lot 3
9	Feeder road works	300	NCB	No	No	Post	3/30/06	
10	Rehabilitatio n research station	23	NS	No	No	Post	12/15/05	

(b) (2) Works: ICB Contracts estimated to cost above US\$500,000 equivalent per contract and all Direct contracting will be subject to prior review by the Bank.

For NCB contracts, the first 3 contracts irrespective of value, and all contracts above US\$300,000 will be subject to prior review by the Bank.

2. Consulting Services

(a) List of consulting assignments with short-list of international firms.

1	2	3	4	5	8	9
Ref.	Contract	Estimated	Selection	Review	Expected	Comments
No.	(Description)	Cost	Method	by Bank	Bid-Opening	
				(Prior /	Date	
				Post		
1	Environnemental GIS	223	QCBS	Prior	2/15/06	
2	Agronomic potential of the Valley	58	QCBS	Post	1/15/06	
3	R&D pumping	40	CI	Post	11/15/05	
4	R&D irrigation	40	CI	Post	11/15/05	
5	Technical assistance in innovation	1100	QBS	Prior	3/15/06	
6	Gouere watershed management	105	QCBS	Prior	4/15/06	
7	Foum Gleita social and land tenure study	103	QCBS	Prior	12/30/05	
8	Rural finance strategy	62	QCBS	Post	10/15/05	
9	Technical assistance project management	21	CI	Post	11/15/05	
10	Audit (UC-PDIAIM)	60	LCS	Prior	4/15/06	
11	Audit (SONADER)	77	LCS	Prior	4/15/06	
12	Database design (SONADER)	27	QCBS	Post	10/30/05	
13	Impact study (SONADER)	15	CI	Post	11/15/05	
14	SONADER Statute study	13	CI	Post	1/30/06	
15	IEC environmental norms	35	CI	Post	5/15/06	
16	Plan gestion végétation aquatique	50	QCBS	Post	5/30/06	
17	Social assessment	42	CI	Post	1/30/06	
18	Web site design	8	CI	Post	10/15/06	
19	Technical assistance water manag. (UCA)	15	CI	Post	3/15/06	
20	Technical assistance credit insurance	31	CI	Post	3/30/06	
21	Diversification specialists (Rosso and Kaedi)	2x44	CI	Post	8/15/06	
22	Update Implem. manual (SONADER)	17	CI	Post	4/29/06	

23	Technical assistance database SONADER	36	CI	Post	5/15/06	
24	Survey of implementation of schema de structure	8	CI	Post	7/15/06	
25	Rural PER	30	CI	Post	8/15/06	
26C	Control civil works dredging of Gorgol	317	QCBS	Prior	1/01/06	
27	Control electr. Works PPG II	24	QCBS	Post	9/15/05	
28	Control wells	11	QCBS	Post	11/15/05	
29	Feasibility and control works in diversification	62	QCBS	Post	4/15/06	
30	Control feeder road works	24	QCBS	Post	2/15/06	

(b) Consultancy services estimated to cost above US\$100,000 equivalent per contract and all Single Source selection of consultants (firms) will be subject to prior review by the Bank

(c) Short lists composed entirely of national consultants: Short lists of consultants for services estimated to cost less than US\$100,000 equivalent per contract, may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

Thresholds for Procurement Methods and Prior Review

Expenditure Category	Contract Value (Threshold)	Procurement Method	Contracts Subject to Prior Review/Estimated Total Value Subject to Prior Review (US\$)
1. Civil works	< \$50,000	Community participation, and/or minor works (3 quotations)	Post-Review First 3 contracts irrespective of value. In all cases, the description of the works is subject to prior review
	= or > \$50,000 and < \$500,000	NCB	First 3 contracts irrespective of value. In all cases, the description of the works is subject to prior review
	= or > \$500,000	ICB	All Contracts
2. Goods: Vehicles, Equipment, Furniture, Supplies	<\$30,000	Shopping, IAPSO	Post-Review. IAPSO may be used for office equipment and vehicles
	office equipment and vehicles = or > \$30,000 and < \$100,000	IAPSO	IAPSO may be used for office equipment and vehicles. In all cases, the specifications of the goods are subject to prior review.
	Other contracts = or > \$50,000 and < \$100,000	NCB	Post-Review. In all cases, the specifications of the goods are subject to prior review
n a train a shallon a	= or > \$200,000	ICB	All Contracts
3. Non-consulting services	< \$30,000	Shopping	Post review: but the description of the services will be prior reviewed and approved on the basis of an annual programs
	= or > \$30,000 and < \$100,000	NCB	Post review: but the description of the services will be prior reviewed and approved on the basis of an annual programs
4. Consultant Services	= or > \$200,000	QCBS	All. Short-list subject to Request of Expression of Interest.
	< \$200,000	Various Methods (to be agreed annually based on the Annual Work Program)	All contract estimated = or > \$50,000 fo individual consultants, and contracts = o > \$100,000 for consulting firms. Other contracts: post review, except Terms of Reference which are prior rev.
5. Training, workshops, study tours	All Values	Preferably CQ (planning to be agreed annually based on the Annual Work Program)	Post-Review (see note (iii) below)

N.B.

