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47

USAID/SENEGAL

PROGRAM ASSISTANCE APPROVAL DOCUMENT

AGRICULTURE DEVELOPMENT ASSISTANCE

SAHEL DEVELOPMENT FUND

685-0249

August 3, 1983

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PDAR 1565

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AID 1120-1 (8-66)

PAAD

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

PROGRAM ASSISTANCE
APPROVAL DOCUMENT

1. PAAD NO.
685-0249

2. COUNTRY
SENEGAL

3. CATEGORY
AGRICULTURE DEVELOPMENT ASSISTANCE
STANDARD FINANCING

4. DATE
May 19, 1983

5. TO:
Alexander R. Love, Actg. Assistant Administrator, Bureau of Africa

6. OYB CHANGE NO.

8. FROM:
David Shear, Director
USAID/Senegal

8. OYB INCREASE

TO BE TAKEN FROM:

9. APPROVAL REQUESTED FOR COMMITMENT OF
$ 5,000,000

10. APPROPRIATION - ALLOTMENT

11. TYPE FUNDING: [ ] LOAN [X] GRANT

12. LOCAL CURRENCY ARRANGEMENT: [ ] INFORMAL [X] FORMAL [ ] NONE

13. ESTIMATED DELIVERY PERIOD: Jan. - Sept. 1984

14. TRANSACTION ELIGIBILITY DATE: October 1982

15. COMMODITIES FINANCED

Fertilizer and fertilizer components, in bulk and bagged.

16. PERMITTED SOURCE		17. ESTIMATED SOURCE	
U.S. only:	$5,000,000	U.S.:	$5,000,000
Limited F.W.:		Industrialized Countries:	
Free World:		Local:	
Cash:		Other:	

18. SUMMARY DESCRIPTION

This grant from Sahel Development Funds represents U.S. Assistance to the Government of Senegal in order to encourage reforms and activities in the fertilizer and cooperative sub-sectors aimed at increasing agricultural productivity. The grant will also fund comprehensive studies of the agriculture sector and credit/savings sub-sector. Fertilizer imported under this grant will help increase agricultural productivity and contribute to alleviation of the GOS balance of payments problem.

Local currency generated under this grant from the sale of fertilizer will be used to assist the GOS in carrying out its agricultural and rural development programs with specific reference to strengthening village level cooperatives and producer groups, and supporting the new Agriculture Credit Bank, Caisse Nationale de Credit Agricole du Senegal (CNCAS). Funds for the CNCAS will not be released until results of credit/savings study confirm need.

19. CLEARANCES	DATE
REG/DP	As shown on action memo
REG/GC	
AA/PC	
A/CONT	
AA/MR	
AA/DFPE	

20. ACTION

APPROVED DISAPPROVED

Alexander R. Love Aug 3, 1983

AUTHORIZED SIGNATURE DATE

Acting AA/AFR

TITLE

CLASSIFICATION:

SUMMARY DESCRIPTION PAAD 685-0249 (CONT....)

The grant to the Government of Senegal is hereby authorized in the amount of $5,000,000 broken down as follows: $3.05 million for imports of fertilizer, fertilizer components and value of non-U.S. flag vessel/shipping; $1.2 million for a Section 640 C. U.S. Flag Shipping differential grant; and $0.75 million for the technical assistance services, subject to the following terms and conditions:

1. Procurement of goods, and commodity-related services will be restricted to AID Geographic Code 000 (U.S. only) source and origin, unless otherwise agreed upon by AID in writing. AID regulation 1 will apply.

2. M/SER/COM is authorized to refer the proposed freight rate for imports of compounded fertilizer and fertilizer components to the Department of Transportation (MARAD) to determine the amount of differential, and to develop procedures for funding the differential under this grant.

3. USAID/Senegal is given the authority to sign and issue Implementation Letters and Commodity Procurement Instructions for this grant, and to approve/disapprove all transactions to be financed under this grant.

4. The Standard Financing Procedures will be implemented according to the schedule outlined in this PAAD in line with AID's standard instructions for fertilizer procurement.

5. Invitations for Proposals (IFP's) for technical services will follow normal AID procedures for this type of activity.

ACTION MEMORANDUM FOR THE ACTING ASSISTANT ADMINISTRATOR FOR AFRICA

FROM: AFR/PD, Mr. Norman Cohen

SUBJECT: Senegal Agriculture Development Assistance, 685-0249

I. Problem: Your approval is requested for a grant of $5.0 million from Section 121 of the Foreign Assistance Act, as amended, Sahel Appropriation, to Senegal for the Agriculture Development Assistance Program 685-0249. It is planned that the total of $5.0 million will be obligated in FY 1983.

II. Discussion:

A. Program Purpose

1. The Africa Bureau plans to authorize a $5.0 million DA funded grant for the Senegal Agriculture Development Assistance Program. The purpose of the program is to encourage the Government of Senegal to undertake reforms and actions in the fertilizer and cooperative sub-sectors aimed at increasing agricultural productivity. The program will also fund a comprehensive agriculture sector assessment and a study of the credit/savings sub-sector. These studies will provide information on constraints and priorities in the agriculture sector on which to base future programming decisions. The local currency generated from the sale of fertilizers will be used to strengthen village level producer groups in the Fleuve and Casamance regions through literacy, numeracy and management training and, pending the results of the credit/savings study, provision of production resources .

2. Conformance to A.I.D. Country Strategy

The goal of the A.I.D. country strategy is to assist Senegal in achieving food self-reliance by the year 2000. To accomplish this goal, the USAID has determined that it must (1) support reforms at the macro and sectoral level which encourage reduction of central GOS control over the factors of rural production and (2) strengthen village level producers to enable them to better manage their own development.

The Agriculture Development Assistance program responds to these objectives by promoting a series of key macro and sectoral reforms and programming local currency on specific activities which will strengthen small farmer access to, and management of, production resources.

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3. Beneficiaries of the Project

At the macro level, Senegal will benefit from increased production due to fertilizer use. Senegalese farmers will also benefit directly from this program through receipt of fertilizer, participation in training programs and access to production credit. The USAID believes the agriculture sector will benefit from the macro and sectoral reforms associated with this program which are to be undertaken by the GOS.

B. Financial Summary

The total life-of-project funding of $5.0 million will be obligated in FY 1983.

	First Year ($ thousand)	LOP
Technical Assistance	750	750
Commodities	4,250	4,250
Total	5,000	5,000

C. Host Country and Other Donor Activities

The GOS will be responsible for management of this program including the importation of fertilizers, execution of reforms and implementation of the local currency training activities. This management will involve the Ministries of Finance and Commerce for the fertilizer imports and the Ministry of Rural Development for local currency project implementation.

The course of preparation and negotiation of this program has provided an excellent opportunity for coordination with the IMF, World Bank, the French and other donors on structural problems and the content of the 1983/84 Standby Agreement. As a result, the major donors to Senegal have adopted the principles of conditionality (policy reform in exchange for support) as the basis for current and future programming.

D. Socio-economic, technical and environmental description

1. The program is socio-economically sound. Economic rates of return for fertilizer use vary between 2.0 and 6.0 , depending on crop and region of the country. Literacy and numeracy training of the type envisaged is needed by farmers and consistently requested by them. All groups will have equal access to credit and training provided under this project.

2. Senegal is a functioning democracy and no issues of human rights exist in this regard.

3. Technical analyses carried out with respect to fertilizer application indicate that the capacity for utilization exists in-country. Farmer training programs to be implemented have been developed and successfully tested by local GOS institutions.

4. The IEE for this program recommends a negative/resolved determination. No further analyses are necessary.

E. Conditions Precedent and Covenants

Policy reform is an integral part of this program and the PAAD provides for the following CP's and covenants:

Conditions Precedent and Covenants

1. Conditions Precedent to First Disbursement. Prior to the first disbursement under the Grant, or to the issuance of AID documentation pursuant to which disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to AID, in form and substance satisfactory to AID:

a. A written statement that the Grantee has sent a formal letter to the International Monetary Fund (IMF) setting forth its proposals for an IMF Standby Agreement for Senegal's fiscal year 1983/84, and written confirmation that this proposal is acceptable to the IMF.

2. Conditions Precedent to Disbursement of Local Currency Generated

a. No funds will be released from the Special Local Currency Account to be established in the Central Bank until arrangements for a joint GOS/USAID Counterpart Management Committee have been finalized.

b. No funds will be released from the Special Local Currency Account to be established in the Central Bank until the Government certifies that village level cooperatives and producer groups are authorized to have direct access to credit sources.

c. Disbursement of local currency funds from the Special Local Currency Account for the National Agriculture Bank (CNCAS) shall be contingent on a positive finding by the Rural Credit and Savings Study team being financed from dollar technical assistance funds.

3. Special Covenants Concerning Program Implementation and Achievement of Program Objectives

a. Fertilizer Subsidies.

1. Within 12 months of obligation of funds, the GOS will present

a plan to USAID for the reduction of the fertilizer subsidy from the current 60% level to 25% by June, 1987.

2. GOS average price for fertilizer will not drop below 50 CFA per kilo through January 1984.

3. Fertilizer subsidy will not exceed 40% by January 1985.

b. Fertilizer Distribution

1. The GOS will permit SSEPC to import urea under this project directly from the U.S. without the GOS serving as an intermediary.

2. Within 12 months of project obligation, the GOS will present a plan for reorganizing the fertilizer marketing system including analysis of the role of the private sector. This plan will recommend methods of reorganization for maximizing efficiency, minimizing costs and responding to local farmer needs.

c. Fertilizer Use

Grantee covenants to continue its effort to bring about closer cooperation between the agricutural research stations and the extension services so that results of applied research concerning the most effective kind and method of application of fertilizers to specific crops can be made available to the farmer and to those responsible for supplying fertilizer to the farmer.

d. Reduction of the deficit of the CPSP (Price Stabilization Board) by 10% by December 1984.

e. Reduction of outstanding seasonal agricultural credit through a reimbursement of 10 billion CFA by December 1984.

f. Periodic Consultations Grantee and AID agree to meet periodically, but no less than annually, to discuss the progress of the implementation of the aforementioned covenants, to discuss the status of the economy, associated economic issues and the relationship of the AID program to those matters.

F. The implementation plan for this program has been carefully reviewed by the USAID Project Committee and AID/W Issues Meeting. Both entities concluded that the plan is realistic and establishes a reasonable time frame in which to carry out the project.

G. The importation of the fertilizer will be carried out by the GOS Ministries of Finance and Commerce. Execution of the village level training will be carried out by the Ministry of Rural Development. The credit program will be managed by the new private sector rural bank, the Caisse Nationale de Credit Agricole. The two agriculture sector studies will be carried out under contracts to be awarded in accordance with standard Agency procedures.

H. The requirements of Section 611(a) have been met by the establishment of a feasible system for the fertilizer import program. On the local currency side the joint USAID/GOS Management Committee will apply criteria based on 611(a) requirements to local projects.

I. Officers responsible for the design of this project are:

Joel Schlesinger Chief, PDO USAID/Senegal	Henderson Patrick AFR/PD/SWAP

J. Funding of U.S. Flag Freight Differential

Per Section 640c of the Foreign Assistance Act, this program will cover the cost differential of ocean shipping between U.S. and non-U.S. flag carriers. This grant is in accordance with the Cargo Preference Act.

III. Waivers

There are no waiver requests contained in this program.

IV. Justification to the Congress

This project was listed in the FY 1982 CP under the title Agriculture Sector Grant. A Congressional Notification (CN) was sent to Congress on July 7, 1983. The CN expired on July 22, 1983.

V. Clearances obtained

On June 14, 1983, the Africa Bureau held an Executive Committee meeting (ECPR) to review the program. The ECPR concluded that, with revision of the CPs and Covenants to specify targets and benchmarks which would be measurable within an acceptable timeframe, and a preliminary assessment of the economic and political value of promoting these reform measures, the program should proceed to authorization. The Mission has revised these terms and conditions and has negotiated their acceptability with the GOS.

In addition, the Mission submitted for inclusion into the PAAD an analysis of the impact of the proposed reforms on the Senegalese economy and the relationship of these reforms to the IMF Standby Agreement. This analysis, reviewed by the Africa Bureau and PPC on August 2, 1983, was deemed a satisfactory basis on which to proceed to authorization. It was noted that further assistance to the agricultural sector would be judged in accordance with the performance of the Senegalese in meeting the conditions set forth in this PAAD as well as other conditions which may be subsequently identified and communicated to the GOS in a Project Implementation Letter.

VI. Recommendation: That you sign the attached Program Assistance Approval Document (PAAD) Facesheet and thereby approve life-of-project funding of $5.0 million for the Senegal Agriculture Development Assistance Program 685-0249.

