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**Private-sector Development Strategy
Mauritania**

A Report for USAID Mauritania
and
the Office of Market Development
and Investment
of the A.I.D. Africa Bureau (AFR/MDI)
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EXECUTIVE SUMMARY

This report proposes a private-sector development strategy for USAID in Mauritania. It builds on the conclusions of the Investment Climate Study (1986) for Mauritania and identifies the sectors and individual projects offering the most promising opportunities to private investors. The report was prepared by Jean-Olivier Fraisse, finance and management consultant and chief of party; Norman Macleod, agronomist and natural resource management specialist; and Jean B. Wyckoff, agricultural economist, after a two-week visit in Mauritania, from January 21 to February 8, 1989.

The Mauritanian economy has gone through drastic changes in recent years under the combined impact of a severe drought and reduced foreign-exchange earnings in the mining sector. The lack of water, food, and forage resulted in a rapid sedentarization of nomadic herdsman around major towns with reliable sources of water and food aid along the Senegal river valley. Food aid from donor countries induced a shift in consumer tastes; wheat and bread are becoming increasingly popular. In addition, the attractively priced cereals imported under the aid programs may be displacing such local traditional crops as sorghum and millet.

The macroeconomic environment in Mauritania is characterized by a small and widely scattered population of about 1.9 million people, which limits market opportunities; the extensive presence of many parastatal entities enjoying monopolies in key sectors and services; periodic shortages of foreign exchange; an ineffective and totally illiquid banking system; a huge foreign debt; and a heavy dependence on foreign aid. In spite of these handicaps, the private sector in Mauritania appears to be thriving and dominates sectors such as trade, artisanal fisheries, small-scale agriculture, and livestock. It consists of a traditional sector that conducts its business in cash, has little faith in the banking system, and remains wary of government and tax authorities, and a modern sector in fisheries, trade, manufacturing, and large-scale agriculture.

At this stage, two areas appear to offer the best opportunities for private-sector development: the Rosso region, and more generally the Senegal river valley, where the recent availability of good quality irrigated land has resulted in a rapid increase in private-sector investments, and the Assaba region around Kiffa, where traditional livestock and small-scale farming can be greatly expanded. However, these areas are very different and even though both could greatly benefit from USAID's private-sector support, the modalities of such support must be carefully fitted to local circumstances.

I. Rosso and the Senegal River Valley

Background

The Rosso area has recently experienced a flare-up in private investors' activities on irrigated farmland along the river, which has resulted in a rapid increase in the production from rice paddies. Three factors may account for the investors' interest: (1) the completion of the Mantali and Diama dams on the Senegal river, which ensures year-round availability of fresh water; (2) the 1983 land-tenure law, which was intended to increase food production during the drought by increasing tilled acreage, allowing the Government to regain control of unused land in the river valley and delta region, and to redistribute it to private investors willing to cultivate it; (3) the existence of a government-guaranteed market at an attractive price for paddy rice under food self-sufficiency policies; and (4) access to government capital through essentially nonrecourse loans. As a result, some 40,000 hectares of land were allocated to about 800 would-be investors, out of which 17,000 hectares were effectively improved and 10,000 hectares were planted with rice. This represents a potential rice paddy production of 30,000 to 40,000 tons.

In our view, the potential of the Rosso area and of the river valley is impressive. They could become one of the world's major agricultural production centers. However, the recent development will not be sustainable without urgent corrective measures to ensure long-term land fertility (drainage and wind protection), improve current agricultural practices through standard extension services (agricultural research on soil, plant varieties, crop rotations, and so on.), and develop the required storage, transport, and milling facilities, which have not kept pace with production. Alternative crops, such as vegetables, fruits, and forage, should also be explored, as well as semi-intensive livestock raising to take advantage of crop byproducts and avoid the constraint of limited regional markets for most agricultural products.

II. The Kiffa Region

The Assaba region around Kiffa (a town of 40,000 inhabitants) is the country's major livestock production center for camels, cattle, sheep, and goats. Small but very innovative entrepreneurs have experimented with new agricultural crops (henna), with irrigated vegetable farming for the local market, with various forms of semi-intensive livestock farming (prior to marketing, free-roaming animals are penned for short periods and fattened on agricultural byproducts), and finally, with milk production and distribution.

The region is attractive because it is remote from Nouakchott (about 550 kilometers on paved roads) and relatively untouched. Few lenders and aid agencies have ventured into the Assaba region because most projects are small and their financing is perceived as costly. However, the income and employment multiplier effects of well-conceived, small-scale activities would be impressive. The financial requirements are limited, so that USAID could easily become the major and highly visible player in the area. We believe that the strategy proposed thereafter will allow USAID to support private-sector development in the area effectively, economically and at little financial risk.

Proposed Private-Sector Development Strategy for USAID

The objective of a private-sector development strategy for Mauritania may be stated as follows:

- i) To encourage private-sector development while expanding the number of participants deriving benefits.
- ii) To facilitate the development of lagging infrastructure, particularly in marketing and processing, via private-sector enterprises.
- iii) To support the expansion of the knowledge base necessary for developing a sustainable irrigated agriculture and livestock sector.
- iv) To enhance the technical capacity of Mauritians to develop and maintain private-sector enterprises using efficient technologies, particularly in agricultural and livestock production and marketing and the fishery sector, through the retail level.