(i) All terms of reference for consulting services will be subject to IDA's prior review.

(ii) Procurement performance will be assessed on an annual basis (in the form of procurement audits by an external agency or of post-review either by the Bank's specialists or independent consultants), and the threshold levels for various methods of procurement may be revised based on the assessment results. (iii) Training abroad and in-country, workshops and study tours will be carried out on the basis of approved annual programs that would identify the nature of training/study tours/workshops, institutions where training/study tours/workshops would be conducted (selection of institutions and justification thereof), cost estimates and contents of the course.

Annex 9: Economic and Financial Analysis

MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

A Cost Benefit Analysis (CBA) for the whole project was not carried out because: (i) benefits of capacity building activities defy quantification, and (ii) benefits from investments in safeguard measures cannot be easily quantified in monetary terms. However, as with Phase I, one can undertake an illustrative CBA of irrigation development in rehabilitation, extension and new creation undertaken by cooperatives and private individual producers.

	Econo	mic	Financial * .	
·Models	ERR	NPV	· IRR	NPV
Rice only		· · · · · · · · · · · · · · · · · · ·		
Individuals with > 40 ha in Trarza	14%	907	17%	989
Individuals with > 40 ha in Haut-Fleuve	15%	1,222	15%	693
Individuals with < 40 ha in Trarza	14%	907	27%	1,507
Individuals with < 40 ha in Haut-Fleuve	15%	1,222	22%	1,259
Cooperative in Trarza	14%	763	72%	2,804
Cooperative in Haut Fleuve	17%	1,622	74%	3,044
Rice + diversification				
Cooperative in Trarza	22%	2,607	122%	4,537
Cooperative in Haut Fleuve	22%	2.711	101%	4.056
Diversification only				
Individual in Trarza: horticulture	62%	13,181	88%	6,244
Individual in Trarza: orchard	23%	22,678	21%	19,070
Individual in Trarza: forage	44%	8,011	44%	2,978

Economic and Financial Analysis (NPV in US\$)

reflection of the strong demand from Mauritanian consumers that are increasing added fresh vegetables to their diets. The cost of capital is at 12 percent. Details are provided in project files.

Economic Analysis

The results are indicative of economic profitability of private investment in irrigation development. The results are particularly strong for poor collective farms in the Trarza and the Haut-Fleuve that engaged in rice production followed by horticultural production. The results, however, are strongest for individual farmers in the Trarza that would substitute rice for other diversified crop production. These results provide part of the rationale for providing incentives to farmers to invest in new production systems, which are perceived to be risky.

Financial Analysis

The financial results for collective farmers are markedly better than the economic results because of the incentives provided by the project. Without the one-time matching grant, poor farmers would not be generating adequate cash flow to pay back their debts. The financial gains for individual farmers are greater in horticultural production. However, they are about the same and slightly lower for fruit production because of the intensive nature of the investment and production systems assumed in the models. In addition, fruit production requires a long gestation period and periodic reinvestment without matching grants.

		Economic		Financial		
Models	Product price	Investment cost	Product yield	Product price	Investment cost	Product yield
Rice only						
Individuals with > 40 ha in Trarza	-23%	38%	-11%	-20%	34%	-10%
Individuals with > 40 ha in Haut-Fleuve	-26%	47%	-13%	14%	21%	-7%
Individuals with < 40 ha in Trarza	-23%	38%	-11%	-30%	62%	-15
Individuals with < 40 ha in Haut-Fleuve	-26%	47%	-13%	-25%	47%	-13%
Cooperative in Trarza	-19%	32%	-10%	-56%	324%	-28%
Cooperative in Haut Fleuve	-31%	62%	-17%	-53%	320%	-29%
Diversification only						
Individual in Trarza:	-29%	160%	-31%	-11%	54%	-12%
Individual in Trarza:	-45%	384%	-45%	-35%	273%	-35%
Individual in Trarza: forage	-27%	79%	-27%	-4%	12%	-4%

Sensitivity Analysis: Switching values

Annex 10: Safeguard Policy Issues

MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

Safeguard Policies: The PDIAIM is a Category A project with potential significant negative impacts on the bio-physical environment and human health, in spite of the project's overall goal to improve the productivity of irrigated land on a sustainable basis. Phase II triggers the same safeguard policies (see below) that were triggered during Phase I. In compliance with these safeguard policies three safeguard documents (Environmental Management Plan, Resettlement Policy Framework, and Pest Management Plan) were prepared addressing issues related to the project's environmental, social and pest and pesticide management aspects. These safeguard measures aim at mitigating the project's environmental and social unintended negative consequences and strengthening its positive spillover impacts. Irrigation development under the PDIAIM concerns already developed and on-going schemes, which will be rehabilitated and created into more water-efficient and environmentally sound schemes. The project will not cause harm to the other riparians, as the demand for water and the risk to environmental degradation will decrease. The safeguard documents include the following: (i) systematization of environmental impact assessment for all identified sub-projects before entering into a funding agreement with communities; (ii) training of staff and partners of the national and regional coordination units; (iii) establishment and implementation of an intersect consultation framework for the environmental control and monitoring; (iv) reinforcement of coordination meetings of harmonization and consultation at all levels among stakeholders; and (vi) concerted efforts of NGOs and mass media for the execution of an Information-Education-Communication program aimed at improving environmental management.