Clearances:

AFR/PD/SWAP:JRMcCabe (draft)
AFR/SWA:NMariani (draft)
AFR/PD/SWAP:RMDepp (draft)
AFR/TR/SDP:GThompson (draft)
AFR/DP:HJohnson (draft)
DAA/AFR:JJohnson:

AFR/DP:SErves (draft)
AFR/SWA:FEGilbert (draft)
GC/AFR:TBork (draft)
PPC/PDPR:JRyan (draft)
SER/COM:PHagan (draft)
AFR/TR:ABurgett (draft)

Drafted by:USAID/Senegal J.Schlesinger:fn:8/02/83 0419M

SENEGAL

PROGRAM ASSISTANCE APPROVAL DOCUMENT

AGRICULTURAL DEVELOPMENT ASSISTANCE

SAHEL DEVELOPMENT FUND (685-0249)

TABLE OF CONTENTS

ANNEXES

ABBREVIATIONS AND ACRONYMS

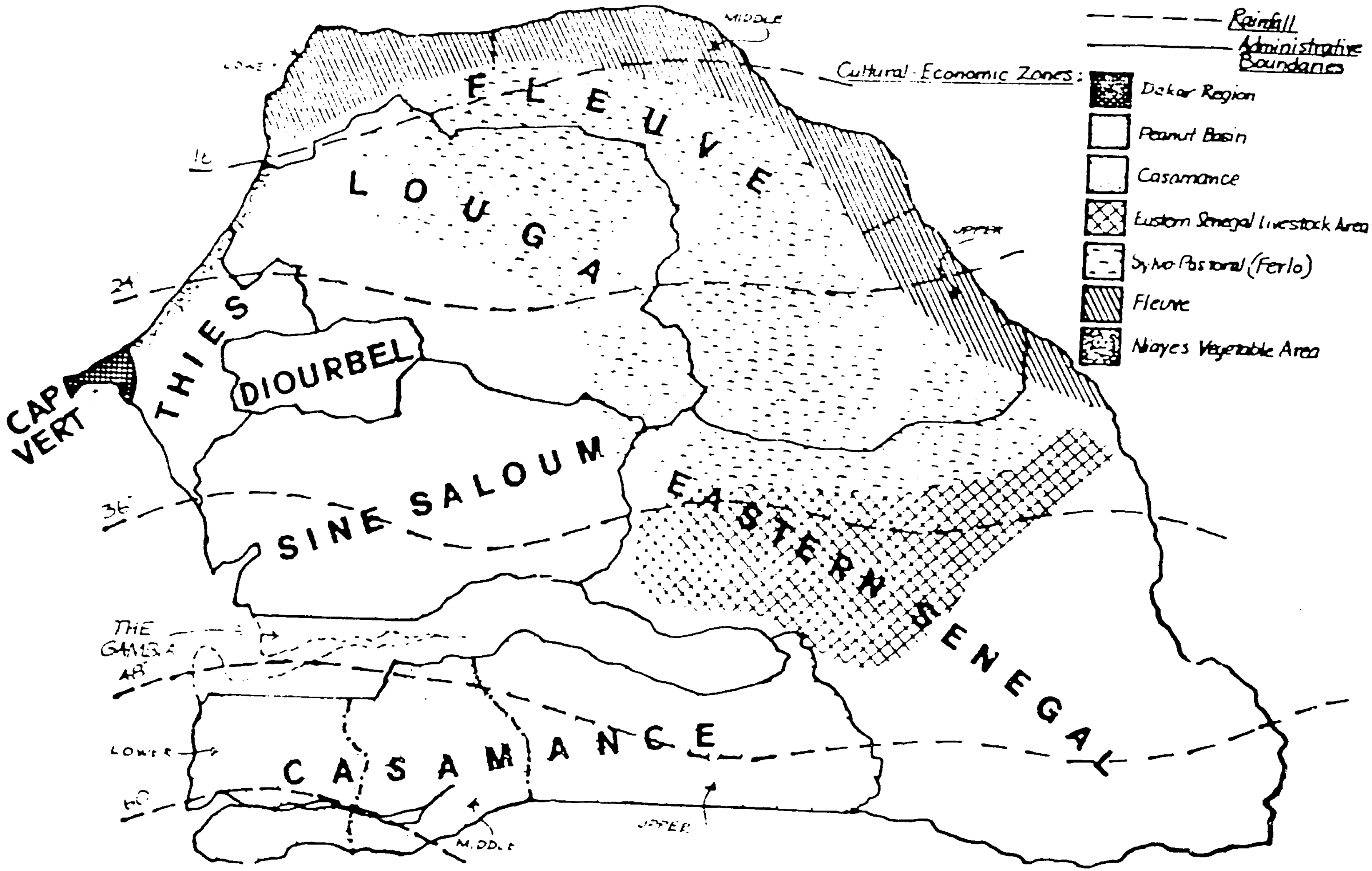
AID	Agency for International Development
BIFAD	Board for International Food and Agriculture Development
BCEAO	Banque Centrale pour les Etats de l'Afrique de l'Ouest (Central Bank for West African States)
BNDS	Banque Nationale pour le Développement du Sénégal (Senegal National Development Bank)
BOP	Balance of Payments
BPP	Bureau des Pistes de Production (Office of Feeder Road Maintenance)
CAA	Autonomous Sinking Fund
CCCE	Caisse Centrale de Cooperation Economique (French)
CDSS	Country Development Strategy Statement
CFAF	Monetary unit of Senegal
CIP	Commodity Import Program
CNCAS	Caisse Nationale de Credit Agricole (National Agriculture Credit Fund of Senegal)
CPSP	Caisse de Pérequation et de Stabilisation des Prix (Price Equalization and Stabilization Fund)
EDF	European Development Bank
EFF	Extended Fund Facility
EIB	European Investment Bank
ESF	Economic Support Fund
FAO	Food and Agriculture Organization (UN)
GDP	Gross Domestic Product
GNP	Gross National Product
GOS	Government of Senegal
IBRD	International Bank for Reconstruction and Development (World Bank)
ICS	Industries Chimiques du Senegal (Industrial Chemicals of Senegal)
IFC	International Finance Corporation

IFDC	International Fertilizer Development Center
IMF	International Monetary Fund
ISRA	Institut Sénégalais de Recherches Agricoles (Senegalese Institute for Agriculture Research)
L/C	Letter of Credit
l/c	local currency
LOP	Life of Project
ME	Ministry of Equipment
MOC	Ministry of Commerce and Industry
MOP	Minister of Plan
MRD	Minister of Rural Development
NASA	National Aeronautic and Space Administration
ODA	Official Development Assistance
OAU	Organization of African Unity
OECD	Organization for Economic Cooperation and Development
OMVS	Organisation pour la Mise en Valeur du Fleuve Senegal (Organization for the Development of the Senegal River Basin)
ONCAD	Office National De Cooperation et d'Assistance au Developpement (National Office for Cooperation and Development Assistance)
OPEC	Organization of Petroleum Exporting Countries
p.a.	per annum
PAAD	Program Assistance Approval Document
PID	Project Identification Document
RDA	Regional Development Agencies
SAED	Societé d'Amenagement et d'Exploitation des Terres au Delta au Fleuve Sénégal (Organization for the Improvement and Development of the Delta Lands of the Senegal River)
SAL	Structural Adjustment Loan
SDR	Standard Drawing Rights
SIES	Société Industrielle des Engrais du Sénégal (Industrial Fertilizer Company of Senegal)
SODEFITEX	Société de Développement des Fibres Textiles (Textile Fiber Development Organization)

SODESP	Société de Développement de l'Elevage dans la Zone Sylvo-Pastorale (Sylvo Pastoral Livestock Development Organization)
SODEVA	Société de Développement et de Vulgarisation Agricole (Agriculture Extension and Development Organization)
SOMIVAC	Société pour la Mise en Valeur de la Casamance (Casamance Development Organization)
SSEPC	Société Senegalaise des Engrais et Produits Chimiques (Senegalese Fertilizer and Chemical Products Company)
STABEX	Export Revenue Stabilization Arrangement
STN	Société de Terres Neuves (Northern Coast-Market Gardening Organization)
UN	United Nations
WAMU	West African Monetary Union

SENEGAL

Administrative Boundaries - Cultural-Economic Zones - Rainfall



I. EXECUTIVE SUMMARY AND RECOMMENDATION

A. The Request

The Government of Senegal has requested program assistance in the amount of $5.0 million to undertake reforms and activities in the fertilizer and cooperative sub-sectors aimed at increasing agricultural production. The assistance also provides for fertilizer imports to assist Senegal in maintaining production and meeting its immediate balance of payments (BOP) requirements. Of the $5.0 million, approximately $3.05 million is for fertilizer imports, $1.2 million is for a Section 640C grant to cover the shipping differential costs due to shipment on U.S. Flag vessels, and $0.75 million is to fund two dollar-financed technical assistance studies needed for development, planning, and decision-making. One study is an in-depth Agriculture Sector assessment, and the other a detailed Rural Credit and Savings Study.

B. Background

Senegal is a moderate, nonaligned democracy of six million people with a high dependency ratio (slightly below 1:1) reflecting a very young population. With a population growth rate at 2.8%, and a per capita income in 1980 of $450, it falls within the UN category of low income countries. Geographically and strategically, it is the closest of the African states to the Americas with the best harbor, airport, communications and road network in West Africa. Its mature, centrist approach to international affairs has earned it the esteem of many Third World, Arab, and Western nations including the United States, giving it an influence in international forums far beyond its size.

(Section VIII provides more information on the overall political scene, the GOS economic constraints, and the U.S. assistance strategy for Senegal.)

C. Policy Reform: Conditionality and Its Impact on the Fertilizer Sub-Sector

Although the agricultural sector accounts for only about 20% of Senegal's GDP, it is the single most important economic activity for a variety of reasons. Seventy percent of the population lives in the rural areas and, thus, derives directly or indirectly their livelihood from agriculture. The processing of peanuts and cotton is a central focus of domestic industry. In addition, the export of peanut products normally provides for 30% of Senegal's annual foreign exchange earnings while the import of essential food items (cereals and rice) costs about $180 million per year (or about one quarter of total imports).

USAID's strategy objectives concern primarily the agriculture sector. The Mission is supporting the GOS' stated goal of achieving food self-reliance through both increased domestic food crop production and trade. However, despite the GOS' apparent commitment to food self-reliance, there are a number of critical policy and institutional constraints which have not yet been effectively addressed. These include: (1) the level of subsidies on agricultural inputs which appear to encourage the production of peanuts at the expense of domestic food crops; (2) the relative producer prices for food and export crops; (3) the relative pricing of domestically produced food crops compared to imported food items; (4) the low efficiency and high cost of regional development agencies which are not capable of ensuring the timely arrival of inputs to farmers or to function without increasingly large subsidies from the GOS; and (5) the inability of the present farmer cooperative system to mobilize the active participation of individual farmers and village level producer groups.

The fertilizer sub-sector provides a relatively self-contained framework within which USAID can begin to urge the GOS to examine and act on some of the constraints mentioned above. Furthermore, since this program will provide close to 100% of Senegal's fertilizer requirements for 1984-85 it will give USAID considerable leverage in negotiations with the GOS on policy and institutional reforms. The pricing of fertilizer (which is now subsidized at a 60% rate) has important implications for: (1) farmers' choices with respect to the use of fertilizer in various quantities and on various crops (peanut, millet, cotton and rice); (2) agricultural productivity since the returns to fertilizer use differ according to region and crop; (3) the supply of fertilizer to farmers as the tight public finance situation has been directly responsible for late payments to the domestic fertilizer producer and, thus, delayed or limited fertilizer deliveries to the farmers. Through a progressive phasing-out of the fertilizer subsidy, USAID is expecting to achieve: (1) more efficient fertilizer use on crops where returns are highest and regions where rainfall reduces the risks associated with fertilizer use; (2) reduced dependency on the government sector as its financial participation is cut; and (3) the removal of the supply side constraint to improved fertilizer use.

D. Other Donor Support

In addition to its own self-help efforts, Senegal has sought and received encouraging support from multilateral and bilateral donors (including the IMF, World Bank, EEC, UN, France, Arab countries, United States, and Germany). Donors have been forthcoming in part because the assistance has been provided within the framework of Senegal's Economic and Financial Reform Plan ("Plan de Redressment") which was introduced by the GOS in December 1979. (Donor coordination meetings, sponsored by the Senegalese Government and the World Bank, have provided a forum for coordinating and facilitating donor assistance.) The USAID has been a full member in these policy consultations by the GOS and has played a supportive role in helping guide the Government's economic policy formulation and execution.

Donors will be focusing on Senegal's self-help efforts in the coming months, and the degree of support by the major donors will be linked to the Government's performance.

E. Program Assistance Description

The USAID has been asked to expand its help from project assistance and PL 480 food products to include program assistance. The GOS has requested fertilizer imports of 12,000 mt of urea for direct distribution and 5,000 mt of sulfur for the fertilizer mixing plant which will permit it to produce 20-25,000 mt of compound fertilizers depending upon the nutrient content. Program assistance is a form of help which can be used to meet urgent balance of payments needs by providing essential imports (in this case fertilizer) and provide local currency (counterpart funds) required to carry out essential programs in the agriculture/rural sector--activities which are basic to carrying out Senegal's Economic and Financial Plan and achieving its long-term development goals. The GOS has asked that the local currency funds generated under this PAAD be allocated mainly to strengthening village level cooperatives, and to supporting the National Agriculture Credit Bank (CNCAS). In consultation with AID/W, USAID has retained both suggestions, but has made the second conditional on the positive findings of a Rural Credit and Savings dollar-funded technical assistance study financed by this PAAD.