I. The Rosso Area

These objectives would be achieved in the Rosso area through the implementation of the following programs:

- i) Establishing a credit facility for small- and medium-scale farmers, for financing production, medium- or long-term investments; the credit delivery system could be a local bank, SONADER, a parastatal rural development agency operating in the area, a new credit union being set up by a syndicate of local farmers under General Confederation of Mauritanian Employers (Confederation Generale des Employeurs Mauritaniens, CGEM), or a new agency to be set up for the purpose by USAID. If using CGEM, which is

so far a very exclusive club of wealthy entrepreneurs rather than a truly representative association of local employers. USAID should satisfy itself that its funds will reach the intended targets by carefully drafting the loan documents, nominating a representative on the loan approval committee, and supervising the project as frequently as necessary.

- ii) Establishing a farm-supply facility to avoid the "scalping" of small-farmer borrowers by the franchise dealers in the area who charge unreasonably high prices for most inputs.
- iii) Providing or supporting extension services, as described in the report. Specific actions would include preparing a compendium of agricultural research results in the region, supporting a soil-testing laboratory, and providing training in farm management and farming skills.

We believe, however, that no sustainable, effective, and financially rewarding involvement of the private sector (or of USAID) is possible in the Rosso area without first clarifying the following critical policy issues:

- i) Land ownership or long term-lease rights should be granted to the farmers. Without such rights, the farmers will not be willing to assume the high cost of the necessary land improvement works and the land could be irrevocably damaged by salt and wind erosion. Furthermore, few lenders will be willing to finance the development of the area because of the lack of worthwhile loan collateral.
- ii) The relations between private investors and the parastatal entities active in the agricultural sector, crop marketing, or food-product imports should be clarified. These entities can damage the private sector through excessive or untimely imports, or through unfair competition.

II. The Kiffa Region

USAID would establish a rural credit facility for small- and medium-scale entrepreneurs in the Kiffa area. To avoid the high costs, low loan recovery rates, and lack of security problems so common in rural credit operations, the facility will have no permanent expatriate staff--although a USAID representative would attend all loan approval committees and would conduct both financial and physical audits. It will rely on a committee of local "wise men" to screen all loan applications and monitor project implementation, and will call on local Peace Corps volunteers to advise the borrowers and supervise the projects. Finally, it will attempt to reinforce borrower discipline through group pressure, good faith deposits, and other time-tested mechanisms that have performed satisfactorily elsewhere.

III. Grant Program for Young Entrepreneurs

Under this program, USAID will help selected young skilled workers establish their own companies. Prerequisites to qualify are a proven and continuous employment record in equipment maintenance or other skill currently in short supply in the South or the Kiffa region, a sound project idea, the ability to contribute at least 30 percent of project costs in the form of equity, and other such criteria.

IV. Other Project Ideas

Several other project ideas are described in Section III of the report.

INTRODUCTION

This report examines the scope and rationale for future USAID support to private-sector development in Mauritania. It describes the country's macroeconomic environment, examines investment opportunities in the various sectors, and identifies the means by which USAID may foster private-sector development in the country. The report was prepared by Jean-Olivier Fraisse, finance and management consultant and chief of party; Norman Macleod, agronomist and natural resource management specialist; and Jean B. Wyckoff, agricultural economist, after a two-week visit in Mauritania, from January 21 to February 8, 1989.

I. The Macroeconomic Setting

General

With an estimated population of 1.9 million (1988) and an income per capita of US\$405 (1985), Mauritania is among the poorest countries of Africa. The Mauritanian economy is divided into a traditional sector, engaged in trade, nomadic livestock raising and agriculture, and a modern sector, until recently dominated by mining and fishery but at this stage rapidly expanding into agriculture. Recent statistics of GDP are as follows:

Gross Domestic Product (GDP) (UM billion at constant 1982 prices)				
	1985	1986	1987	1988 (est.)
Agriculture	0.65	1.27	1.56	1.58
Livestock	(na)	(na)	(na)	7.66
Fishing	3.20	3.50	3.44	3.51
Mining	5.95	5.98	5.78	6.02
Others	(na)	(na)	(na)	5.62
Services	(na)	(na)	(na)	16.39
Total GDP	39.9	42.1	43.3	44.7

The Mauritanian economy is still recovering from serious difficulties caused by external and internal factors. A persistent and severe drought from the early 1970s until the mid-1980s had a profound impact on Mauritania. The lack of food and forage in the hinterland led to greatly reduced wealth for the nomads who had to dispose of their herds; to a rapid urbanization of the rural population, which gathered wherever water and food aid were available; and in permanent changes in food diet with the adoption of imported wheat, vegetables, and fish (which had not been widely consumed in the past). Irrigated agriculture also expanded rapidly in the South along the Senegal river and in various oases. At the same time, a long period of low international prices for iron ore combined with technical difficulties with the mines reduced government earnings from the sector that had long been the major source of foreign exchange for the country. Since 1983, however, fishery has been accounting for some 60 percent of total hard-currency receipts.

The impact of these external factors was undoubtedly aggravated by weak government economic policies, which allocated a substantial part of available resources, including foreign aid, to major public investment projects of questionable profitability. Between 1980 and 1984, the gross domestic product (GDP) output per capita decreased by 0.6 percent yearly despite a high rate of capital investment (32 percent of the gross national product (GNP)). Over the same period, public and private consumption and investments

exceeded the gross national output by 25 to 30 percent. The Government's consolidated fiscal deficit rose to a peak of 11.4 percent of the GDP in 1984 while the current-account balance-of-payment deficit, swollen by capital imports associated with major public investments, was about 30 percent of the GDP.