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[X]	[]
Natural Habitats (<u>OP/BP</u> 4.04)	[X]	[]
Pest Management (OP 4.09)	[X]	[]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[X]	[]
Involuntary Resettlement (OP/BP 4.12)	[X]	[]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[]	[X]
Forests (OP/BP 4.36)	[]	[X]
Safety of Dams (OP/BP 4.37)	[X]	[]
Projects in Disputed Areas (OP/BP/GP 7.60)*	[]	[]
Projects on International Waterways (OP/BP/GP 7.50)	[X]	[]

Social Aspects. The social safeguards are related to the potential involuntary loss of land for construction works, on a temporary basis and some land acquisition to the benefit of farmers on irrigated schemes. The project has limited negative impacts on people and assets and in fact, its impacts are largely positive, including increase in agricultural outputs and revenues that will translate into rural poverty alleviation. Given that the project deals exclusively with beneficiaries with already established land rights, and existing road tracks and waterways, requirements to vacate land are highly unlikely. Nonetheless, in compliance with World Bank OP/BP 4.12, a resettlement policy framework has been developed in a participatory manner and the results have been discussed during the pre-appraisal mission with the project's stakeholders to seek inputs

^{*} By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

from them. The Resettlement Action Plan will be used in case resettlement or land acquisition will be needed and an accompanying budget will be prepared and funded by the Borrower to eventually compensate individuals and communities for losses.

Pest and Pesticide Management Plan. The project supports extension services that aim to inculcate to agricultural producers the proper handling, use and disposal of pesticides, as well as the control of pests compatible with food safety and quality requirements. Regarding the granivorous birds that consume a considerable part of the rice crop, particularly in the off-season, Phase II will develop and implement an action plan to control the damage caused by these birds. This will be accomplished in collaboration with neighboring country Senegal, and through local agencies. The PMP also includes an action plan to control mosquitoes in the Senegal River Valley, to which the project will contribute in collaboration with on-going and planned projects and through specialized local agencies (e.g., in the Health department).

Environmental Management Plan. Phase I identified guidelines for irrigation development that ensure that environmental concerns are taken into account by private investors. Thus, feasibility studies for irrigation development include an environmental assessment, and investment subsidies are predicated on the building of infrastructure (e.g., drainage) that reduces environmental degradation. Furthermore, Phase II supports an awareness and Information-Education-Communication (IEC) program with regard to the application of these environmental guidelines. It also ensures, through extension services, that all completed project-supported irrigation schemes receive the proper O&M included in feasibility studies.

Phase II also addresses enduring global environmental issues, such as the negative impacts of the decades-long irrigation development in the Senegal River Valley. By its activities, the project could contribute to exacerbate the preexisting ills of irrigation development. These include--in addition to drainage-related damages addressed above--increasing prevalence rates of bilharzias, malaria and other waterborne diseases. In collaboration with on-going and planned projects (e.g., the AfDB and IDB-funded project and an eventual JICA-funded project), the project will finance measures to mitigate its impacts and contribute to reserve the negative trends.

In particular, Phase II will support activities aimed at:

- (i) ensuring the safety of the Foum Gleita dam, in compliance with the recommendation of the Dam Safety study;
- (ii) providing drinking water to vulnerable communities in the Foum Gleita and Kaedi areas that lack access to potable water and are forced to drink water of the irrigation canals;
- (iii) controlling granivorous birds that devastate rice crops (as discussed under the PMP);
- (iv) reforestation and anti-desertification, initiated during Phase I, which will include aerial seeding in strategic areas in order to stabilize sand dunes that threaten irrigation schemes, and establishing and maintaining fire-break corridors to protect grazing land at the edge of the Senegal River Valley;
- (v) controlling aquatic plants, including through dredging the Gorgol river and rehabilitating the Gouere drainage (see Component B: infrastructure development);
- (vi) implementing the participatory land use management, e.g., being developed in the Bureau of Land Administration's *schemas de structure* (land categories) and agricultural potential mapping (Component C);
- (vii) increasing awareness of project-area population to environmental degradation; and

(viii) strengthening capacities, including through the implementation of a environmental GIS initiated in Phase I.

The project will provide an environmental and social safeguard specialist within the PIU to ensure the coordination and monitoring of the implementation of the safeguard measures. It will recruit a communication specialist within the PIU to make use of all available media resources to better communicate with all key stakeholders. The project will make environmental management the concern of all key actors, in capacity building of producers' organizations, SONADER and private bureaus and civil work companies (Component A), infrastructure development in both public and private aspects (Component B), support to agricultural supply chains participants, through extension services and quality control management (Component C), and project management, safeguards, and monitoring and evaluation (Component D). Phase II has developed and will implement a communication strategy to address Environmental Management issues, which are also the concern of other Bank-financed projects (CBRD, Capacity Building Project, Road Transport Sector project) and other donor-financed projects (AfDB and IDB). The PDIAIM will build synergies with these projects to enhance the prospects of environmental management in irrigation development.