F. Program Assistance Benefits

Senegal will benefit from the assistance provided under this PAAD in the following ways:

1. Gradual adoption of policies in the fertilizer and cooperative sub-sectors should result in increased production;

2. Fertilizer imports are essential to maintain agricultural production and probable savings of foreign exchange for food imports;

3. Local currency uses will be directed to priority development needs;

4. Technical assistance studies will provide basic information needed concerning the agriculture and rural credit and savings sector. This information is needed to prepare future programs, improve decision-making on current problems, and provide a basis for other donor support; and

5. Balance of payments support.

USAID will benefit from the program assistance provided under this PAAD in the following ways: Policy dialogue at the fertilizer, cooperative and macroeconomic levels will be facilitated, and the USAID will be able to better support efforts by the donor community for a more vigorous self-help program on the part of the GOS. Most important is the policy input at the sectoral level which will affect the cost and distribution of fertilizer as well as the access of village level producers to credit.

G. Recommendation

USAID/Senegal recommends approval by the Assistant Administratorfor Africa of this grant of $5.0 million in program assistance composed of approximately $3.05 million in dollars which will generate local currencies by the import of fertilizer inputs, $1.2 million for a Section 640C grant to cover costs of the shipping differential from using U.S. Flag vessels, and $0.75 million for two basic technical assistance studies in the field of rural development.

II. AID/W INSTRUCTIONS AND QUESTIONS

Instructions for preparation of the PAAD were received by the USAID in STATE 257886 (Sections 6 to 8) dated March 3, 1983, and STATE 040289 dated February 11, 1983. The latter telegram posed a number of questions concerning fertilizer imports. Both telegrams are reproduced in Annexes P and Q for ready reference.

The USAID in DAKAR 5345 dated March 8, 1983, selected Option Number 2 (also AID/W's preference) which proposed submission to AID/W of two PAADs of $5.0 million each. One is to use ESF-financing for general commodity imports, and the other (this PAAD) is to use Sahel Development Funds to finance a Fertilizer Commodity Import Program (CIP). Local currency (or counterpart) generated in both cases would be placed in a special counterpart account at the Central Bank and would be used to support Senegal's long-term development program for specific activities approved by the joint GOS/USAID local currency Management Committee set up for this purpose. There follows a list of points and questions raised in the two telegrams from Washington with appropriate comment.

A. AID/W: The $10.0 million in SDF and ESF funds ($5.0 million each) would be to provide immediate balance of payments relief and to achieve support for key reforms being considered during next year. Local currency generations would result in a pool of resources to support activities requiring local currency financing.

<u>Response</u>: Senegal's balance of payments deficit is critical, and the GOS, IMF, and World Bank have all suggested to the USAID that a larger share of its assistance to Senegal be in the form of program assistance (or non-project assistance as it is sometimes called). This assistance will also support key reforms considered as part of the Government's Economic and Financial Reform Plan ("Plan de Redressment") and its agreements with the IMF and the World Bank. Fertilizer imports and local currency generated under this PAAD will be used to support Senegal's long-term development goals and encourage policy reforms at the fertilizer sub-sector level. In particular, SDF funds will be used in developmental policy leverage, specifically in the fertilizer sub-sector.

B. <u>AID/W</u>: A macroeconomic analysis is required for both programs justifying the need for $10.0 million in foreign exchange assistance and placing the reforms in the context of the IMF/World Bank/GOS program and summarize the objectives of the plan.

<u>Response</u>: The macroeconomic justification shows that the estimated unfinanced current account deficit in 1983 will be $119.9 million after deductions from all sources. Therefore, the total of U.S. program assistance of $16.25 million, including PL 480 Title III, will constitute 14% of the as yet unfinanced portion and is very much needed. This amount should assist the USAID in continuing its positive influence on the GOS in carrying out its Reform Plan and encouraging it to live up to its commitments to the IMF and the World Bank. (See Annex K.)

C. <u>AID/W</u>: Foreign exchange would be provided through the mechanism of a fertilizer commodity import program (CIP).

Response: USAID agrees that the fertilizer CIP is most appropriate since it responds to a priority demand on the part of the GOS for fertilizer, assists agriculture production, will provide prompt balance of payments support, and will generate local currency (l/c) needed for Senegal's development program. It will also facilitate the USAID's policy dialogue with the Government on the reforms needed in the fertilizer sector (e.g., in pricing, credit and marketing).

D. AID/W: The short term objective of the fertilizer CIP is to support the IMF, World Bank, and the GOS Reform Plan ("Plan de Redressement") in a specific sub-set of reforms related to a more rational fertilizer marketing, distribution, and pricing policy. These fertilizer policy reforms are therefore specific outputs of the sector assistance program which contribute to the achievement of a longer-term development purpose, e.g., increasing agriculture productivity.

Response: This is correct. The GOS has as a medium-term objective to move the fertilizer distribution and marketing to the private sector. It has taken an important initial step in placing the distribution of fertilizer in the hands of a private firm SSEPC (the Senegal Fertilizer and Chemical Products Company). Regarding subsidies, the price of fertilizer to the farmer was doubled in 1982 and credit to the farmers in the peanut basin was eliminated in 1981. The former action reduced the subsidy from 80% to 60%. While the GOS goal remains the lowering of the subsidy to 25% over the next few years, it is not likely to lower the subsidy further this year given the difficulties of the farmers in adjusting to the dual action of doubling the price of their fertilizer at the same time as eliminating credit. While the USAID/GOS are planning a dollar-financed Rural Credit and Savings study under this PAAD to determine rural credit needs (see Annex I for details), it does not appear thus far that indigenous credit resources are adequate and/or available at a reasonable interest rate. Demand for fertilizer has only held up outside of the peanut basin where the Rural Development Agencies (SODEFITEX and SAED) have maintained their system of credit. The USAID is using discussion on the fertilizer CIP program to encourage continued and renewed steps toward privatization of fertilizer distribution and marketing. Portions of the funds generated may be used for a fertilizer marketing study. Subject to the findings of the above mentioned dollar-financed Rural Credit and Savings study, local currency has also been set aside in support of the newly formed National Agriculture Credit Bank (CNCAS). (See Section V.C.1.)

E. AID/W: The fertilizer imports should be justified based on thorough technical, economic, and financial analyses.

Response: Results of the study on this subject are contained in Annex E and highlights are set out in Section IIID below. The results of the analyses demonstrate that the technical package is sound. Both from the farmers' point of view and the benefits to the economy, it is worthwhile to apply fertilizer to all major crops grown, except groundnuts in some of the dryer areas of the peanut basin. While specific value cost ratios vary by region and crop and according to assumptions used, generally the ratio is around 2.0 - 6.0. A ratio of 2.0 is considered adequate to stimulate a demand from the farmer to use the fertilizer. Any ratio over 1 is considered beneficial to the economy.

F. AID/W: The Sahel Development Program (SDF), using dollars already in the current OYB for $5.0 million will be used to fund the program. The long-term development impact of the program and the linkages to the achievement of the reforms must be demonstrated. Thus, it must be shown that long-term development goals can be achieved through: 1) the use of foreign exchange for fertilizer imports; 2) the policy reforms to be achieved; 3) the willingness of the GOS to undertake development activities in support of the program; and, 4) the development use of the local currencies.

Response: The fertilizer CIP proposed in this PAAD has already provided opportunities for staff and policy (Ministerial) level discussions on the privatization of fertilizer distribution and marketing, the role of the new fertilizer manufacturing company, ICS (Industrial Chemicals of Senegal), and the use of the existing mixing plants, (SIFS), reduction of subsidies, credit needs of the farmer for fertilizer, a marketing study, etc. The grant agreement which will be signed with the GOS obligating the dollars under this PAAD will include covenants spelling out the Government's continued intention to move the fertilizer marketing system toward private channels and to continue its efforts to reduce fertilizer subsidies (See Section III and Annex E). The use of the local currency for development purposes is concentrated in two areas requested by the GOS: a) support of cooperatives at the village level, and b) support for the National Agriculture Credit Bank (CNCAS). Both of these activities are basic to the long-term development of agriculture production and productivity. The grant agreement will have a condition precedent to disbursement of local currency that requires the GOS to complete the pending formalities so that village level cooperative groups can have direct access to credit.

G. AID/W: Examples of local currency use which support reforms in fertilizer marketing, distribution and pricing might include a credit study, cooperative development activities, and moving the distribution of fertilizer into the private sector. Land regeneration might also be shown to have a development impact by assuring the future productivity of the land.

Response: As mentioned in F above, these activities have been discussed with the GOS in some detail. Section III E analyzes their relationship to sectoral reforms and Section V and Annex G provide descriptions of the specific activities.

H. AID/W: It must be demonstrated that the activities mentioned in Point G above are exclusively financed with local currency. Activities need not be described in detail; however, the mechanism for the review of specific proposals and the establishment of a segregated account must be described.

Response: A joint GOS/USAID local currency (counterpart) Management Committee will approve the disbursements from the special local currency account based on specific activity proposals from the technical ministries concerned. The procedure and criteria for l/c project approvals are summarized in Section V and described in detail in Annex F. This procedure will assure that projects approved by the joint Committee will meet basic AID criteria for project selection. Even though the counterpart funds belong to the Government and AID environmental standards are not obligatory, copies of the AID

Environmental Handbook will be made available to the members of the joint Committee and the Committee Secretariat. No additional foreign exchange needs are expected. To the extent there are foreign exchange requirements (e.g., in the Agriculture Bank (CNCAS), other donors such as the French Caisse Centrale and the World Bank are prepared to meet the requirements).

I. AID/W: Supplemental Questions on Fertilizer Imports not already covered above. These points are designed to help identify more clearly the degree to which the fertilizer imports help achieve the fertilizer policy objectives:

1. Transferring fertilizer distribution to private firms. Comment: The GOS has signed program contracts with the fertilizer mixing plant (SIES) and the fertilizer distribution company (SSEPC), both private, for purchase of the mixed fertilizer and distribution of urea and mixed fertilizers. The Government would like to move the privatization further, but financial questions concerning the prompt payment of the private sector for this subsidy still need to be worked out.

2. Analyses of the fertilizer market, the mixing plant, and the characteristics of the private sector in the fertilizer manufacturing and distribution system. Comment: This subject is reviewed in Section IIID and Annex E. In brief, the new fertilizer plant (ICS) coming on stream in 1984 will take over the present mixing plant (SIES). Some economies of scale and organization are expected involving a 15% or more cost reduction. As mentioned above, the GOS intends to move marketing to the private sector and has already taken initial steps by engaging a private firm (SSEPC) for distribution. A marketing study of fertilizer distribution is foreseen as one of the uses for local currency. (See Section V.C.3.)

3. Causes of the underutilization of the mixing plant should be identified. Comment: The doubling of the price of fertilizer to the farmer, coupled with discontinuation of credit to the farmer in the peanut basin, to which may be added irregularity in timing and amount of supply, have reduced effective demand substantially. Note: Forecasts of demand by both the private company and the GOS indicate that the requests under this PAAD for 12,000 mt of urea and 5,000 mt of sulfur are within the demand estimates for the 1984 season.

4. Is the factory viable only if protected by import licensing or tariffs? Comment: The mixing plant's (SIES) prices were compared with international prices (Annex E, Table 7) so as to determine if Senegal would not be better off importing compound fertilizers rather than having them mixed in country. SIES prices which include a 15% customs tax are equal or lower than CIF Dakar prices plus 15% customs tax, for identical compounds, so it is viable.

5. Will the fertilizer company be willing to shift its source of supply? Comment: Yes, for those products where no long-term contracts exist. There are none for sulfur with SIES. Its successor company, which will import 200,000 mt of sulfur a year beginning in 1984, will have long-term contracts, but will have adequate margin for spot purchases.

6. What is the cost differential between U.S. sources of supply and current sources? Comment: U.S. sources are competitive for urea and sulfur FOB. They are not competitive if U.S. Flag shipping is required. There is sometimes a slight additional cost of non-U.S. Flag from the U.S. compared to non-U.S. Flag shipments from Europe due to the added distance from the Gulf Coast ports.

7. How will higher shipping costs affect the price of fertilizer and how does this relate to current subsidy and the objective of reducing subsidy through assistance? Comment: USAID has proposed in the PAAD that the shipping differential between the cost of U.S. Flag and non-U.S. Flag be paid as a grant under a Section 640C of the Foreign Assistance Act. In this way, there will be no substantial difference in the landed cost of fertilizer in Dakar for the GOS.

8. In the Environmental Review, thought should be given to the general effects of fertilizer on degraded soil. Comment: Soil acidification can result from extended and excessive use of fertilizers in sandy loam soils. However, liming and the incorporation of organic matter into the soil can correct and/or prevent this condition. Senegal has abundant sources of lime. Acidification preventive measures are well known and practiced by Senegalese agronomists and extension agents. Therefore, this aspect is not considered a problem in connection with the fertilizer imports under this PAAD. There are no statistics on the amount of lime used by farmers. However, given the million plus hectares of cultivatable land, and the small amount of fertilizer to be imported, plus the small amount of fertilizer applied per hectare, the amount of soil degradation potentially caused by this shipment is so minimal as to be unmeasurable. Further, any possible microscopic damage is far outweighed by the benefits to the people of increased food production.