In 1985, with substantial financial and technical support of its creditors and donors, the Government launched the initial phase of a Programme de Redressement Economique et Financier (PREF), which sought to reduce large budgetary and balance-of-payment deficits and to improve the climate for balanced and sustainable growth. In particular, PREF focused on implementing a flexible exchange-rate policy; a restrictive monetary and credit policy favoring the private sector; continued austerity in public finances; decontrol of prices so that they would reflect real costs; continued rehabilitation of the parapublic sector; investment programs giving priority to the productive sectors (fisheries and agriculture) and rehabilitation projects (in mining, infrastructure and public services); developing training facilities tailored to the needs of the economy; and setting up an incentive framework to promote private investment, job creation, and community participation in satisfying basic needs.

Despite a substantial injection of financial resources from the World Bank and other donors, progress under PREF has been slow. The key characteristics of the current macroeconomic environment, as they may affect private-sector operators, are described below.

In spite of conditions set by PREF in 1985 to control consumption and public investment, total external debt increased 33 percent from 1985 to 1987, equaling 217 percent of the GDP in 1987 and requiring 40 percent of the GDP for debt servicing in 1988 and 1989. In spite of this disastrous financial state and excessive debt burden, the PCR recommends the addition of \$746 million of external financing in 1989 and 1990.

Key Characteristics of the Macroeconomic Environment

- i) *A small population and low level of participation income, which greatly limit market opportunities:* the country's 1.9 million inhabitants, widely scattered over a large territory with poor transport infrastructure, constitute a major handicap to the development of many manufacturing activities, in particular those based on import substitutions. In addition, as discussed below, the agriculture and livestock potential of the country is far in excess of its domestic market.
- ii) *Rapidly changing lifestyles:* from the sedentarization and rapid urbanization of nomadic populations and the increasing availability of new food products. The market for such traditional crops as sorghum and millet is shrinking because of the increasing availability of imported wheat and other cereals, first introduced during the drought as food aid. There is also a fledgling market for fish and locally grown vegetables even among former herdsmen.
- iii) *Pervasive role of Government parastatals:* with various degrees of intensity since independence from France in 1960, the Government has played a major role in economic development through up to 70 parastatal companies. Most of these companies are poorly managed, unprofitable, inefficient, and overstaffed. There is a virtually inoperative policy to reduce their number through liquidation, privatization, and restructuring. Those that will remain may hamper private-sector initiatives by controlling key aspects of economic life. Their role and future will be discussed in connection with their respective sectors.

- iv) *Occasional shortages of foreign exchange:* The country's balance-of-payment deficit is the cause of periodic shortages of hard currencies. International transfers of funds for the payment of consumables, spare parts, or debt service may be arbitrarily delayed by the central bank. Furthermore, cumbersome foreign-exchange controls are stifling private initiative and inducing citizens to smuggle their wealth out of the country.
- v) *An ineffective and rather illiquid banking system:* Most Mauritanian banks are in an undeclared state of bankruptcy because of a growing portfolio of nonperforming loans. They are no longer able or willing to lend medium- or long-term funds to would-be investors because of PREF's restrictive monetary policies, which prevent them from rediscounting their loans with the central bank. Also contributing to the lack of liquidity in the banking system is its chronic inability to mobilize local savings and the banks' growing portfolio of nonperforming loans. As a result, routine financial transactions may be delayed because the banks themselves are lacking the cash to complete the transaction. Under PREF, government-owned banks will be recapitalized through privatization, but so far only one bank (BMCI) has been successfully sold to the private sector. This bank appears to have better liquidity and is gaining the confidence of depositors.
- vi) *A huge foreign debt:* Foreign debt is estimated to have reached almost \$2 billion by the end of 1987. External debt represented some 220 percent of GDP in that same year, and in 1988, interest and principal repayment due are projected to reach almost US\$ 200 million, an amount larger than annual exports of iron ore. Most of the debt was contracted in conjunction with physical investment in questionable ventures, whose profitability has frequently lagged behind expectations. The country's huge foreign debt increases the level of uncertainty for private investors, as Government economic policies may become increasingly restrictive in an attempt to save foreign exchange.
- vii) *A heavy dependence on foreign aid:* Because of its geopolitical situation, Mauritania has benefited from an unusually high external assistance of about US\$180 per capita over the period 1982 to 1984. This level of foreign aid exceeded the country's absorptive capacity, which discouraged "real" development, encouraged corruption, and reinforced irresponsible behavior on the part of government and people. Foreign aid is flowing in as food aid, grants, and soft-term loans. The typical loan maturity exceeds 20 years and the average interest at the end of 1987 was 3.4 percent. These highly concessionary terms went to finance parastatal ventures in productive sectors, such as agriculture or livestock, which usually offer investment opportunities to the private sector. Even more damaging to private-sector initiative is food aid, which imports vast quantities of foreign cereals that are dumped on the local market at unrealistically low prices. Local producers cannot compete against subsidized European or American wheat, and as long as bread will sell for UM13 (US\$ 0.17 at current exchange rates) for a 750-gram loaf, few people will want to eat local sorghum or millet.
- viii) *A perennial shortage of skilled labor:* While the country has an adequate supply of graduates from American or European universities, skilled labor is scarce in Mauritania. The shortage of qualified craftsmen is most obvious in such support activities as mechanics, maintenance workers, construction workers, and equipment (tractors and earth-moving machinery) drivers. The need is most acute in the River Basin area, which is developing very rapidly. By contrast, there is no shortage of skilled labor in the mining area, which is already well

established. However, the mining sector tends to be an economic enclave little related to the rest of the economy.

II. Private-sector Development: Review of Individual Sectors

The following describes recent developments that affected the various sectors of the economy. Background information on each individual sector is available in the Investment Climate Study (1986), which was carried out for USAID/Mauritania and the then Office of Private Enterprise, A.I.D.