Annex 11: Project Preparation and Supervision

MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

	Planned	Actual
PCN review	July 29, 2004	July 29, 2004
Initial PID to PIC	August 9,2004	August 25, 2004
Initial ISDS to PIC	August 9, 2004	August 10, 2004
Appraisal	November 29, 2004	November 29, 2004
Negotiations	February 9, 2005	February 17, 2005
Board/RVP approval	March 15, 2005	-
Planned date of effectiveness	June 30, 2005	
Planned date of mid-term review	December 1, 2007	
Planned closing date	December 31, 2010	

Key institutions responsible for preparation of the project:

Ministère du Développement Rural et de l'Environnement (MDRE)

Unité de Coordination du PDIAIM (UC-PDIAIM)

Société nationale pour le développement rural (SONADER)

Union nationale des coopératives agricoles de crédit et d'épargne de Mauritanie (UNCACEM) Direction des politiques, de la coopération et du suivi-évaluation (DPCSE)

Services des affaires foncières et de la cartographie (SAFC) of DPCSE

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Ismael Ouédraogo	TTL	AFTS4
Amadou Oumar Ba	Sr. Ag. Services Specialist	AFTS4
El Hadj Adama Touré	Sr. Ag. Economist	AFTS4
Salamata Bal	Social Development Specialist	AFTS4
Lucie Tran	Operations Analyst	AFTS4
Sossena Tassew	Information Assistant	AFTS4
Robert Robelus	Sr. Environmental Assessment Specialist	AFTS1
Ousmane Bangoura	Sr. Health Specialist	AFTH2
Nestor Coffi	Financial Management Specialist	AFTFM
Moustapha Ould El Bechir	Procurement Specialist	AFTPC
Yahya Ould Aly Jean	Disbursement Assistant	AFMMR
Amadou Soumaila	Irrigation Engineer	FAO/CP
Henri Aka	Procurement Specialist	AFTPC
M. Salah Darghouth	Adviser	ARD
Renate Kloeppinger-Todd	Rural Finance Adviser	ARD
Joselito Gallardo	Rural Finance Consultant	OPD
Helene Bertaud	Sr. Counsel	LEGAF
Myrina McCoullough	Operations Analyst	AFTH3

Bank funds expended to date on project preparation:

- 1. Bank resources: US\$192,000
- 2. Trust funds: US\$0
- 3. Total: US\$192,000

Estimated Approval and Supervision costs:

- 1. Remaining costs to approval: US\$0
- 2. Estimated annual supervision cost: US\$400,000

Annex 12: Documents in the Project File

MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

- 1. Abdoulaye Sène, Cadre de gestion environnementale et sociale, juillet 2004
- 2. Djibril Doucouré, Plan de gestion des pestes et des pesticides, juillet 2004
- 3. François Gadelle, Recherche Développement, septembre 2004
- 4. Franz Schorosch et Amadou Bachirou Barro, Conseil rural, octobre 2004
- 5. Giovannetti, Plan cadre de relocalisation, juillet 2004
- 6. Horus, Etude strategique du secteur financier en Mauritanie, 2004
- 7. Ibrahima Dia et Beddou Ould Saleck, Etude Impact social et économique du PDIAIM, décembre 2004
- 8. Jean Yves Clavreul et El Alem Ould Ahmed Khalifa, Etude d'une Stratégie de Communication, décembre 2004
- 9. Michel Voisard, Diversification agricole, octobre 2004
- 10. Nicolas Gergely, Analyse économique et financière et crédit agricole, décembre 2004
- 11. PDIAIM, Rapport d'achèvement de la Phase I du PDIAIM, octobre 2004
- 12. PDIAM, Rapport de préparation de la deuxième phase du PDIAIM, janvier 2004
- Touré Catherine Cormont et Ba Mariam Sall, Stratégie Genre du PDIAIM, octobre
 2004
- 14. Worl Bank, OP 8.30 Review of the Integrated Development for Irrigation Agriculture in Mauritania Phase II and clarifications, February 2005
- 15. World Bank, Integrated Development Program for Irrigated Agriculture in Mauritania, Phase I, Project Appraisal Document, 1999