III. PROGRAM ASSISTANCE DESCRIPTION

This request for program assistance in the amount of $5.0 million dollars will encourage the Government of Senegal to undertake reforms and activities in the fertilizer and cooperative sub-sectors aimed at increasing agricultural production. $3.05 million of the $5.0 million is for fertilizer imports, $1.2 million is for a Section 640C grant to cover the shipping differential for using a U.S. Flag vessel and $0.75 is to fund two dollar-financed technical assistance studies needed for development, planning and decision-making. One study is an in-depth Agriculture Sector assessment and the other a detailed Rural Credit and Savings Study.

A. Background

Senegal is a moderate, nonaligned democracy of six million people with a high dependency ratio (slightly below 1:1) reflecting a very young population. With a population growth rate at 2.8%, and a per capita income in 1980 of $450, it falls within the UN category of low-income countries. Geographically and strategically, it is the closest of the African States to the Americas with the best harbor, airport, communications, and road network in West Africa. Its mature, centrist approach to international affairs has earned it the esteem of many Third World, Arab and Western nations, including the United States, giving it an influence in international forums far beyond its size.

Agriculture, including fishing, is the prime sector of the economy. Thus, increasing food and cash crop production is a key to stabilization of the economy. As fertilizer use is essential to such increases, the USAID has placed priority on working in this sub-sector.

Although the agricultural sector accounts for only about 20% of Senegal's GDP, it is the single most important economic activity for a variety of reasons. Seventy percent of the population lives in rural areas and, thus, derives directly or indirectly their livelihood from agriculture. The processing of peanuts and cotton is a central focus of domestic industry. In addition, the export of peanut products normally provides about 30% of Senegal's annual foreign exchange earnings while the import of essential food items (e.g., cereals and rice) costs about $180 million per year (or about 1/4 of total imports).

While literacy of the adult populaton is around 10%, Senegal has a broad ever-deepening nucleus of well-trained civil servants and technicians which gives the country substantial capacity to utilize economic and technical assistance and to put into effect development programs.

Senegal has a modest, but active private sector of encouraging potential, and has been developing its tourism and marketing of winter vegetables in Europe. It has made substantial efforts in recent years to develop its major mineral resource--phosphate. In 1984, a privately run, world-class fertilizer facility will come on stream using the locally-mined phosphate, and mixing it with imported sulfur to make Diammonium Phosphate (DAP) and Triple Super Phosphate (TSP). While the complex is mainly for export, part of the production will be sold on the domestic market.

As pointed out in the Country Development Strategy Statement (CDSS) paper for FY 1985, Senegal is in substantial balance of payments difficulties. Senegal's current account deficit is projected to be $354 million in 1983. To offset this deficit, the GOS is hoping for some $234 million in IMF drawings, Arab and French exceptional support and other net official capital inflows.

USAID's proposed package of $16.25 million in 1983 in program assitance (SDF,[1] $4.25 million; ESF, $5.0 million; and Title III, $7.C million) is equal to 14% of the unfinanced portion of the projected 1983 balance of payments deficit of $119.9 million, a significant amount from the Government of Senegal's (GOS) point of view.

In line with the new priority being accorded to the rural productive sector, the GOS has asked that the funds under this PAAD be allocated to purchasing fertilizer, strengthening village level cooperatives, and supporting the National Agriculture Credit Bank (CNCAS). In consultation with AID/W, USAID has retained these suggestions, but has made the last conditional on positive findings of a Rural Credit and Saving Technical Assistance Study financed by this PAAD. It is within the context of this program that the USAID has been asked by the GOS to expand its help from project assistance and PL 480 Title III to include program assistance. Program assistance is a form of aid which is most helpful in meeting urgent balance of payments needs (for fertilizer purchases) and in providing local currency (l/c) (counterpart funds) required to carry out essential programs in the agriculture/rural sector--activities which are bas.. to implementation of Senegal's Reform Plan and achievement of its long-term development goals. The use of program assistance has provided the USAID the opportunity to engage the GOS in substantive policy dialogue with respect to the macro situation, in general, and the fertilizer and cooperative sub-sectors, in particular.

B. Program Benefits Summary

1. Senegal benefits from the program assistance provided under this PAAD in the following ways:

a. Gradual adoption of policies in the fertilizer and cooperative sub-sectors which should result in increases in productivity.

b. Fertilizer imports of 12,000 mt of urea for distribution, and 5,000 mt of sulfur for the mixing plant will allow production of 20,000 to 25,000 mt of compound fertilizers, thus, contributing directly to increased food production, and a resultant savings of foreign exchange otherwise spent on food imports.

c. Local currency will be generated which will be utilized for activities essential to achieving Senegal's goal of self-reliance in food production, such as support of village level producer groups (sub-coops), support for the National Agriculture Credit Bank, and a fertilizer marketing study.

d. Technical assistance basic studies financed under this PAAD will provide an in-depth assessment of the agriculture sector, and a detailed analysis of the credit and savings situation.

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1 $0.75 million of the $5.0 million of SDF funds will be used for two Technical Assistance studies and is not considered as balance of payments support.

e. Balance of payments support will be provided on a grant basis by importing essential fertilizer and fertilizer raw material, thus, saving scarce GOS foreign exchange.

2. USAID benefits from the program assistance provided under this PAAD in the following ways:

a. Fertilizer sub-sector level influence can be significant as a result of fertilizer imports. Provision of this essential input provides opportunities for a policy dialogue on Government policies enhanced by the GOS hope that further AID-financed imports of fertilizer can be envisaged in the future if all goes well. USAID will encourage the Government to continue its efforts to move the distribution and marketing of fertilizer into the private sector and reduce further fertilizer price subsidy. The specific targets and time-frames can be found below in Section C.

b. Additional sub-sector influence is provided by concentrating the local currency (l/c) generated under this program on a few high priority activities of long-term development importance (for example, the major local currency activity, prepared with the GOS, for strengthening village level producer groups and the Government's strong request for financial support of the newly created National Agriculture Credit Bank). Further, use of some of the local currency for basic studies needed for future policy actions is another l/c use which may effect specific GOS actions (for example, a study of the complete transfer of fertilizer marketing to the private sector down to the retail level).

c. The dollar-funded technical assistance study assessing the agriculture sector will form a basis for a multi-year Agriculture Development Program grant. It will also provide basic information to the GOS and other donors as to the major constraints and relative priorities for alleviating these problems. The rural credit and savings study will pin down rural credit needs and savings potential, and confirm the wisdom of supporting the CNCAS.

d. Macroeconomic policy level dialogue as it continues between the GOS and USAID will become more meaningful with the provision of this $4.25 million in balance of payments support, especially when taken in conjunction with the other forms of program assistance (ESF PAAD, $5.0 million and Title III program, $7.0 million) totalling $16.25 million or 14% of the unfinanced portion of the balance of payments gap. The USAID supports GOS efforts to carry out its Economic and Financial Reform Plan ("Plan de Redressment") as well as the need for the GOS to live up to its commitments to the IMF.

C. Conditionality and Its Impact on Agriculture Sector and Fertilizer Sub-Sector

USAID's strategy objectives concern primarily the agricultural sector. The Mission is supporting the GOS stated goal of achieving food self-reliance through both increased domestic food crop production and trade even in drought years. However, despite the GOS' apparent commitment to food self-reliance, there are a number of critical policy and institutional constraints which have not yet been effectively addressed. These include: (1) the level of subsidies on agricultural inputs which appear to encourage the production of peanuts at the expense of domestic food crops (e.g., rice, millet, maize); (2) the relative producer prices for food crops and export crops; (3) the relative pricing of domestically produced food crops compared to imported food items; (4) the low efficiency and high cost of regional development agencies which are not capable of ensuring the timely arrival of inputs to farmers or to function without increasingly large subsidies from the GOS; and (5) the inability of the present farmer cooperatives system to mobilize the active participation of individual farmers and village level producer groups.

The fertilizer sub-sector provides a relatively self-contained framework within which USAID can begin to urge the GOS to examine and act on some of the constraints mentioned above. Furthermore, since this fertilizer CIP will provide close to 100% of Senegal's fertilizer requirements for 1984/85, it will give USAID considerable leverage in negotiations with the GOS on policy and institutional reforms. The pricing of fertilizer (which is now subsidized by 60%) has important implications for: (1) farmers' choices with respect to the use of fertilizer in various quantities and on various crops (e.g., peanut, millet, cotton, rice); (2) agricultural productivity since the returns to fertilizer use differ according to region and crop; and (3) the supply of fertilizer to farmers as the tight public finance situation has been directly responsible for late payments to the domestic fertilizer producer and, thus, delayed or limited fertilizer deliveries to farmers. Through a progressive phasing-out of the fertilizer subsidy USAID is expecting to achieve: (1) more efficient fertilizer use on food crops where returns are the highest and in regions where dependable rainfall reduces the risks associated with fertilizer use; (2) reduced dependency on the government sector as its financial participation is cut; and (3) the removal of the supply side constraint to improved fertilizer use.

With respect to institutional weaknesses, USAID is requiring the GOS to present, within twelve months of project obligation, a plan for reorganizing the fertilizer marketing system including an analysis of the role of the private sector. At present, fertilizer marketing responsibilities are divided among a private sector company (SSEPC), a parastatal organization (SONAR) and the various regional rural development agencies. Coordination is poor and farmers have criticized: (1) the lack of timely deliveries; (2) limited access to sales depots; (3) the lack of credit for fertilizer purchases; and (4) insufficient information and guidance with respect to the appropriate mix of different types of fertilizer. The study under this one-year CIP is designed to provide the basis for future USAID involvement in institutional development in this sub-sector including the critical question of the respective roles of government and the private sector in providing low-cost, but efficient services to farmers.

A non-project assistance mode has been chosen for the DA-funded Agriculture Development Assistance Program, because it provides an effective mechanism for addressing both institutional weaknesses through the careful targetting of local currency use and policy reforms through the establishment of quantitative benchmarks against which performance can objectively be monitored. Furthermore, a relatively small amount of non-project aid ($5 million) allows USAID to exert substantial leverage due to the value which the GOS attaches to this type of assistance. The economic crisis which Senegal has been confronting since 1978 has also severely limited the scope for introducing new investment activities with a reasonable opportunity for success.

1. The specific reforms to be implemented under this project are listed below. Section IV of this paper discusses the technical and economic justification for involvement in the fertilizer sub-sector.

A. Macroeconomic Reforms

1. No disbursement of dollar funds until conclusion of a 1983-84 Standby Agreement between the IMF and the GOS. (CP)

2. Selection of specific targets from the IMF 1983-84 Standy Agreement which are relevant to the agricultural sector for performance monitoring. (Covenant)

3. Reduction of the deficit of the CPSP (Price Stabilization Board) by 10% by December 1984. (Covenant)

4. Reduction of outstanding seasonal agricultural credit through a reimbursement of 10 billion CFA by December 1984. (Covenant)

B. Sectoral Reforms

1. Within 12 months of obligation of funds, the GOS will present a plan to the USAID for the reduction of the fertilizer subsidy from the current 60% level to 25% by June 1987. (Covenant)

2. GOS average price for fertilizer does not drop below 50 CFA per kilo through January 1984. (Covenant)

3. Reduction of fertilizer subsidy to at most 40% by January 1985. (Covenant)

4. The GOS will permit SSEPC (private sector distributor) to import urea under this program directly from the U.S. without the GOS serving as an intermediary. (Covenant)

5. Within 12 months of program obligation, the GOS will present a plan for reorganizing the fertilizer marketing system including analysis of the role of the private sector. This plan will recommend methods of reorganization for maximizing efficiency, minimizing costs and responding to local farmer needs. (Covenant)

6. No local currency will be disbursed until the GOS certifies that village level producer groups have direct access to credit sources. (CP)

D. Technical and Economic Justification for Fertilizer

Annex E, which provides the detailed "Economic, Technical and Financial Justification for Fertilizer Imports", reaches the following conclusions:

1. Conclusions

a. Fertilizer application in Senegal is economically viable as indicated by the favorable value cost ratios generally between 2.0 and 6.0, depending upon the assumptions and the foreign exchange earnings and savings created by fertilizer use.

b. Fertilizer demand is clearly sufficient for the amounts proposed in the PAAD of 12,000 mt of urea, and 5,000 mt of sulfur for the fertilizer mixing plant (SIES) as estimated by the Ministry of Rural Development and the private sector fertilizer suppliers.

c. Rural Development Agencies (RDAs), such as SODIFITEX (cotton) and SAED (rice), are a stable source of fertilizer demand; while in the peanut basin, the absence of credit and uncertain distributive mechanisms continue to affect fertilizer demand.

d. Private sector distribution of the fertilizer by the private firm (SSEPC) was arranged for by the Government last Fall for the 1983 crop year. This action demonstrates a willingness to move towards privatization of fertilizer distribution and marketing.

e. The cost for compounded granular fertilizers is expected to drop by as much as 15% once the new fertilizer facility, ICS, comes on line in 1984 due to economies of scale, a different way of apportioning overhead, etc. ICS, which is owned by a consortium of governments and banks and is privately run, will take over the SIES operations.