A. Mining Sector

The mining sector was nationalized in the mid-1970s, and it is still dominated by a large Government-owned iron ore mining company, the Societe Nationale Industrielle et Miniere (SNIM), which in 1985 accounted for 14.5 percent of the GNP and about 50 percent of foreign-exchange earnings. More recently, however, the relative importance of the mining sector has decreased in view of the expansion of the fishery sector, which now accounts for more than 60 percent of foreign-exchange earnings. This reduced importance is from technical difficulties--3 years after production startup, SNIM's ore-concentrating plant is still operating at one-third capacity (2 million tons per annum versus a 6 million ton capacity)--and low iron-ore prices. At this stage, SNIM is heavily subsidized by the Government--some US\$20 million per annum according to reliable sources--and it is being reorganized with World Bank assistance. Another large mine, a copper mine at Akjoujt, has been sold to Arab interests. Overall, the sector is still dominated by the Government, and in our view, it does not offer attractive opportunities for either the Mauritanian private sector or USAID intervention.

B. Fisheries

The Mauritanian coastal waters are considered to be one of the most productive ocean fishing zones in the world. Presently, the total yearly harvest potential was estimated at some 600,000 tons of fish per annum, including 460,000 of pelagic species, 90,000 tons of demersal species, and 42,000 tons of cephalopods. The sector is currently exploited pretty much to its full potential by a large industrial fleet (for the most part foreign-owned, with the exception of some 130 Mauritanian-owned freezer trawlers), and by a small artisanal fleet of traditional pirogues, which land some 20,000 tons per annum of pelagic fish and a growing catch of high-value cephalopods and lobsters. There is fear that current yields may not be sustainable.

In recent years, the fishery sector has produced a net foreign-exchange inflow of some US\$270 million per annum, accounting for more than 60 percent of total foreign-exchange earnings and contributing some 20 percent of Government budgetary revenues. While the pelagic fish are marketed directly by the foreign-fleet owners, the high-value species (demersal fish and cephalopods) must be landed in Mauritania and exported through a state-owned entity, the Mauritanian Fish Marketing Company (Societe Mauritanienne de Commercialisation du Poisson, SMCP) which acts as both a marketing agency and a tax collector. Even though many ship owners are satisfied with SMCP because it provides them with a ready market with no effort on their part, SMCP acts as a screen that may prevent the owners from adapting to consumer tastes and thus from increasing their profits. In addition, as a parastatal entity, SMCP appears to lack the will and initiative that would be required to identify the best bid at any point for the Mauritanian catch. It tends to rely on existing and well-established distribution channels and does little shopping around.

Under the present arrangements, more than 70 percent of the output of the sector is returned to factors of production outside Mauritania in the form of wages to foreign crews, payment to foreign suppliers, profits of foreign

companies, and debt service on foreign loans. The Government intends to increase the local share by processing more of the catch locally (at this stage, most of the fish is exported frozen whole with little value added), supplying services (ship maintenance, chandling, and so on) currently available only in Las Palmas, and improving surveillance of fishing operations to reduce smuggling. The Government strategy of increasing the local value added will require that SMCP's pricing structure be modified to provide suitable incentives. In addition, it is unclear whether SCMP will retain a monopoly on fish-based products manufactured locally.

The Mauritanian private sector is already well established in the industrial fishery sector since it owns and operates some 130 old, mostly obsolete, but low-priced freezer trawlers. These are generally operated by Korean crews, who offer a high level of skills at comparatively low wages. USAID is presently financing the training of several Mauritanian crews.

Another area of private initiative has been the artisanal sector. Several small entrepreneurs buy the catch from artisanal fishermen, transport it, and sell it in the hinterland. A handful of entrepreneurs are even exporting high-value fresh fish, rock lobster, or cephalopods by plane from Nouakchott to Europe.

Overall, the fishery sector is very dynamic and creative. It has been intensively studied by a number of bilateral and multilateral agencies. Some projects being designed or implemented focus on infrastructure development (ports or freezing facilities to improve the marketing of the artisanal catch) and support to the artisanal fishermen. It needs no support from USAID, with the exception of the crew training already being provided. In addition, USAID could provide assistance towards policy formulation in the sector.

C. Agriculture and Livestock

C-I. The Rosso Region

Background

The agricultural and livestock sectors present the best opportunities for private investment in Mauritania and, as evidenced by the rapid development of the River Valley in the Rosso area, have already attracted the attention of local entrepreneurs. The impressive development in the Rosso area appears to be the result of several unusual factors:

- i) The availability of free, very valuable land. The land tenure reform law of 1983 allowed the government to regain control of land deemed unused and redistribute it to people who had expressed an interest in developing it. The 1983 law was an emergency measure to alleviate the impact of the drought by increasing tilled acreage. To protect the rights of former owners or occupants--whoever they may be--the law specified that the land be reallocated on a temporary and revocable basis. The beneficiaries did not receive clear title to the land, but only a document to the effect that they were allowed to cultivate the land but not to improve it or otherwise erect permanent structures on it. In some areas such as the upper River Valley, the new occupants clashed with the traditional users (herdsmen or flood-recession farmers) who felt exploited even though the land had been left fallow for several years because of the extreme drought condition. The ensuing claims are being sorted out, but the social tensions are running high, especially because many beneficiaries are Moors while the local inhabitants are indigenous Africans. West of Rosso, by contrast, very few such claims were made--fewer than 20 out of 800 beneficiaries, according to reliable sources.