Annex 13: Statement of Loans and Credits

MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITNIA

			Original Amount in US\$ Millions						Difference between expected and actual disbursements	
Project ID	FY	Purpose	IBRD	IDA	SF	GEF	Cancel.	Undisb.	Orig.	Frm. Rev'd
P078368	2004	HIV/AIDS Multisector Control	0.00	0.00	0.00	0.00	0.00	20.01	-0.74	0.00
P078383	2004	MR 2nd MINING SECTOR TA PROJECT	0.00	18.00	0.00	0.00	0.00	18.73	0.81	0.00
P081368	2004	MR: Community-Based Rural Development	0.00	45.00	0.00	0.00	0.00	43.54	0.00	0.00
P069095	2002	Urban Development Program	0.00	70.00	0.00	0.00	0.00	68.59	26.51	0.00
P071308	2002	MR Educ Sect. Dev. Program	0.00	49.20	0.00	0.00	0.00	43.78	13.79	0.00
P071881	2002	MR Global Dist. Learning Center	0.00	3.30	0.00	0.00	0.00	2.05	0.93	0.00
P064570	2000	CULTURAL HERITAGE	0.00	5.00	0.00	0.00	0.00	1.59	1.31	0.00
P066345	2000	MR EGY/WATER/SANITATION SECTOR REFORM TA	0.00	9.90	0.00	0.00	0.00	4.04	7.12	0.00
P044711	2000	Maur:INTEG DEV PROG FOR IRRIGATED AGRIC	0.00	38.10	0.00	0.00	0.00	8.14	7.55	0.00
P055003	1999	Nutrit., Food Sec., & Soc. Mobil. (LIL)	0.00	4.90	0.00	0.00	0.00	0.81	0.74	-0.29
P057875	1999	MINING SECT CAPACITY	0.00	15.00	0.00	0.00	0.00	2.86	2.75	0.00
P035689	1998	Health Sect. Invest. Program	0.00	24.00	0.00	0.00	0.00	3.78	3.47	3.49
		Total:	0.00	282.40	0.00	0.00	0.00	217.92	64.24	3.20

MAURITANIA STATEMENT OF IFC's Held and Disbursed Portfolio In Millions of US Dollars

		Committed							
			IFC				IFC		
FY Approval	Company	Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
2000	GBM	5.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PAL-Tiviski	0.55	0.00	0.00	0.00	0.55	0.00	0.00	0.00
	Total portfolio:	5.80	0.00	0.00	0.00	0.55	0.00	0.00	0.00

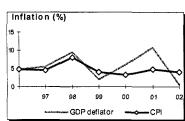
		Approvals Pending Commitment						
FY Approval	Company	Loan	Equity	Quasi	Partic.			
2004	GBM-II	0.00	0.00	0.01	0.00			
	Total pending commitment:	0.00	0.00	0.01	0.00			

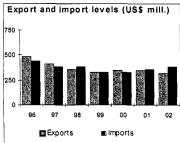
Annex 14: Country at a Glance

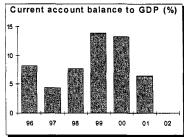
MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