2. Background

Senegal's fertilizer consumption has dropped drastically in recent years due to four major reasons:

- The removal of credit after the dismantling of the parastatal ONCAD in late 1980.

- An increase in prices to the farmer (100% between 1982 and 1983) requested by World Bank as the first step in reduction of subsidy levels financed by the GOS.

- The absence of an organization capable of managing the various functions of a nationwide marketing system until the Fall of 1982 when the Government arranged for a private company (SSEPC) to distribute the fertilizer.

- The confusion in the minds of farmers as to the Government's future intentions regarding supply of inputs, fertilizer subsidies, and possible resumption of credit.

Nevertheless, the need for fertilizer is substantial. The amount of nutrients extracted by crops is much higher than the amounts of nutrients applied to the soils with fertilizers. Thus, the present decrease in fertilizer application is contributing to a progressive decrease in soil fertility.

3. Economic profitability

The economic profitability of fertilizer use has been clearly established: Based on IFDC curves of yield increase per nutrient[1], the value cost ratios of fertilizer use for four major crops, in four different regions, using six different price hypotheses have been determined. (For details, see Annex E-Tables 8, 9, and 10). The general conclusions that can be drawn from these analyses suggest that:

- From the farmers' point of view, fertilizer is profitable on most crops except groundnuts in the drier northern part of the country. Value cost ratios vary generally from 2.0 - 6.0 depending on the assumptions.

- From a macroeconomic viewpoint, fertilizer is clearly a good investment, in particular, if we consider the foreign exchange earned or saved. Annex F-Table 14 estimates a foreign exchange savings from the import of 5,000 mt of sulfur and 12,000 mt of urea at between $7.0 and $9.0 million.

4. Demand

An estimate of fertilizer need nationwide, based on the most pessimistic hypotheses, calls for an annual application of 115,000 tons of

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1 IFDC (International Fertilizer Development Center, Mussel Shoals, Alabama) research carried out in 1978-79.

compound fertilizer and 70,000 tons of urea, while this year's estimated consumption (1983-84 season) is approximately 30,000 tons of compound fertilizers and 10 - 12,000 tons of urea.

5. Eliminating the constraints

The constraints on fertilizer consumption are not a result of fertilizer economics at the micro and macro-level, but are institutional in nature. AID, through this fertilizer import program and related activities in other country projects, is able to address several of these. While major institutional reform [illegible] be expected within a one year program the combination of resources is expected to have significant effect and facilitate increased levels of fertilizer use and more effective application. The important fertilizer consumption constraints to be addressed are:

- Coordination between research and farm extension services
  USAID/Senegal has assisted in establishing signed working agreements between these services and field technicians are participating in the conduct of improved field trials on farmers fields. Inclusion of fertilizer trials along the lines recommended by IFDC, i.e., phosphate rock and nutrient sulfur, is to be included in the further development of this program.

- Input and output prices
  The continued increase in farm commodity prices (60 CFAF/kg for rice, 55 CFAF/kg for millet and 50 CFAF/kg for corn, announced on May 1, 1983 for the 1983/84 crop season) raise the incentive for increased production therefore fertilizer use. At market prices which are 20-40% above the official prices the input/output ratio is even more favorable than that used in the analysis of this paper. The USAID will continue to support incentive prices as a means of stimulating increased production.

- Credit
  Fertilizer supply has been directly linked to agriculture credit until recently in the peanut basin and continues to be in the other regions of the country. The new credit organization has not been established nor have operating procedures been drafted in sufficient detail to predict the credit impact on future levels of fertilizer use. USAID is involved in the consideration of the credit system and anticipates GOS pilot programs in 1983/84. Sound and economical lending practices are important to increasing fertilizer use and priority is being given to improving the credit system for these reasons. However, at current levels of the import program the limited credit supply is not considered a critical factor.

- Marketing system
  By transferring the responsibility for fertilizer distribution to the private sector, the GOS has taken a major step forward in putting this industry under good management. The GOS policy is to convert all fertilizer distribution and marketing to the private sector but has not elaborated this policy in terms of either organizational structure or time frame for the rice and cotton production areas. USAID involvement with several

regional development agencies (RDA) provides a working relationship for assisting in the transfer of fertilizer marketing from the RDA to the private sector. The fertilizer marketing study proposed in this paper will provide a reference and master plan for this transfer of responsibility. The objective of this transfer will be a more responsive and economical arrangement for fertilizer supply to Senegal's farmers. In this case, the interim stage of reorganization is not seen as a critical constraint within the import and use targets of this project.

6. Policy dialogue and reforms

The fertilizer import program discussions with the Ministries of Plan, Finance, and Rural Development have already provided opportunities for staff and policy (Ministerial) level discussions on the privatization of fertilizer distribution and marketing, reduction of subsidies, credit needs of the farmer for fertilizer, etc. A private sector fertilizer marketing study financed from local currency generations is planned. The grant agreement will include covenants spelling out the Government's continued intention to move the fertilizer marketing system into private channels and that it will continue its efforts to reduce fertilizer subsidies.

E. Local Currency Uses and Relation to GOS Development and Sectoral Reforms

1. Local currency generation

An estimated 1.07 billion CFAF will be generated under this SDF program grant as indicated below.

Dollars		Local Currency (Counterpart) (CFAF)
$3.05 million	For 12,000 mt Urea and 5,000 mt Sulfur	1.07 billion
0.75 million	Two Technical Assistance Studies in Agric. Sector	-0-
1.20 million	Section 640C Grant for additional cost shipping fertilizer U.S. Flag	-0-
5.0 million	Total Generation CFAF ($1.0 equals 350 CFAF)	1.07 billion

The 1.07 billion CFAF will be deposited by the Government in a Special Local Currency Account at the Central Bank. Twenty-five percent of this local currency or 267 million CFAF will be deposited by the Government at the time the tender is awarded for the purchase of the fertilizer in October/November 1983. The remaining 75% or 800 million CFAF will be required no later than six months after the fertilizer is shipped (i.e., deposit in September 1984).

(These are roughly the same terms given the private sector in the CIP program under the ESF Program Assistance Grant (685-0262). As described in paragraph 3 below, funds may only be released from the Special Local Currency Account at the Central Bank by the joint GOS/USAID Local Currency (l/c) Management Committee.

2. Local currency use budget

It is planned to use the local currency for activities or studies directly related to Senegal's long-term efforts in rural development. While exact amounts will vary as the final activity proposals are prepared by the technical ministry concerned, the following illustrative budget sets out the planned local currency disbursements from the Special l/c Account at the Central Bank.

Illustrative Local Currency Use Budget

a. Strengthening Village Level Producer Groups (sub-coops) — $1.00 million (350 million CFAF)

b. Financial Support of the Agriculture Credit Bank (CNCAS)[1] — 1.80 million (630 million CFAF)

c. Contingencies and Other Uses (Fertilizer Marketing Study, etc.) — $0.20 million (70 million CFAF)

d. Joint Local Currency Management Committee Support — $0.05 million (17.5 million CFAF)

e. Land Regeneration (Back-up project -$1.8 million in CFAF - should item b. above not be approved.)

Total in dollars and CFAF = $3.05 million (1,068 million CFAF)

3. The approval procedure

All requests for financing specific local currency activities, projects, or programs prior to being sent to the Joint GOS/USAID Local Currency Management Committee for approval will have obtained the approbation of the GOS technical ministry. Once this step is completed the Joint l/c Management Committee will review and approve the proposal in line with the criteria set out in Annex F. A major task of the l/c Management Committee will be program management in addition to technical review. It will have a responsibility to examine such things as the adequacy of the budget for the level of effort proposed, whether provision for quarterly financial, and progress reports are clear, and whether evaluation and audit has been properly provided for. Copies of the approval criteria will be made available to the technical ministries preparing activity proposals so that these requirements will have been met prior to submission of the proposal for approval.

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1 Use of l/c for Credit and Savings Bank contingent on positive finding from the Credit and Savings Study team.

The GOS has suggested using the existing joint GOS/USAID Local Currency Management Committee already established to review and approve Title III l/c activities. This committee is chaired by the Ministry of Plan and has th. e other members--Finance, Commerce, and USAID. The Committee, which has bee. in operation for over a year now in its present form, is doing a good job. Some enlarging of its mandate may be necessary, as well as some additional support to the Committee's Secretariat to allow it to handle the additional work load. Amounts released for specific activities by the Joint Local Currency Committee will be released to a special account to be used exclusively for financing the approved activity. $50,000 in CFAF has been set aside to cover additional local currency costs.

4. Use of the local currency

One of the two major local currency uses under this PAAD is to support an activity designed to strengthen local village level producer groups (sub-coops). (Section V.C.(2) below summarizes the program and Annex G.(2) contains a more detailed description.) This activity should be considered within the framework of the Government's plan to decentralize the control of the agriculture sector and to place more responsibility at the village level. It provides funds for a major training effort of extension agents, village leaders, and trainers in literacy, numeracy, and cooperative leadership skills.

It is expected that placing responsibility for the selection of inputs and equipment needs and repayment of agriculture credit at the grass roots-level plus making the borrowers individually and collectively responsible will help assure repayment. A condition precedent in the grant agreement to disbursement of local currency funds for this activity will be completion by the Senegalese Government of the decree authorizing village level organizations to have direct access to rural credit.

The second major activity to be financed from local currency funds responds to the GOS request for support of the newly created National Agriculture Credit Bank (CNCAS). This activity is summarized in section V.C.(1) below and described in detail in Annex G.(1). It is part of the Government's plan to provide credit and mobilize savings in the rural economy via a bank free from direct Government control. The Bank will lend money to a broad spectrum of rural users at commercial or near commercial rates of interest. It has been designed over the past two years by the GOS in collaboration with the Caisse Centrale, the French National Agriculture Credit Bank as well as the World Bank. Ownership will be a mix of government participation (15% direct and 15% via its National Development Bank (BNDS) and other donor and private sector participation for the remaining 70% of capital). Grants and soft loans in the forms of lines of credit are being sought from donors. The program is expected to take up to 7 years to cover the country and a deliberate, careful start-up in only three regions is envisaged. Careful attention to training-especially for staff in the regional offices to assure intelligent contact with the populations at the grass roots-level is planned. Release of funds for this activity will be conditional on a positive finding from the dollar-financed technical study on Rural Credit and Savings. (See V. below)

The local currency contingency line item will be used mainly for studies needed to carry out the Government's Economic and Financial Reform Plan.

F. Technical Assistance: Agriculture Sector Assessment and Rural Credit and Savings Study

1. Under this project a current assessment of the food and agriculture sector in Senegal will be carried out. The last few years have seen major changes in the terms of trade for Senegal's principal cash crop - groundnuts. The world wide economic crisis has led to major changes in Senegal's ability to furnish agriculture inputs, provide credit, and subsidize fertilizer. Senegal has attempted to face up to this changed situation with announcement of its Economic and Financial Plan , as well as reduction in subsidies, reorganization of credit facilities, and Rural Development Agencies.

While the Government has undertaken a number of specific studies, with the help of other donors, such as the French Caisse Centrale, there has been no overall assessment in recent years. Therefore this study will draw upon the existing documentation and other services from which it will prepare a summary statement of the GOS Development strategy for the rural sector. It will also prepare a constraint analysis ranking the major constraints, and a resource analysis setting out the resources available or likely to become available from all sources-GOS, other donors, USAID. The report will conclude with a rank ordering of priorities for USAID assistance.

The study will be available to the USAID as a foundation piece in the preparation of a multi-year agriculture sector assistance program. The information will also be of considerable value to other donors as they prepare projects in the field of agriculture. (Annex H contains a detailed description of the study.)

Some $450,000 has been set aside in this PAAD to provide 27 man months for data collection and analysis by an economist and staff.

2. The Rural Credit and Savings study will have as its objective to provide a comprehensive presentation of rural financial resources, particularly the requirements and returns from credit and the quantity and terms of rural savings mobilization. Within the framework of the results of this study, recommendations will be made concerning the need for additional credit in the rural sector, and concerning the usefulness of providing local currency support to the newly created National Agriculture Credit Bank (CNCAS) as an appropriate instrument to help provide such credit. Some $300,000 has been earmarked under this PAAD to provide for some 16 man months for data collection and analysis by an economist and staff. (Annex I contains a detailed description of this study.)