- ii) The availability of water, a very scarce resource. The recently-completed Manantali dam on the Senegal River will regulate seasonal floods and ensure access to reliable water yearround. In addition, the lower dam at Diama will prevent saltwater intrusion in the lower valley and delta, which has so far prevented the development of nearby land.
- iii) The existence of a government-guaranteed attractive price, as well as a ready market for paddy rice through a parastatal entity, the Food Security Commission (Commissariat à la Sécurité Alimentaire, CSA). In the wake of the drought, the Government had attempted to rationalize food availability in the country by establishing the Office Mauritanien des Cereales (OMC) in 1975, whose purpose was to buy and redistribute all locally produced cereal crops, and the Food Aid Commission (Commission d'Aide Alimentaire, CAA) which was in charge of managing the substantial food aid flowing into the country. These two entities were merged in 1982 into CSA which still retains OMC's former monopoly on the purchase and redistribution of locally produced cereals, while another parastatal, National Import-Export Company (Société Nationale d'Importation et d'Exportation, SONIMEX) retains a monopoly on the imports of basic food items, including rice. SONIMEX is also in charge of rice distribution on the domestic market so that it can more easily coordinate imports and local production. To encourage local food production, CSA was buying at the farm gate, transporting, and milling local paddy rice at UM18.5 per kilogram (1988) at a time when SONIMEX could import broken rice (a byproduct for the Thai, but the preferred product in Mauritania) from Bangkok at UM14 per kilogram, CIF Nouakchott. Now rice must be delivered at 19.5UM. SONIMEX in turn averages local and imported rice prices to reach a government-controlled retail domestic price of UM29 per kilogram.

Investors' response to these favorable conditions was almost immediate. An enormous inflow of outside capital (both public through bank loans and private) poured in to develop the redistributed land for rice production. At the end of 1988, some 40,000 hectares of potentially irrigable land in the Rosso area alone were taken over by the state and redistributed to about 800 individuals, small collectives, or cooperatives, out of which some 17,000 hectares were actually improved at a much lower cost than SONADER (a state agency in charge of land development), and about 10,000 were effectively planted with rice. At an average yield of 4 to 5 tons per hectare, and assuming that CSA is able to cope, about 40,000 tons of local rice could go to the market against a yearly consumption of 70,000 to 80,000 (part of which is reexported to Mali and Senegal).

Not surprisingly, the available milling, storage, and transport capacity has not kept pace with rice production, and many farmers are likely to lose their crops. In addition, the quality of locally milled rice has been deemed to be unacceptably low by the domestic consumers at the retail price set by SONIMEX. Investments are thus needed to eliminate these bottlenecks.

Current Government Policy Toward the Sector

As stated in a Communication of the Council of Ministers on June 15, 1988, current Government policies toward local producers consist of:

- i) A pricing policy providing for sufficient incentives to the producers and protecting domestic production.
- ii) An efficient marketing policy ensuring private-sector development by providing adequate compensation for private-sector services.

- iii) An incentive policy ensuring private-sector participation in both production and related activities upstream and downstream from production.

In principle, this policy will enhance the role of the private sector in domestic food production and processing. However, the actual implementation of the policy remains difficult as evidenced by the widely divergent current paddy rice production cost estimates produced by the World Bank (UM13.5 per kilogram) and by the Government (UM19 per kilogram, including a 12 percent return on investment). Nevertheless, Government is intent on increasing controlled consumer rice prices to ensure SONIMEX's profitability in spite of shrinking imports and rising domestic production.

Appraisal of the Current Situation

First and foremost, the agricultural potential of the Senegal River Valley is impressive. On the Mauritanian side, it represents almost 130,000 hectares of high quality, irrigable land that could be turned into a world-class production center. In the meanwhile, prevailing evidence in the Rosso area leads us to believe that:

- i) Contrary to the current creed, many private developers had access to substantial loans through Union de Banque de Developpement and other local banks. Only a few used their own funds exclusively. Furthermore, several individuals who had benefited from bank loans in the fishery sector and had defaulted on these loans managed to secure new loans to establish farms in the Rosso area. Great care should thus be exercised when selecting future potential partners in the area.
- ii) Unless remedial steps are immediately taken, the current spurt in development will be short-lived. The low-cost, light-investment type of land improvements that many farmers implemented do not provide for adequate drainage and wind protection. Salinity is a serious danger and inadequate cultivation methods (rice monoculture without alternating crops, reseeding hybrid rice from last year's crop, and so on) will quickly erode yields. In addition, both unskilled and skilled manpower is in short supply in the area, the more so as peak work loads in traditional agriculture coincide with peak work loads in rice production--planting and harvesting take place at the same time. To be sustainable, rice production should thus be mechanized, but only large farms can afford the necessary equipment.
- iii) Government policies with respect to land tenure should be clarified. Nobody will invest heavily to improve land he may only use on a temporary and revocable basis. In addition, land titles are the most effective way to secure the financing required to support the development of the entire sector.
- iv) Government policies with respect to the roles of the parastatals (SONIMEX, CSA, and SONADER) and of the private sector should be clarified. As long as a parastatal is able to flood the market with cheap imports, farmers will not be willing to make long-term commitments to ensure the sustainability of their operations.
- v) The limited size of the domestic and regional markets is a serious constraint to crop diversification; 2,000 hectares of irrigated land yielding a modest 10 tons of vegetables per hectare could produce all the vegetables Nouakchott (about 400,000 inhabitants) may ever need to eat.

- vi) Unless public infrastructure (transport, cold stores, communications, public utilities, and so on) are greatly improved, overseas exports of surplus crops are not a feasible alternative.