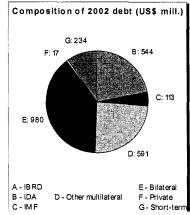
POVERTY and SOCIAL			Sub- Saharan	Low-	Development die 14
	M	auritania	Africa	income	Development diamond*
2002 Desulation miduses (millione)		2.0	600	0.405	
Population, mid-year (millions)		2.8 340	688 450	2,495 430	Life expectancy
GNI per capita (Atlas method, US\$) GNI (Atlas method, US\$ billions)		0.96	306	1,072	
•		0.00	000	1,072	
Average annual growth, 1996-02					
Population (%)		3.1	2.4	1.9	
Labor force (%)		3.3	2.5	2.3	GNI Gross
Most recent estimate (latest yea	nr available, 19	96-02)			capita primary
Poverty (% of population below national	povertvline)	46			
Urban population (% of total population)		60	33	30	
Life expectancy at birth (years)		51	46	59	
Infant mortality (per 1,000 live births)		108	105	81	
Child malnutrition (% of children under 5))	32			Access to improved water source
Access to an improved water source (%		37	58	76	
Illiteracy (% of population age 15+)		59	37	37	
Gross primary enrollment (% of school-	age population)	83	86	95	Mauritania
Male		86	92	103	Low-income group
Female		80	80	87	
KEY ECONOMIC RATIOS and LC	NG-TERM TR	ENDS			
	1982	1992	2001	2002	,
	0.75		10	0.98	Economic ratios*
GDP (US\$ billions)					
Gross domestic investment/GDP	34.2		26.7	24.7	Trade
Exports of goods and services/GDP	40.1		38.0	36.8	
Gross domestic savings/GDP	-10.4		14.0	9.0	Ā
Gross national savings/GDP	-8.1	11,7	23.8	32.2	
Current account balance/GDP	-36.9	-9.9	6.4		Domestic .
Interest payments/GDP	3.0	16	2.3	1.8	savings Investment
Total debt/GDP	151.5	176.8	258.6	252.2	
Total debt service/exports	18.5	17.3	18.7	18.5	
Present value of debt/GDP			139.8		
Present value of debt/exports			363.6	••	Indebtedness
198	32-92 1992-02	2001	2002	2002-06	
(average annual growth)					Mauritania
GDP	2.1 4.3	4.0	3.3		
GDP per capita	-0.4 12	0.8	0.4	••	Low-income group
STRUCTURE of the ECONOMY	1982	1992	2001	2002	
(%of GDP)	1002		2001	2002	Growth of investment and GDP (%)
Agriculture				214	75 T
Industry	33.1	28.0	20.9	21.4	
	23.4		20.9 28.6	214 310	50 -
Manufacturing					
Manufacturing	23.4	29.2 116	28.6	310	25
Manufacturing Services	23.4 43.5	29.2 116 42.9	28.6 8.0 50.5	310 8.3 47.6	
M anufacturing Services P rivate consumption	23.4 43.5 78.4	29.2 116 42.9 78.7	28.6 8.0 50.5 70.4	310 8.3 47.6 72.6	25
Manufacturing Services Private consumption General government consumption	23.4 43.5	29.2 116 42.9 78.7 16.4	28.6 8.0 50.5 70.4 15.6	310 8.3 47.6	
Manufacturing Services Private consumption General government consumption	23.4 43.5 78.4 32.1	29.2 116 42.9 78.7	28.6 8.0 50.5 70.4	310 8.3 47.6 72.6 18.4	25 0 -25 97 98 99 00 01 02
Manufacturing Services Private consumption General government consumption Imports of goods and services	23.4 43.5 78.4 32.1 84.7	29.2 116 42.9 78.7 16.4	28.6 8.0 50.5 70.4 15.6	310 8.3 47.6 72.6 18.4	25 0 -25 97 98 99 00 01 02
Manufacturing Services Private consumption General government consumption Imports of goods and services (average annual growth)	23.4 43.5 78.4 32.1 84.7 1982-92	29.2 116 42.9 78.7 16.4 52.1 1992-02	28.6 8.0 50.5 70.4 15.6 50.7 2001	310 8.3 47.6 72.6 18.4 52.6 2002	$\begin{array}{c} 25 \\ 0 \\ -25 \end{array} \begin{array}{c} 97 \\ 98 \\ 99 \\ 00 \\ 01 \\ 02 \\ \hline \\ GDP \end{array}$
Manufacturing Services Private consumption General government consumption Imports of goods and services (average annual growth) Agriculture	23.4 43.5 78.4 32.1 84.7 1982-92 15	29.2 116 42.9 78.7 16.4 52.1 1992-02 4.0	28.6 8.0 50.5 70.4 15.6 50.7 2001 -0.2	310 8.3 47.6 72.6 18.4 52.6 2002 -3.6	25 0 -25 97 98 99 00 01 02
Manufacturing Services Private consumption General government consumption Imports of goods and services (average annual growth) Agriculture Industry	23.4 43.5 78.4 32.1 84.7 1982-92 15 4.1	29.2 116 42.9 78.7 16.4 52.1 1992-02 4.0 18	28.6 8.0 50.5 70.4 15.6 50.7 2001 -0.2 14	310 8.3 47.6 72.8 18.4 52.6 2002 -3.6 4.2	$\begin{array}{c} 25 \\ 0 \\ -25 \end{array} \begin{array}{c} 97 \\ 98 \\ 99 \\ 00 \\ 01 \\ 02 \\ \hline \\ GDP \end{array}$