G. Balance of Payments Support and Related Reforms

1. Conclusions

Annex K. The Macroeconomic Justification analyzes the current economic crisis, corrective measures which have been introduced, donor support for these corrective measures, and the prospects for economic recovery.

a. The economic crisis continues to persist despite concerted efforts on the part of the GOS to take corrective action. These difficulties arise from certain structural factors such as: over-dependence on too few exports, reliance on imports to satisfy currency consumption needs, declining world prices for peanut oil as acceptable and less expensive substitutes emerge (e.g., sunflower, soybean, and rapeseed oil), the low return on investment, and high labor costs in the modern sector.

b. The GOS, since the introduction of its Economic and Financial Reform Plan in December 1979 (see Annex C), has made impressive strides in implementing corrective action particularly with respect to: containment in the rate of growth of current expenditures in the Government budget, the introduction of a more restrictive credit policy, the adoption of a new foreign trade policy, the progressive decontrol of prices and the increase of prices paid to domestic producers of agriculture products.

c. Prospects for economic recovery will depend heavily on GOS political will and determination to proceed energetically with its medium-term program for economic and financial reform. However, it is clear that: (1) economic stabilization is likely to take considerably more time than originally anticipated; (2) stabilization remains the most urgent task facing Senegal today; and (3) given the necessary pace of adjustment, substantial external assistance is both warranted and required over the next three to four years.

d. The GOS, in recognition of the importance of pursuing economic adjustment, is in the process of negotiating a new 1983/84 Standby arrangement with the IMF. It is expected that agreement will be reached in July or August with presentation to the IMF Executive Board in September.

Recent evidence clearly demonstrates that the GOS must accelerate its efforts to implement economic reforms at the macro level in order to reverse a deteriorating trend in both the balance of payments and public finance situation and at the agricultural level in order to reduce subsidies, increase production and stabilize the economy. If important measures to check imports and government expenditures and increase production are not made urgently then Senegal may be facing a more critical situation next year, particularly in view of an expected decline in exceptional balance of payments aid. Hence, USAID/Senegal believes that it is necessary to make ESF and SDF program assistance conditional on GOS agreement with the IMF on a 1984/84 Standby arrangement. In the view of the USAID, the IMF is currently adopting a politically realistic, but firm approach in its negotiations with the GOS.

H. Development Impact: Policy Change and Related Reforms

Specific benefits to the Government and the macro, sectoral and sub-sectoral effects are discussed in Section B above entitled, "Program Benefits Summary", and spelled out in more detail in Sections C to E above describing the specific elements of the $5.0 million grant: impact of conditionality and fertilizer imports, local currency use, and technical assistance studies in the agriculture sector.

The purpose of this section is to underline that program assistance is particularly effective, and can affect policy even though the amount provided may be relatively small in terms of the total foreign exchange requirements of Senegal or compared to other donor contributions. This is so because the amount proposed may be very large in terms of the specific activity being supported. For example, the $4.25 million to cover the cost of purchasing 12,000 mt of urea for distribution and 5,000 mt of sulfur for the mixing plant represents 100% of the import requirement for the domestic fertilizer market for 1983/84. Assistance to village level sections and producer groups represents to the Minister of Rural Development well over 75% of the funds available to him for the strengthening of cooperatives at the village level. The dollar-financed technical assistance studies will provide the basic information and data necessary for the USAID to develop a multi-year sector grant, and help provide the GOS and other donors the information needed to establish priorities and make correct decisions in the agriculture sector.

The staff level negotiations and Ministerial briefings associated with this PAAD have provided significant opportunities for a policy dialogue on such subjects as moving fertilizer importing and marketing into the private sector, lowering of fertilizer subsidies, and providing credit to the peanut basin in an effective way. So the broad-based nature of the resource transfer under this program assistance grant is providing opportunities that might not have presented themselves (or would have been more severely limited) if the aid had only been in the form of project assistance.

By assembling all of the program or non-project assistance (ESF, $5.0 million; SDF (this PAAD) $4.25 million and Title III, $7.0 million) in the 1983 program, the USAID has a package of some $16.25 million in program assistance. This represents 14% of the unfinanced balance of payment gap. This direct participation in meeting the foreign exchange needs has provided credentials for in-depth talks with the GOS, IMF, and World Bank on Senegal's structural problems. IMF economists have welcomed USAID's interest. The U.S. Executive Director to the Fund was recently briefed by the USAID macroeconomist on the situation in Senegal. It is this cooperation and solidarity with the other donors which in helping persuade the GOS to take the difficult "belt-tightening" measures described in Annex K. below that are absolutely vital for the Senegal government. An example of this cooperation is the condition precedent in the grant agreement that makes disbursement of any dollar assistance under this PAAD subject to the GOS working out with the IMF a Standby Agreement for 1983/84.

Lastly, and perhaps most importantly, it is the Government's perception of the U.S. as a reliable source of multi-year economic, technical, and food assistance continuing far beyond the one-year life of project under this PAAD. It is this implied continual multi-year support of the Government's Economic and Financial Plan which has given, and continues to provide, the U.S. Mission with policy leverage over and above the amount of money provided under in this PAAD.

Therefore, the approval of this PAAD for $5.0 million, as well as the other elements of USAID's program assistance package, is essential to the successful continuation of this policy.

I. Conditions Precedent and Covenants

Apart from the usual statutory and administrative requirements, there follows a list of CPs and Covenants prepared especially for the draft agreement (See Annex B for the full text) proposed under this PAAD:

"Section 2.1. Conditions Precedent to First Disbursement. Prior to the first disbursement under the Grant, or to the issuance of AID documentation pursuant to which disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to AID, in form and substance satisfactory to AID":

((a)(b) and (c) are standard)

"(d) a written statement that the Grantee has sent a formal letter to the International Monetary Fund (IMF) setting forth its proposals for a IMF Standby Agreement for Senegal's Fiscal Year 1983/84, and written confirmation that this proposal is acceptable to the IMF."[1]

"Section 2.2. Conditions Precedent to Disbursement of Local Currency Generated

(a) No funds will be released from the Special Local Currency Account to be established in the Central Bank until arrangements for a joint GOS/USAID Counterpart Management Committee have been finalized. (See Section 5.1(a)).

(b) No funds will be released from the Special Local Currency Account to be established in the Central Bank until the Government certifies that village level cooperatives and producer groups are authorized to have direct access to credit sources.

(c) Disbursement of local currency funds from the Special Local Currency Account for the National Agriculture Bank (CNCAS) shall be contingent on a positive finding by the Rural Credit and Savings Study team being financed from dollar technical assistance funds provided in Section 1 of this agreement".

"Section 6: Special Covenants Concerning Program Implementation and Achievement of Program Objectives

Section 6.1. Fertilizer Subsidies.

6.1a Within 12 months of obligation of funds, the GOS will present a plan to the USAID for the reduction of the fertilizer subsidy from the current 60% level to 25% by June 1987.

6.1b GOS average price for fertilizer does not drop below 50 CFA per kilo through January 1984.

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1 Using the provision in Section 2.1 "except as the parties may otherwise agree in writing" use of the $0.7 million for Technical Assistance studies will be exempted from this CP.

6.1c Reduction of fertilizer subsidy to at most 40% by January 1985.

Section 6.2 Fertilizer Marketing.

6.2a Within 12 months of program obligation, the GOS will present a plan for reorganizing the fertilizer marketing system including analysis of the role of the private sector. This plan will recommend methods of reorganization for maximizing efficiency, minimizing costs and responding to local farmer needs.

6.2b The GOS will permit SSEPC (private sector distributor) to import urea under this program directly from the U.S. without the GOS serving as an intermediary.

Section 6.3 Fertilizer Use. Grantee covenants to continue its efforts to bring about closer cooperation between the agriculture research stations and the extension services so that results of applied research concerning the most efficient kind and method of application of fertilizers to specific crops can be made available to the farmer, and to those responsible for supplying fertilizer to the farmer.

Section 6.4 Macro-Level Reforms.

6.4a Selection of specific targets from the IMF 1983-84 Standby Agreement which are relevant to the agricultural sector for performance monitoring.

6.4b Reduction of the deficit of the CPSP (Price Stabilization Board) by 10% by December 1984.

6.4c Reduction of outstanding seasonal agricultural credit through a reimbursement of 10 billion CFA by December 1984.

Section 6.5 Periodic Consultations. Grantee and AID agree to meet periodically, but no less than annually, to discuss the progress of the implementation of the aforementioned covenants, to discuss the status of the economy, associated economic issues and the relationship of the AID program to those matters.

J. Compliance and the USAID Position

The Embassy/USAID position on this is clear. In the event that the GOS does not live up to its agreements concerning either the dollar import side or local currency use agreements, and if all dialogue and negotiations fail, the USAID would cut off the funding of the specific activity, or if the money was already spent, refuse to consider any future funding. If a fundamental issue was at stake in which the principle could not be compromised, or modified, the entire AID program would be put in abeyance pending resolution. For example, one of the Conditions Precedent cited in Section I above makes all dollar disbursements under the Grant Agreement (except for the Technical Assistance Studies) subject to the Government's working out a Standby Agreement with the IMF for 1983/84.

Having said this, one should stress that if the USAID continues its policy of financing activities where the objectives are the same or complimentary to the Government's goals, this eventuality need not arise. Should differences appear, sound analytical rationale would be furnished to the Government explaining the U.S. position. This would be coupled with a readiness to listen to the Government's side when there are disagreements.

K. Conclusion and Recommendation

Given the Government of Senegal's request for program assistance (see Annex A for text) to help alleviate its serious balance of payments problem, and the need to use the local currency funds generated from this program for priority development projects;

Given the present need for the results of two basic technical assistance studies also requested which will furnish an in-depth assessment of the agriculture sector, and a complimentary detailed study of the rural credit and savings system; and

Given the economic policy, program, and implementation information and justification provided in the preceding sections and tables.

IT IS RECOMMENDED THAT:

The Assistant Administrator for Africa approve this request for program assistance from the Sahel Development Fund in the form of a grant of $0.75 million for technical assistance, $3.05 million for fertilizer imports and raw materials, and $1.2 million for a Section 640C grant to finance the differential caused by shipping on U.S. Flag vessels. The exact mix of the $4.25 million in fertilizer, shipping, and differential costs would depend on actual costs at the time of awarding the IFB. The total grant will not exceed $5.0 million.

VI. ANALYSIS OF THE REFORM PACKAGE

I. Background

About 70% of Senegal's approximately 6.0 million people live in rural areas, and although rural-urban migration has been high, the rural population continues to grow at the rate of about 2.1% per annum. A large majority of the rural population derives its livelihood either directly or indirectly from agriculture and in particular from peanuts. In fact in 1981, more than 50% of Senegal's population was, in one way or another, dependent on the peanut industry. Nearly 60% of the rural population live in the "Peanut Basin" which covers about 35% of the country's land area. Human and livestock pressure in this area is becoming a serious problem.

The Agricultural sector continues to be a key one in the economy. It has accounted for some 30-35% of GDP, and about 60% of export revenue in recent years. It also employs about 75% of the labor force. Within the sector, about 60% of output comes from crops, 18% from livestock, 15% from fishing and 7% from forestry products. Basic foodcrops produced are millet, sorghum, rice, maize and cowpeas; groundnuts and cotton are the main cash crops. Over 90% of rural output is produced by small-scale rainfed farm units, but there are differences in farm size, labor availability, ownership of agricultural capital, productivity and revenues. The sector is fairly sensitive to rainfall, which is often erratic. Over the past decade, groundnuts and millet have taken up close to 90% of the cultivated area (47% and 42% respectively) while cotton and maize have occupied 2% each of the areas. Between 1976 and 1979 major export products in the agricultural sector have been peanuts (69%), fish products (21%), and cotton products (7%).

A. Agricultural Performance

Since independence, production of all major export and food crops has been erratic and can best be characterized as stagnant (See Tables 1 through 4 in the annex). The only exception is cotton which was introduced in Senegal in the mid-1960's and where production has been increasing fairly consistently in recent years. The somewhat more than one million hectares of peanut land produce about 880,000 tons of peanuts on average while cereal grain production totals less than 700,000 tons (on average) for a surface approaching one million hectares. Food crop production is not sufficient to satisfy Senegal's domestic requirements hence imports of about 350,000 tons of rice and 125,000 tons of wheat are purchased annually. On an output per hectare basis Senegal has low yields as compared to results obtained on farm plots cultivated as recommended by extension and agricultural research services.

Yields in kilograms per hectare of the two major crops, peanuts and millet, have varied from one year to the next, but have shown no upward trend in the last twenty years (See Graphs 1 and 2). Although the proposed agricultural sector assessment, to be financed with funds from this one-year $5 million program, will investigate the underlying causes of poor agricultural performance in Senegal, it is clear that erratic rainfall is an important contributing factor. Within the peanut basin, farmers basically have a choice between cultivating millet or peanuts or some combination of both to satisfy their own food crop needs and to earn cash income. The amount of land area devoted to peanuts and millet has remained remarkably stable since independence. The low apparent elasticity between areas devoted to each crop is probably due to the fact that there is a limited market system to sell millet or other domestically produced cereals. (The urban market is barely 50,000 tons.) Thus, once farm subsistence has been ensured, the farmer has little choice but to cultivate peanuts. Another reason appears to be that the present crop mix allows farmers to even out the allocation of their labor throughout the growing season. Thus, without more widespread mechanization, it is unlikely that the current pattern will change significantly.