Recommended Course of Action

The following steps should help alleviate the problems:

- i) There is a dearth of information on possible alternate crops in the Senegal River Valley and in particular in the Rosso area. A compendium of available agricultural research data in Senegal, Mali, and Mauritania should be prepared at the earliest.
- ii) Standard agricultural extension services--agricultural research, seed farm, tree nursery, soil analyses, input definitions, crop rotations, and so on--should be quickly organized.
- iii) Maintenance facilities should be quickly expanded in the River Valley; otherwise, benefits from the rapid increase in irrigation and farm equipment will be quickly lost. Similarly, there is a great need for drivers, farm mechanics, and other semiskilled workers in the area.
- iv) Adequate financing must be provided to help the private sector organize rice storage, transport, and milling facilities. CSA's rapid pace of withdrawal from these various activities could result in serious disruptions for the producers. To date, little has been done to help them cope with this changing environment. In a second phase, financing will also be required to help implement a crop-diversification policy.
- v) In spite of market constraints, crop rotations (rice, vegetables, forage, and so on) should be encouraged to ensure long-term land fertility.
- vi) The only sizable and already well-established export market available to Mauritanian agriculture is livestock. The River Valley should explore the means by which it may be able to tap into this huge potential market to increase the value of its production. For centuries, Mauritanian herds (camels, cattle, sheep, and goats) have been sold all over Western Africa and as far as Nigeria. The River Valley could use its byproducts (straw, bran, corn stems, forage, and so on) to fatten and breed livestock in a semi-intensive manner--in the rainy season, when forage is plentiful, herds are spread throughout the country in a traditional nomadic lifestyle; in winter, during the dry season, they gather around Rosso; breeding would be timed in the winter season to help improve the local stock and ensure a good healthy start to young animals.

C-II Livestock and the Kiffa Region

In contrast to agriculture, the livestock sector has remained very traditional. Mauritanians still engage in "contemplative" herding, where livestock is more perceived as a reserve of wealth than as a valuable resource to be rationally exploited. However, a few individual entrepreneurs are attempting to improve their herds through selected breeding and improved diets. These efforts would be greatly enhanced through the combined agricultural and livestock activity described above for the Rosso area. In addition, as described below, the Kiffa region offers outstanding opportunities for private-sector development in small-scale agriculture and livestock activities.

Kiffa is a town of about 40,000 inhabitants that has expanded rapidly over the past 10 years. It is the capital of the Assaba region, the country's

major livestock production center. A one-day visit to Kiffa revealed attractive and unusual circumstances that can be exploited to launch a sound private-sector development program. Specifically, there is a number of small but very innovative entrepreneurs and a very dynamic mayor strongly supported by the region's governor.

Specific project ideas presently being tested by local entrepreneurs include the production of henna as a cash crop, the production of vegetables on irrigated farms for the local market (not too successful to date because of seasonal surpluses and low purchasing power), various forms of semi-intensive livestock farming (prior to marketing, free-roaming animals are penned for short periods of time and fattened on agricultural byproducts), and finally, milk production and distribution, which appear very promising.

The region is attractive because it is remote from Nouakchott (about 550 kilometers on paved roads) and relatively untouched. Few lenders and aid agencies have ventured into the Assaba region because most projects are small and their financing is perceived as costly. However, the income multiplier effect of well-conceived, small-scale activities would be impressive. The financial requirements are limited, so that USAID could easily become the major and highly visible player in the area. We believe that the strategy proposed thereafter will allow USAID to support private-sector development in the area effectively, economically, and at little financial risk.

III. USAID Private-sector Development Strategy

Prior to defining a private-sector strategy, it may help to pause and reflect on two necessary components of any strategy: the target group of entrepreneurs and the type of projects that may best succeed in the Mauritanian environment.

The Mauritanian Entrepreneur

Ideally, the key element when attempting to develop the private sector is the existence of a well-educated, committed, reliable group of potential local investors willing to risk their assets on a new venture of their own. Mauritania is rather exceptionally endowed in this aspect because of its very old merchant class, which is well versed in international trade where it has excelled for centuries. Those who succeed in trade are likely to diversify their activities by acquiring a few fishing freezer trawlers or investing in agriculture. From our discussion with knowledgeable people, Mauritanian traders appear to have specific traits which are worth describing. In particular:

- i) Traders like a high return based on a quick turnover and movable assets. By contrast, entrepreneurs are willing to invest in fixed machinery, plant, and equipment with a low turnover in the hope of getting a lesser but more consistent profit.
- ii) Traders like liquidity. They shy away from the banking system and conduct most of their transactions in cash. Consequently, a substantial part of the Mauritanian economic life was and still remains outside the banking system. Cash is hoarded or invested in livestock or real estate and banks are unable to mobilize local savings.
- iii) Family ties are extremely strong in Mauritania. Family members may provide unexpected money gifts to help one of them launch a new venture. In addition, resource transfers within the family routinely redistribute income from the wealthiest to the neediest. This might explain why the country has so far been able to cope with a high concentration of wealth without social unrest.

- iv) Traditional traders and entrepreneurs seldom maintain or even feel a need for adequate accounting records. A side effect of the lack of records is that their activities remain beyond the scrutiny of tax authorities.
- v) Traders conduct their business intuitively. They decide to invest based on their best judgment. They do not feel the need for a detailed investment analysis when requesting a loan from a local bank. Until recently, the banks have obliged by granting loans on the basis of personal guarantees or other forms of security.
- vi) Mauritians love to negotiate. Bargaining is a way of life. An agreement is much more likely to be complied with when reached after a lengthy discussion.

The negative part of these traits is that local businesspeople often go for quick profits on low investments. It is a "hit-and-run" type of operation. Long protracted ventures are not attractive to them. However, as discussed above, Government policies may also share the blame for this short-term outlook.