Manufacturing Services Private consumption General government consumption Imports of goods and services (average annual growth) Agriculture Industry Manufacturing	23.4 43.5 78.4 32.1 84.7 1982-92 15 4.1 -0.3	29.2 116 42.9 78.7 16.4 52.1 1992-02 4.0 18 -0.1	28.6 8.0 50.5 70.4 15.6 50.7 2001 -0.2 14 5.9	310 8.3 47.6 72.8 18.4 52.6 2002 -3.6 4.2 2.6	$ \begin{array}{c} 25 \\ 0 \\ -25 \\ \hline 97 \\ 98 \\ 99 \\ 00 \\ 01 \\ 02 \\ \hline 0 \\ 10 \\ \hline \end{array} $ Growth of exports and imports (%)
Manufacturing Services Private consumption General government consumption Imports of goods and services (average annual growth) Agriculture Industry Manufacturing	23.4 43.5 78.4 32.1 84.7 1982-92 15 4.1	29.2 116 42.9 78.7 16.4 52.1 1992-02 4.0 18 -0.1	28.6 8.0 50.5 70.4 15.6 50.7 2001 -0.2 14	310 8.3 47.6 72.8 18.4 52.6 2002 -3.6 4.2	$ \begin{array}{c} 25 \\ 0 \\ -25 \\ 97 \\ 98 \\ 99 \\ 99 \\ 00 \\ 01 \\ 02 \\ \hline GDI \\ \hline GDP \\ \hline Growth of exports and imports (%) \\ 10 \\ 0 \\ 97 \\ 98 \\ 99 \\ 00 \\ 01 \\ 02 \\ 0 \\ 0 \\ 97 \\ 98 \\ 99 \\ 99 \\ 00 \\ 01 \\ 02 \\ 0 \\ 0 \\ 0 \\ 97 \\ 98 \\ 99 \\ 99 \\ 00 \\ 01 \\ 02 \\ 02 \\ 0 \\ 0 \\ 0 \\ 0 \\ 97 \\ 98 \\ 99 \\ 99 \\ 00 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 02 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 02 \\ 02 \\ 02 \\ 01 \\ 02 \\ $
Manufacturing Services Private consumption General government consumption Imports of goods and services (average annual growth) Agriculture Industry Manufacturing Services	23.4 43.5 78.4 32.1 84.7 1982-92 15 4.1 -0.3	29.2 116 42.9 78.7 16.4 52.1 1992-02 4.0 18 -0.1 6.2	28.6 8.0 50.5 70.4 15.6 50.7 2001 -0.2 14 5.9	310 8.3 47.6 72.8 18.4 52.6 2002 -3.6 4.2 2.6	$ \begin{array}{c} 25 \\ 0 \\ -25 \\ 97 \\ 98 \\ 99 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$
Manufacturing Services Private consumption General government consumption Imports of goods and services (average annual growth) Agriculture Industry	23.4 43.5 78.4 32.1 84.7 1982-92 15 4.1 -0.3 2.0	29.2 116 42.9 78.7 16.4 52.1 1992-02 4.0 18 -0.1 6.2	28.6 8.0 50.5 70.4 15.6 50.7 2001 -0.2 14 5.9 8.5 8.5 9.5 -6.2	310 8.3 47.6 72.6 18.4 52.6 2002 -3.6 4.2 2.6 8.9	$ \begin{array}{c} 25 \\ 0 \\ -25 \\ 97 \\ 98 \\ 99 \\ 00 \\ 01 \\ 01 \\ 02 \\ \hline GDI \\ \hline GDP \\ \hline Growth of exports and imports (%) \\ 10 \\ 0 \\ 97 \\ 98 \\ 99 \\ 99 \\ 00 \\ 01 \\ 02 \\ 0 \\ 0 \\ 97 \\ 98 \\ 99 \\ 99 \\ 00 \\ 01 \\ 02 \\ 0 \\ 0 \\ 0 \\ 97 \\ 98 \\ 99 \\ 99 \\ 00 \\ 01 \\ 02 \\ 02 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 97 \\ 98 \\ 99 \\ 99 \\ 00 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 00 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 02 \\ 02 \\ 01 \\ 02 \\ 02 \\ 02 \\ 01 \\ 02 \\ $
Manufacturing Services Private consumption General government consumption Imports of goods and services (average annual growth) Agriculture Industry Manufacturing Services Private consumption	23.4 43.5 78.4 32.1 84.7 1982-92 15 4.1 -0.3 2.0 2.3	29,2 116 42,9 78,7 18,4 52,1 1992-02 4,0 18 -0,1 6,2 2,4 4,1 10,7	28.6 8.0 50.5 70.4 15.6 50.7 2001 -0.2 14 5.9 8.5 9.5	310 8.3 47.6 72.8 18.4 52.6 2002 -3.6 4.2 2.6 8.9 12	$ \begin{array}{c} 25 \\ 97 \\ 98 \\ 99 \\ 99 \\ 00 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 97 \\ 98 \\ 99 \\ 00 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 00 \\ 01 \\ 02 \\ 01 \\ 02 \\ 00 \\ 01 \\ 02 \\ 00 \\ 01 \\ 02 \\ 00 \\ 01 \\ 02 \\ 00 \\ 01 \\ 02 \\ 00 \\ 01 \\ 02 \\ 00 \\ 01 \\ 02 \\ 00 \\ 01 \\ 02 \\ 00 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 01 \\ 01 \\ 02 \\ 01 \\ $