Producer prices appear to have had limited, if any, impact on farmers' decisions with respect to how much area to devote to various crops (See Graphs 3 through 5). An examination of producer price data reveals that: (1) regardless of the relative price structure of peanuts to millet the total area planted is in the range of 2.0 to 2.3 million hectares with a millet/peanut acreage split which does not vary significantly; (2) yields and output are correlated significantly with rainfall and not with relative prices; and (3) the substitution effect in relationship to changes in relative prices seems to be insignificant. One hypothesis is that farmers are more concerned with risk aversion through crop diversification than with maximization of monetary earnings.[1] Another is that there is no significant difference in potential revenue from cotton, peanuts or rice since the GOS has generally maintained producer rices at comparable levels (See Graph 6). The lack of market opportunities for domestically produced cereals is clearly also a major explanatory variable. Another theory involves the relative importance of off-farm income through remittances from permanent urban dwellers or from seasonal urban migration. If non-farm income is indeed a significant contributor to the revenue of rural households, then 10-15% increases in producer prices may yield relatively marginal increases in total income. Due to the important implications of this hypothesis it should be studied further in the agricultural sector assessment.

An important consequence of stagnating agricultural productivity in the face of rural population growth of about 2.1% per annum has been declining rural incomes per capita. Despite considerable investments in the agricultural sector in the 1970's, the spread between urban and rural income is about six to one in favor of urban dwellers. While 1980 GNP per capita for Senegal of $450 was about equal in real terms to per capita income in 1970, the average rural income (of about $190 per capita) was about 10% lower in real terms than in 1970.

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1. A recent study seems to indicate that risk-averting behavior may in fact be profit-maximizing as well.

B. Constraints to Improved Agricultural Productivity

Although an agricultural sector assessment will analyze constraints to increased agricultural production in Senegal in much more detail, it is possible to identify the more obvious ones on the basis of already existing studies of the agricultural sector.

1. Water Shortages and Irregularities

In the short term, insufficient rainfall is the single most significant factor influencing agricultural development in Senegal. In four out of the last six years, rains were well below the long-term average, in some areas less than 50% of the norm. Equally important is the spacing of the rains since long intervals between rains can provoke significant crop damage. Over the medium-term the GOS is attempting to decrease the sector's reliance on frequently erratic rainfall through irrigation.

2. Soil Depletion

Due to increased demographic and livestock pressure, particularly in the peanut basin, the practice of fallowing has progressively been abandoned and has not been compensated for through an improvement in crop production techniques. A portion of the plant needs has traditionally been "supplied" by leaving the land in fallow. There have been local norms for different soils and crops allowing for one or two years of production after fallow periods of three to seven years. However, with increasing population density, the periods of fallow have been shortened or eliminated so that farmers are now "mining" the soil nutrient source.

3. Lack of Crop Diversification

With the exception of the introduction of cotton there has been very little change in the cropping patterns for Senegal since independence. Hence peanut remains the major export crop and millet the primary food crop. Given future projections in the world oilseed market which indicate that intense competition from other oilseeds will most probably keep the price for peanut oil lower than previous trends, the future contribution of the agricultural sector to GDP will depend on crop diversification. The question of determining where Senegal's comparative advantage may lie should be a major feature of the proposed agricultural sector assessment. A recent study completed by the Club du Sahel appears to indicate that potential returns to diversified foodcrop production may be more promising than to developing alternative export crops.

4. Malfunction of Agricultural Institutions: RDA's and Cooperatives

As in many developing countries, a key constraint to increased agricultural production has been the malfunction of important agricultural institutions. The institutional support structure of the sector has been largely influenced by the Regional Development Agencies of which there are five: (1) SAED (Société d'Aménagement et d'Exploitation des Terres du Delta) which covers the Senegal River Basin; (2) SODEVA (Société de Développement et Vulgarisation Agricole) which covers the peanut basin; (3) SOMIVAC (Société pour la Mise en Valeur de la Casamance) which covers the Casamance region; (4) SODESP (Société de Développement de l'Elevage dans la Zone Sylvo-Pastoral) which covers the central plains; and (5) SODEFITEX (Société pour le Développement des Fibres Textiles) which covers Eastern Senegal.

From independence in 1960 through 1978, the GOS had progressively placed greater responsibilities and resources in the hands of the RDA's as a means of achieving growth in the agricultural sector. These agencies were to provide farmers with improved technology, necessary inputs, improved access to markets and in general, to expand the acreage of the principal crops. By the late 1970's, the RDA's had become cumbersome bureaucracies that were intimately involved in the rural sector and were a burden to, rather than a leader of, agricultural development. In 1978, the RDA's consumed 15% of the country's Gross Agriculture Product. In the Peanut Basin, the GOS organization, ONCAD, controlled the supply of all agriculture inputs and marketing of peanuts. Farmers criticized ONCAD for its inability to guarantee the timing and quality of deliveries of agricultural inputs. This organization, corrupt and inept, was abolished as an initial measure under the Reform Plan in 1980.

The Regional Development Agencies, particularly SODEVA, have worked through a system of cooperatives where farmers' produce is marketed and where agricultural inputs (e.g. seeds and fertilizer) are delivered for distribution. These cooperatives have earned a bad reputation with the farmers largely because they have been dominated by the government, poorly managed and insensitive to local needs. The result has been effective elimination of farmer participation in cooperative management which has in turn provided an open door to corruption of the cooperative system and alienation of cooperative members.

The cooperatives and their members suffered from a number of deficiencies, including the undue control by local "notables", especially the president and weigher, who were usually literate. The membership are basically illiterate and lack numeracy skills necessary to understand cooperative records. Members had no voice in selection of which members receive credit despite the fact that all members were responsible for the cooperative's debts. Cooperatives have had no control over produce once it left the cooperative even though losses incurred in transport and handling are charged to the cooperative's account. Furthermore, cooperatives here had no voice in determining the price of their products and no say in the quantity, quality, or price of inputs to be made available to them.

The conclusion that can be drawn from the above list is that the farmer does not have control over the local cooperative upon which he is dependent for his factors of production, nor does he have an effective voice in determining the policies of the economic system that relies heavily on him and peanut production for survival. In recognition of this, the Government's Reform Plan provides for the reconstruction of the cooperative system starting at the level of the primary village section. In part with local currency generated from this PAAD, the GOS intends to begin immediately to strengthen village level cooperatives and producer groups. Section V entitled "Use of Local Currency" and Annex of the original PAAD provide a detailed description of this part of the program.

5. Malfunction of Agricultural Institutions: Credit

The dissolution in 1980 of ONCAD, which was also responsible for providing credit, has meant that both the peanut basin and the Casamance region have been without any formal credit program for the last three years. Farmers traditionally use credit for the purchase of seeds, fertilizer, implements, pumps, draft animals and cattle for fattening. Credit has been extended in kind by cooperatives and by the RDA's, with farmers' accounts being settled by the delivery of produce or payment in cash. However, basic management and audit systems have been inadequate and the cooperative system gradually built up a debt roughly equal approximately CFAF 30 billion (See Table 5). Recent village survey work also revealed that as much as 50% of the registered farm debt was either inadequately recorded or perhaps falsely entered in the books. To offset the adverse effects of bad weather, and to respond to farmers' complaints about the management of the credit program, the GOS has twice forgiven debts in the past five years. This debt forgiveness has seriously undermined the concept of credit liability, making reform all the more essential.

Given the importance of rural credit, and the need to have an up-to-date assessment, this PAAD provides for a study of Senegal's rural credit and savings to determine how credit cqn be made self-sustaining. If a need is confirmed, the study will further determine whether the newly created National Agriculture Credit Bank (Caisse Nationale du Crédit Agricole du Sénégal--CNCAS) is an appropriate institution to provide these services. (For a more detailed description of the activities planned in the field of credit and savings, see Section V and Annexes I and G.1.)

6. Coordination Between Research and Agricultural Extension

Although agricultural research has a relatively long history in Senegal and has absorbed considerable resources, it has not always been adequately responsive to farmers' needs and constraints. Furthermore, coordination between technical packages worked out by research and the presentation of these packages to the farmers has been lacking. Thus, there have been discrepancies between recommendations from research institutes and those from the Ministry of Rural Development and extension services. However, in recent years, partly due to the influence of USAID, joint programs of applied research have been established between SODEVA and ISRA in the peanut basin, and between PIDAC and ISRA in the Casamance region.

7. Incoherence of GOS Policy: Pricing

The GOS has been unable to develop and implement a consistent policy with respect to relative prices of agricultural inputs and output. It was the government's intention, through the use of guaranteed producer prices and the subsidization of inputs, to encourage farmers to adopt modern cultivation techniques (e.g. increased use of fertilizers, agricultural tools and heavier equipment). Subsidized inputs were designed to minimize farmer risks particularly associated with the purchase of expensive fertilizers, which are ineffective in drought years. In practice, however, fertilizer use does not appear to have been especially sensitive to price (see Table 11) and the financing of subsidies out of earnings from the sales of export crops has tended to reduce producer prices. Furthermore, with respect to fertilizer, supply constraints may have been more influential in determining the rate of fertilizer application than relative pricing (See Part 2, Section II C.).

8. Incoherence of GOS Policy: Marketing

Marketing policy has been focused on traditional export crops and this despite the generally stated aim of crop diversification and increased domestic cereals production to substitute for imports. Emphasis has been given to the perpetuation of a state-run system for marketing agricultural inputs with little attention being directed to ways of introducing a certain element of competition to improve the quality of services rendered. The central role of government institutions has become increasingly difficult to maintain as the government has been experiencing serious budgetary constraints.

C. The Impact of Low Agricultural Productivity on the Macroeconomic Situation

Stagnating agricultural production, despite considerable investments in the 1970's through the RDA's, and unfavorable shifts in external terms of trade (see Annex on macroeconomic situation) have severely affected the agricultural sector's contribution to foreign exchange earnings and budgetary receipts. On the budgetary side, the weight of subsidies to the agricultural sector has been increasingly heavy (see Table 6). Annual government outlays of about CFAF 30 billion or $80 million are necessary to cover: (1) the current subsidy on export crops, particularly peanuts, resulting from the fact that Senegal's prices for exports are below domestic production and processing costs given producer prices; (2) operating subsidies to regional rural development agencies; and (3) subsidies on agricultural inputs, both fertilizer and seeds. The Senegalese economy, in crisis since 1978, has been unable to mobilize sufficient current revenue to finance these expenditures which have been covered *de facto* through an accumulation of agricultural debt (see Table 5). This outstanding agricultural debt, on which the GOS has not met even interest payments, has serious implications for the future stability of the domestic banking system, including the multi-national Central Bank, the BCEAO. A write-off of debt amounting to approximately $345 million is inconceivable given the banking regulations associated with the West African Monetary Union.

The two government institutions principally responsible for outstanding agricultural debt are, the now defunct, ONCAD and the CPSP (Price Equalization and Stabilization Fund). The CPSP's primary role since the GOS eliminated most of the subsidies on consumer goods, is to stabilize revenue to farmers from peanuts and cotton (see Table 8). Unfortunately, in recent years, receipts from the importation of certain consumer goods have been negligeable while expenditures in the form of compensatory payments to domestic processors of peanuts and cotton have been sizeable. The way the CPSP has been meeting its financial obligations is by essentially agreeing to accept partial responsibility for seasonal credit extended to oil crushing firms and to SODEFITEX for the purchase of the two major export crops. When world prices are consistent with domestic producer prices, this seasonal credit is reimbursed within the calendar year (period over which the processors of export crops are expected to obtain the full earnings from world sales). Since the CPSP does not have the financial resources to reimburse the portion of the outstanding seasonal agricultural credit equivalent to the subsidy payment it should have extended to domestic producers, it is in essence the domestic banking system which has assumed this burden through interest and principle payments foregone on seasonal credit.

Poor agricultural productivity when combined with the impact of unfavourable shifts in Senegal's external terms of trade (see macroeconomic annex, Table 12), have made the agricultural sector a net foreign exchange user (see Table 7). In drought years, this situation is aggravated considerably. There are few short-term solutions to reducing significantly the foreign exchange implications of the agricultural sector. Most imported food items are essential to ensure minimum consumption needs of the population while limitation on the imports of chemicals and machinery would have an almost immediate negative impact on agricultural production. Over the medium-term, however, increased agricultural productivity through the removal of some of the constraints described in Section B and a proper balance between export earnings from peanuts and cotton and import substitution from millet, rice and maize could lead to a net foreign exchange gain.