It is obvious, nevertheless, that the private sector in Mauritania is not homogeneous, but rather consists of very diverse individuals. A minority are unscrupulous and their only objective might be to avail themselves of any opportunity to make money. Heavy borrowing with no intention to pay back is their trademark. Other big and medium-size investors are less ruthless (possibly because they do not have a very effective power base). Finally, the small entrepreneur cannot generally tap the commercial credit sector and thus is not really in the game. While the first two groups can take care of themselves, their dynamism and entrepreneurial talent may have to be tapped to help achieve USAID private-sector objectives.

Desirable Project Characteristics

To proceed logically, we will first characterize projects likely to fail in the local environment. We will then attempt to define the traits that may help a project succeed.

- i) Except in its early years, a project should not depend on a custom tariff or other government incentives to be profitable; governments are notoriously fickle, they may change policies, and a project that must be protected could see its protection removed.
- ii) Unless cheap domestic inputs are available or they enjoy a natural protection (bulky or heavy material are costly to transport, perishable products with a short shelflife are difficult to export), most import-substitution projects must rely on economies of scale to be competitive. They are thus likely to fail in view of the size of the Mauritanian market.
- iii) Export markets are characterized by cut-throat competition; in order to survive, one should either enjoy a comparative or competitive advantage--that is, export products that are competitively priced or that are attractive to consumers because of unusual features (a "niche" product)--or be able to produce and ship in a reliable and timely manner a product of consistently high quality. Successful exporting is thus seldom feasible until a firm is well established and fully in control of its operations; furthermore, successful exporting requires reliable transport and communication facilities. Mauritania was able to succeed in exporting fish and iron ore, two products for which she enjoys a competitive advantage, but she may find it difficult to export fruit and vegetables, which are already available from a variety of sources.

- iv) Foreign-exchange shortages would handicap a project that requires substantial imported inputs; however, if the project is also exporting part of its production, it may be able to use the proceeds of its export sales to finance its own inputs--an arrangement that would undoubtedly meet strong opposition from the central bank.
- v) The low purchasing power of the Mauritanian population must also be taken into account; it implies that a product cannot go through expensive processing and that cost overheads should be kept low. A way to alleviate the problem is to set up interlinked projects that would share common services; for example, a fish delivery truck would bring back vegetables as a back-haul cargo; or several otherwise independent entities would pool maintenance and orders of consumables.

In conclusion, a successful project in Mauritania would have to enjoy a competitive or comparative advantage on the local market by using low-priced domestic inputs and relatively few imported inputs; it would not need a lasting custom protection but would enjoy a natural protection (costly imports of competing products because of weight, short shelflife, or other factors). Finally, it would achieve economies of scale by sharing common services with other related projects.

Strategy Objectives

The objective of a private-sector development strategy for Mauritania may be stated as follows:

- i) To encourage private-sector development while expanding the number of participants deriving benefits.
- ii) To facilitate the development of lagging infrastructure, particularly in marketing and processing, via private-sector enterprises.
- iii) To support the expansion of the knowledge base necessary for developing a sustainable irrigated agriculture and livestock sector.
- iv) To enhance the technical capacity of Mauritians to develop and maintain private-sector enterprises using efficient technologies, particularly in agricultural and livestock production and marketing and the fishery sector, through the retail level.

These objectives will be accomplished through carefully selected, designed and executed programs. The target group for expanding participation and resultant benefits of private-sector development are the small- and medium-size farmers, artisanal fishermen, artisans and craftsmen, and businessmen. Initial concentration will be on small farmers and collectives in the rapidly growing agricultural sector surrounding Rosso and Kiffa. The various programs are described thereafter.

Rosso Region

A. Credit facility for small- and medium-scale enterprises

Emphasis will be on the effective provision of credit for consumable production inputs, irrigation and farming machinery and equipment, and improvement of land irrigation and drainage systems. It is proposed that each type of credit be identified and repayment terms structured appropriately. The criteria for selecting loans and borrowers will be carefully specified and assiduously followed. To prevent any particular group from gaining control of USAID funds at the expense of other groups, covenants will specify the composition of the loan-approval committee and the desired characteristics of the loan portfolio.

The financial vehicle for delivery of credit will determine the success or failure of the project. It may be possible to use the UBD structure currently being financed by the Germans in Rosso, providing that the USAID program is staffed, implemented, and accounted for separately. If this cannot be satisfactorily accomplished, setting up distribution through the SONADER delivery system might be examined. A final alternative would be to structure a new "credit union," perhaps involving the mayor of Rosso, representatives from the area collectives, and selected individuals who have been long-time residents and farmers in the area. The new investors, who have obviously been able to access outside capital, would be explicitly excluded from this program.

B. Farm-Supply Facility

As the credit is dispersed to the small farmers in Rosso, the demand for production inputs, pumps, machinery, and so on will increase. In order to prevent the "scalping" of small-farmer borrowers by the franchise dealers in the area, it may be possible to finance an entrepreneur to set up a farm-supply business where the USAID program director or his representative sets allowable margins on all items. Similarly, as production increases, the financing of needed infrastructure for private-sector development, such as a vegetable assembly, grading, and packing facility and/or a grain-storage facility might prove to be feasible. The latter facility should be equipped for bulk handling to eliminate the need for bags and the three bagging operations required by the present system.