change) change) insumer prices insumer prices of GDP, includes current grants) irrent revenue irrent budget balance irrent budget balance irrent surplus/deficit RADE 1982 S\$ millions) tal exports (fob) on ore ish ial imports (cif) iuel and energy capital goods port price index (1995=100) inport price index (1995=100)	1992 10.1 10.0 22.4 3.0 -2.5 1992 400 155 245 400 155 245 137 36 121	2001 4.7 10.7 20.6 3.8 -5.2 2001 345 188 155 357 113 92	2002 4.0 0.5 37.7 18.5 7.2 2002 321 174 155 388
pmestic prices change) insumer prices plicit GDP deflator 10.1 overnment finance of GDP, includes current grants) irrent verue irrent budget balance verall surplus/deficit RADE 1982 S\$ millions) tal exports (fob) on ore ish tal imports (cif) uel and energy capital goods port price index (1995=100)	10.1 10.0 22.4 3.0 -2.5 1992 400 155 245 459 137 36	4.7 10.7 20.6 3.8 -5.2 2001 345 188 155 357 113	4.0 0.5 37.7 18.5 7.2 2002 321 174 155 388
change) insumer prices plicit GDP deflator 10.1 povernment finance of GDP, includes current grants) irrent revenue irrent budget balance RADE 1982 S\$ millions) tal exports (fob) on ore ish tal imports (cif) ical denergy capital goods port price index (1995=100)	10.0 22.4 3.0 -2.5 1992 400 155 245 459 137 36	10.7 20.6 3.8 -5.2 2001 345 188 155 357 113	0.5 37.7 18.5 7.2 2002 321 174 155 388
plicit GDP deflator 10.1 overnment finance of GDP, includes current grants) irrent revenue irrent budget balance erall surplus/deficit RADE 1982 S\$ millions) tal exports (fob) on ore ish tanufactures tal imports (cif) ood iuel and energy capital goods port price index (1995=100)	10.0 22.4 3.0 -2.5 1992 400 155 245 459 137 36	10.7 20.6 3.8 -5.2 2001 345 188 155 357 113	0.5 37.7 18.5 7.2 2002 321 174 155 388
or vernment finance of GDP, includes current grants) irrent revenue irrent budget balance iverall surplus/deficit RADE S\$ millions) tal exports (fob) ish fanufactures tal imports (cif) ivel and energy capital goods port price index (1995=100)	22.4 3.0 -2.5 1992 400 155 245 459 137 36	20.6 3.8 -5.2 2001 345 188 155 357 113	37.7 18.5 7.2 2002 321 174 155 388
of GDP, includes current grants) irrent revenue irrent budget balance irrent budget balance irerall surplus/deficit RADE RADE S\$ millions) tal exports (fob) on ore ish tal imports (cif) icel and energy capital goods port price index (1995=100)	3.0 -2.5 1992 400 155 245 459 137 36	3.8 -5.2 2001 345 188 155 357 113	18.5 7.2 2002 321 174 155 388
of GDP, includes current grants) irrent revenue irrent budget balance irrent budget balance irerall surplus/deficit RADE RADE S\$ millions) tal exports (fob) on ore ish tal imports (cif) icel and energy capital goods port price index (1995=100)	3.0 -2.5 1992 400 155 245 459 137 36	3.8 -5.2 2001 345 188 155 357 113	18.5 7.2 2002 321 174 155 388
rrrent budget balance erail surplus/deficit RADE 1982 S\$ millions) tal exports (fob) on ore ish fal imports (cif) iuel and energy capital goods port price index (1995=100) port price index (1995=100)	3.0 -2.5 1992 400 155 245 459 137 36	3.8 -5.2 2001 345 188 155 357 113	18.5 7.2 2002 321 174 155 388
rerall surplus/deficit RADE RADE S\$ millions) tal exports (fob) on ore ish tal imports (cif) ivel and energy capital goods port price index (1995=100)	-2.5 1992 400 155 245 459 137 36	-5.2 2001 345 188 155 357 113	7.2 2002 321 174 155 388
ADE 1982 S\$ millions) tal exports (fob) on ore ish tal imports (cif) ood uel and energy capital goods port price index (1995=100)	1992 400 155 245 459 137 36	2001 345 188 155 357 113	2002 321 174 155 388
1982 S\$ millions) tal exports (fob) on ore ish A anufactures tal imports (cif) uel and energy capital goods port price index (1995=100) port price index (1995=100) 	400 155 245 459 137 36	345 188 155 357 113	321 174 155 388
1982 S\$ millions) tal exports (fob) on ore ish A anufactures tal imports (cif) uel and energy capital goods port price index (1995=100) port price index (1995=100) 	400 155 245 459 137 36	345 188 155 357 113	321 174 155 388
tal exports (fob) on ore ish f anufactures tal imports (cif) iood uel and energy capital goods port price index (1995=100) port price index (1995=100)	155 245 459 137 36	188 155 357 113	174 165 388
on ore ish 1 anufactures tal imports (cif) iood uel and energy capital goods port price index (1995=100)	155 245 459 137 36	188 155 357 113	174 165 388
ish tanufactures tal imports (cif) iood uel and energy spital goods port price index (1995=100) port price index (1995=100)	245 459 137 36	155 357 113	155 388
1 anufactures tal imports (cif) iood iuel and energy apital goods port price index (1995=100) port price index (1995=100)	 459 137 36	 357 113	 388
tal imports (cif) ood uel and energy apital goods port price index (1995=100) port price index (1995=100)	459 137 36	357 113	388
ood uel and energy capital goods port price index (1995=100) port price index (1995=100)	137 36	113	
uel and energy apital goods port price index (1995=100) port price index (1995=100)	36		
apital goods		92	106
oort price index (1995=100) oort price index (1995=100)	121		92
oort price index (1995=100)		61	56
oort price index (1995=100)	121	87	82
	112	95	97
ms of trade (1995=100)	108	91	85
LANCE of PAYMENTS			
	1992	2001	2002
\$ millions)			
orts of goods and services 287	448	377	371
orts of goods and services 584	620	582	653
ource balance -297	-172	-205	-281
income -46	-67	-23	-27
current transfers 66	149	122	256
rent account balance -277	-118	65	
ancing items (net) 246 anges in net reserves 30	116 3	-78 13	
	3	5	2
emo: serves including gold (US\$ millions) 144	65	286	372
	87.0	285 255.9	272.0
nversion rate (DEC, local/US\$) 518	07.0	200.8	212.0
TERNAL DEBT and RESOURCE FLOWS			
S\$ millions)	1992	2001	2002
tal debt outstanding and disbursed 1,137	2,105	2,603	2,479
BRD 33	30	0	0
DA 49	229	475	544
tal debt service 57	87	72	71
BRD 2	67 15	0	0
DA 1	3	5	4
	- U	Ũ	-
nposition of net resource flows			
fficial grants 55	106	172	
fficial creditors 182	83	47	62
rivate creditors 7	-2	-3	1
oreign direct investment 15	8	30	•
Portfolio equity 0	0	0	
rld Bank program	20	68	~
Commitments 14	29	68	0
Disbursements 28	13	48	39
Principal repayments 0	13	2	1









Annex 15: Maps

MAURITANIA: SECOND PHASE OF THE INTEGRATED DEVELOPMENT PROGRAM FOR IRRIGATED AGRICULTURE IN MAURITANIA

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