C. Compendium of Agricultural Research Results and Other Forms of Support

The potential for agricultural development in the river basin is tremendous. However, in order to develop an optimal, sustainable system, a great deal of scientific knowledge and basic support will be required. It is recommended that USAID encourage and support the expansion of Mauritania's agricultural research network to include research specific to the developing Rosso area. Immediate projects could include a systematic search of past published research by the Richard Toll Institute, previous work within Mauritania, and other relevant sources.

A second effort would be to support a soil-testing laboratory for farmers in the area. Involving existing extension personnel in such an effort might be instructive. Using the large accumulation of local currency generated by the PL 480 and other soft currency programs to further the expansion of knowledge and food production via agricultural research would seem appropriate. Developing motivated, informed, technically skilled, mobile extension service with communication and teaching ability is essential.

The most apparent shortcoming of private- (or public-) sector entrepreneurs in developing countries is their lack of management and accounting skills. If they are to maximize their profits and use their limited resources most effectively, they must understand and know how to apply certain decision tools. In many cases, information from good accounting records can facilitate the decision process. A program offering the opportunity for farmers and other borrowers in the credit program to optimally use their borrowed capital, labor, land, and other productive resources should be provided and may be required. For those who are numerate, simple recordkeeping could be taught and the information gained could be used in evaluating additional credit requests. The record would also provide cost of production data and identify those inputs not used at their optimal level. This information would eventually provide farmers with their least-cost, most profitable production function.

Farming skills should also be taught, especially those associated with the introduction of crops new to the farmer. Skills associated with the harvesting of fruit and vegetables, such as determining the optimum stage of

maturity, picking a fruit with a twist rather than a pull to keep from damaging both the fruit and the tree, and handling the harvested crop properly to maintain quality, should all be taught. While Mauritania is still far from food self-sufficiency, there is little reason for this shortage situation to prevail. If development of the Senegal river basin proceeds at its present rate, the "thin" market available in Mauritania will be quickly satisfied. Export markets, which are very competitive and demand quality products will then be required. Training farmers for this eventuality now is in their self-interest as well as the country's.

Kiffa Region

It is proposed that USAID establish a credit facility for small- and medium-size entrepreneurs in the Kiffa region. Rural credit operations are typically plagued by high costs, low loan recovery rates, and inadequate securities. Major reasons for such problems are high overhead costs, inadequate screening of borrowers, and lack of supervision to ensure that the proceeds of the loan have been used as intended. To alleviate these problems, the credit facility to be provided by USAID for small- and medium-scale enterprises in the Kiffa region will be structured as follows:

- i) A committee of local "wise men" will screen all loan applications in association with an USAID representative. Key criteria for the screening process will be the applicant's character, his prior experience in the activity to be financed, the collateral he will provide, and the capability of the proposed project to produce sufficient cash flow to repay the loan.
- ii) Prior to receiving the loan, the applicant will deposit 10 percent of the loan amount in an escrow account bearing interest; this deposit will be frozen for as long as the loan remains outstanding. This will weed out applicants with no surplus income that may be used for debt service. To build up peer pressure among the borrowers, borrowers will be told that their deposit may be used in lending operations and a list of all borrowers will be made available on request.
- iii) The committee of "wise men" will be in charge of loan supervision. As local inhabitants of Kiffa, they will be able to monitor project implementation and to suspend disbursements when a borrower is acting improperly.
- iv) After attending each loan committee, the USAID representative will audit the accounts and check the physical implementation of a sample of projects.
- v) As a further safety measure, local Peace Corps volunteers will be kept informed of all projects; their assistance will be requested to advise borrowers on implementation and to monitor progress.

Grant Program for Young Entrepreneurs

While maintenance and other support services are lacking in the Rosso area, in particular in view of the rapid expansion of irrigation and farm equipment, modern Mauritania--Nouadhibou and the mining area--has an ample supply of skilled workers. A grant program could help qualified young skilled workers with an entrepreneurial spirit establish their own companies in the River Basin. Stringent eligibility criteria and a sound project proposal would be required to help weed out unsuitable candidates.

Other Project Ideas

While the *initial* private-sector development focus is outlined above, simultaneous exploration of other alternatives should proceed. The artisanal fishery might profitably use some credits for replacing and perhaps modernizing equipment. Improved marketing, including the use of currently available freezing plants, would seem to be in order. Introducing some processing, (such as smoking or drying in order to lengthen product shelf life and extend market area) should be explored. Expanding fresh fish shipments to Europe to the extent of available cargo space may be an opportunity. If the market is there, chartering air freight is a possibility.

Ship chandling, especially the fishing fleet, might provide an opportunity for local food producers. Setting up a low cost, semihydroponic production system using a simple form of drip irrigation with sand medium should produce a quality product. Capturing this market would generate foreign exchange as foreign vessels are supplied and save foreign exchange for Mauritanian ships--a double benefit. Such an operation might also supply the needs of the mining community as well. A reefer container could be placed aboard a railway flat car and attached to the ore train.

The livestock industry is the largest contributor to the Mauritanian economy. While it uses most of the country's land area, its offtake is relatively low. A major opportunity is presenting itself as the Senegal River Basin develops its irrigated agriculture potential. Use of the crop residues produced and development of irrigated forage rotations in the farming systems may provide food to fatten tens of thousands of cattle, sheep, and goats. The offtake should more than satisfy Mauritania's demand for meat, providing an opportunity for exporting. A slaughterhouse could (and would) become an attractive private enterprise, as would a tannery. Livestock production and marketing is totally in the private sector. Making credit available to our small-size and medium-size farmers in the Rosso area to purchase additional livestock to use their crop residues should provide good profits, a rapid turnover of funds, and high repayment rates.

While oases agriculture may provide some potential opportunities, the time and travel constraints on this team precluded examining them.