D. GOS Strategy to Deal with Agriculture Sector Problems

In December 1979 the GOS, with the assistance of the World Bank and the IMF launched a medium-term Economic and Financial Reform Program involving a series of corrective measures in the agricultural sector. As set forth in the Reform Plan, the key elements of the GOS strategy for revitalizing the agriculture sector are:

1. Reorganization of the seed and fertilizer distribution and marketing systems;

2. Reorganization of the Rural Development Agencies (RDA's) to decentralize their management, reduce operating costs, increase efficiency and liberate areas for private sector initiatives;

3. Encouragement of private sector initiative in areas of marketing and agriculture services;

4. Greater involvement of cooperatives and village level groups in decision-making related to commercial agriculture;

5. Revamping of agriculture credit; and

6. Revising the structure for the agriculture research program.

For the period 1980 to 1982 the GOS has introduced a number of measures to promote structural reform in accordance with the above program. Producer prices for export crops and domestically produced cereals were increased across the board in 1981.[1] Consumer prices of imported food products now tend to reflect import costs. ONCAD, the parastatal responsible for providing inputs, credit, and for marketing groundnut production up to 1980 was dissolved and arrangements have been made for settling this institution's liabilities vis-à-vis its suppliers and the banks. The responsibility for groundnut marketing has been transferred to the oil crushing firms which purchase the crop directly from the cooperatives. Performance contracts between the GOS and three of the rural development agencies (SAED, SODEFITEX, SODEVA) have been signed, a study of the financial management of the CPSP has been made, a policy of encouraging farmers to store their own seed was attempted but abandoned during the 1982-83 growing season, and procedures for the overhaul of groundnut collection and weighing operations have been implemented. Measures have also been taken to promote the role of private transporters in the marketing of agriculture production.

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1. In April 1983, producer prices for rice, maize and millet were increased an additional 10-20%.

Despite the above achievements there are a variety of areas in the agriculture sector where change has proved to be difficult. The first concerns the role and future of SONAR, a temporary agency created following the dissolution of ONCAD to supply farmers with inputs such as seed and fertilizer. While the GOS stated that this agency should be temporary, there has been heated debate regarding the timing of the phasing-out process, particularly in view of the critical unemployment situation in Senegal.

Secondly, the GOS has recently suspended its new policy of encouraging individuals to hold back part of their harvest to serve as seeds for the following growing season due to claims of technical difficulties with seed preservation and the release of funds for this purpose as well as to unfavorable reactions from the farmers themselves. These farmers, who are accustomed to wide fluctuations in their production from one year to the next, were hesitant about opting in favor of conserving their own seed stocks since they believed that this would permanently deny them access to government seed stocks in the future. Concern has been expressed with respect to the implications of this policy for the quality of future seed stocks.

Thirdly, there are differences of opinion on the relationship and respective roles of cooperatives versus village sections. The reform program calls for a strengthening of the village sections and their role with respect to seed management and other functions. However, the cooperatives have been the most important organizations in the past and it is only normal that greater emphasis on village sections has provoked a certain amount of opposition from those groups with vested interests in the former system.

Fourthly, the combined impact of the new policy of cash sales for fertilizers, and a progressive phasing-out of fertilizer subsidies has had a negative impact on fertilizer consumption. The introduction of a consistent and feasible policy on fertilizer sales could contribute substantially to the resolution of problems in this area.

Finally, the reorganization of rural development agencies has proceeded more slowly than orginally expected despite the signature of performance contracts. Problems associated with staffing, and administrative and financial management have proved to be quite stubborn and efficiency has suffered. These difficulties are reflected in performance with respect to World Bank's Structural Adjustment Loan.

As a result of the slower than expected progress in implementing agricultural reforms, the World Bank cancelled the second tranche of the SAL (equivalent to about $16 million). The deadline for release of the tranche had already been extended once from December 31, 1981 to June 30, 1983. Implementation difficulties can be linked to the nature of SAL conditionality which has been relatively complex, involving a number of different institutions and reforms in a variety of different areas, such as seed stock maintenance, the distribution and pricing for fertilizers, the reorganization of RDA's, and the future of the parastatal SONAR. As a result, progress in one area has been penalized by inadequate performance in other areas.

Although important measures have been taken to promote structural change in the agriculture sector, reform has been more elusive than anticipated. Institutional arrangements have demonstrated remarkable inertia and Senegalese farmers, who have been accustomed to extensive government participation, appear cautious about assuming the risk involved in farming in the Sahel region without significant government support. The newly appointed Minister for Rural Development has asked for a 6-month period of study before presenting a comprehensive program for pursuing structural reform in the agriculture sector.

Since the cancellation of the SAL the IMF is at present the only multilateral institution dealing with overall reform in the agriculture sector. A proposed 1983-84 stabilization program, if accepted, would have critical implications for the agricultural sector. Due to the impact of low agricultural productivity on the macroeconomic situation a stabilization program must deal with means of reducing this sector's drain on scarce budgetary and foreign exchange resources. A primary objective under the standby agreement is to reduce the level of subsidies to the agricultural sector, particularly since the GOS cannot find appropriate financing. The strategy involves: (1) a reimbursement of outstanding agricultural debt as a means of reducing projected interest costs for 1983-84 by at least CFAF 2.5 billion; (2) elimination of central government financing of the fertilizer subsidy estimated at CFAF 2.9 billion; (3) a reduction in subsidies to oil crushing firms through cost cutting in the peanut sector; (4) a reduction in the operating [illegible]ies to SAED of CFAF 1.8 billion; (5) a reduction in subsidies on [illegible] seed stock (SONAR) through an increase in retained earnings from peanut sales to save CFAF 4.0 billion; and (6) a series of price increases on imported consumer goods (including rice and sugar) to generate an additional CFAF 6.4 billion for the CPSP and to reduce projected subsidy payments on consumer goods by CFAF 9.0 billion.

The end result of the above measures would be: (1) to decrease the CPSP deficit by 63% from an estimated CFAF 15.9 billion to a projected CFAF 5.8 billion (i.e., a net decrease of CFAF 10.1 billion); (2) to reduce GOS subsidies to the agricultural sector from a projected CFAF 32.0 billion to about CFAF 22.5 billion (or a 30% reduction); (3) to complete the reimbursement of CPSP outstanding agricultural credit (principal plus interest); (4) to continue the reimbursement of ONCAD debt in accordance with the re-financing agreement concluded with the BCEAO; and (5) to encourage consumption of domestic food crops and discourage rice imports through a 2[illegible] increase in the retail price of imported rice.

II. An Agriculture Development Assistance Program: USAID's Response to Sectoral Constraints

A. Major Lessons from Previous Donor Experience in the Agricultural Sector

The lack of improvement in agricultural productivity despite considerable internal and external investments in the sector and major government involvement is a poignant indicator of the relative ineffectiveness of a 100% "project-oriented" approach to agricultural development. The scope of a project has apparently not been sufficiently broad to provide the necessary institutional support which is clearly one of the major impediments to improved agricultural performance. A method must be devised for effectively influencing the efficiency of basic institutions (e.g. cooperatives, parastatals, village level producer groups) responsible for input distribution, credit, and marketing. Policy implications, particularly with respect to marketing and pricing, must be coherent in order to influence long-term farmer behavior and choices of crops, cultivation techniques, and input use. A preliminary examination of the data has demonstrated little if any price responsiveness from farmers, but this is most probably due to the lack of consistent pricing policy and institutional constraints.

The importance of technical assistance activities both in relation to institution-building and in response to major outstanding questions in the agricultural sector is essential. More in-depth analysis is required to understand the details of farm economics in Senegal. Thus future involvement should emphasize the need for further analysis.

World Bank experience with the SAL has demonstrated the real difficulties associated with reform in the agricultural sector and the necessity of carefully focusing reform efforts. Major policy and institutional changes are clearly going to require time and careful periodic monitoring of performance. The scope of action should also be sufficiently narrow to prevent progress in one area from being penalized by inadequate performance in other areas.

The agricultural sector is clearly going to be affected by the economic stabilization measures proposed by the IMF. U.S. activities in the agricultural sector will thus be designed to work within the exigencies of economic stabilization while minimizing the potential disruption to the sector of major cuts in subsidies.

B. Justification for the Use of Non-Project Assistance in the Fertilizer Sub-Sector

In view of the lessons which can be drawn from past experience in the agricultural sector, USAID is now moving gradually from an entirely project-oriented mode to the use of some non-project assistance in a carefully defined framework. A one-year $5 million program, if successful, would be extended into a multi-year program within two years. USAID is focusing its efforts on achieving policy and institutional reform in the fertilizer sub-sector, although attention is also being given to the more general need to reduce the implicit budgetary drain of the agricultural sector and to pursue certain technical studies (e.g. an agricultural sector assessment, a credit and savings study, a fertilizer marketing study) to set the stage for future assistance in the sector.

The fertilizer sub-sector has been selected for a number of reasons. First, an IFDC study of the sector clearly indicates that fertilizer use can be both economically and financially profitable in Senegal, particularly on food crops. Second, an examination of the foreign exchange implications of fertilizer use by comparing potential benefits resulting from increased agricultural production with foreign exchange costs of domestic fertilizer production indicates that this sub-sector could be a net foreign exchange earner or saver. Third, data on fertilizer distribution in Senegal demonstrate clearly that it is inefficient and requires reform in policy and institutions to realize even some of its potential benefits. Fourth, more efficient fertilizer use could within a relatively short period of time (3 to 4 years) be reflected in increased rural incomes. Fifth, it has been chosen as a sector where subsidies must be reduced to close the GOS budgetary deficit and thus will be requiring special attention in order to prevent serious disruption (e.g. a drastic decline in fertilizer use in response to an increase in price to the farmers).

USAID believes that this one-year fertilizer CIP will offer support for economic stabilization efforts as well as a basis for pursuing long-term development objectives in the fertilizer sub-sector. The financing of 12,000 tons of urea and 5,000 tons of sulfur imports will provide 100% of Senegal's projected requirements for these two fertilizer components. The relative importance of this contribution should give USAID considerable leverage for influencing institutional and policy change in the sub-sector, while carefully focused conditionality defined in terms of specific quantitative benchmarks should provide a basis for measuring performance with respect to reform. In view of the current economic problems confronting Senegal the GOS places particularly high value on non-project assistance which should also enhance USAID's ability to influence reform.

C. Medium-Term Objectives for the Fertilizer Sub-Sector

Fertilizer consumption in Senegal has been both erratic and inefficient as evidenced by the relatively low correlation between fertilizer consumption and yield (see Graphs 7 and 8). The factors contributing to this phenomenon are discussed in Part 2, Section II A, B, and C. The medium-term objective of USAID involvement in the sub-sector is to increase the efficiency of fertilizer use (through pricing and marketing reforms) and to increase domestic consumption levels from about 38,000 metric tons to about 75,000 metric tons over the next five years. This increase in fertilizer use must take place in the context of decreasing price subsidies. However, it is possible that greater effiency in fertilizer utilization in response to price signals could lead to higher actual rates of return and thus greater demand. It is intended that fertilizer use be distributed as follows: 30% for peanuts; 35% for millet; 10% for irrigated rice; and 25% for other crops (cotton, market gardening, and dryland rice). These objectives and their implications for consumption patterns are compared to projected consumption for 1983-84. See the text table on the following page.

TEXT TABLE 1

Type of Fertilizer	Crop	Consumption Objectives		Projected Consumption for 1983-84	
		MT	%	MT	%
NPK 6.20.10	Peanuts	22,500	30.0	4,000	10.5
NPK 14.7.7 and urea	Millet	26,250	35.0	12,000	31.6
NPK 18.46.0 and urea	Irrigated rice	7,500	10.0	5,000	13.2
NPK 8.18.27 and KCL	Market gardening Cotton Dryland rice	18,750	25.0	17,000	44.7
TOTAL		75,000	100.0	38,000	100.0

Achievement of the medium-term objectives would require, in particular, efforts: to restore fertilizer use on peanuts and millet to its average of recent years (see Table 9), to increase application on irrigated rice by about 50% and to increase fertilizer use for other crops by about 10%. Assuming optimum fertilizer use in the Senegalese context, as defined by the IFDC, attainment of fertilizer consumption targets would imply the following yield increases: 42,500 metric tons for peanuts, 57,000 metric tons for millet, 22,500 metric tons for irrigated rice and 1,800 metric tons for other crops. This would in turn lead to an increase in farmer revenue (at current producer prices) of about CFAF 9.0 billion. Clearly, Senegal will not be able to take full advantage of the potential revenue increase within five years; however, the CFAF 9.0 billion figure gives a rough indication of how improved fertilizer use could contribute to increased agricultural productivity and farmer incomes.

In the area of pricing policy USAID is aiming for a complete elimination of subsidies on fertilizer over a six-year period, at the longest. The GOS has agreed that the reduction in the subsidy burden on the government budget is necessary. An added advantage may be that subsidy reduction will encourage fertilizer use in regions and on crops where returns are sufficiently high to justify purchase at cost price. There is some evidence (detailed in Part 2, Section II) that subsidization has led to: (1) use of fertilizer in dry regions where the probability of low returns to fertilizer due to drought is high; (2) relatively widespread use of fertilizer in amounts which are too small to result in demonstrable increases in yield. USAID is proposing a timetable whereby the GOS will hold firm on the average 60% subsidy level through January 1984; (3) reduce the subsidy level from 60% to 40% maximum by January 1985; and (4) reduce the subsidy level to 25% maximum by January 1987.

Institutional arrangements for fertilizer marketing and distribution are currently in a state of flux. ONCAD was traditionally responsible for purchasing fertilizer from the domestic producer, providing credit to farmers for fertilizer on an annual basis, and distributing fertilizer to the cooperatives which in turn distributed it to the farmers. Since the dissolution of ONCAD a number of institutions have been involved, principally: SONAR (a temporary agency responsible for fertilizer distribution until 1982), SSEPC (a marketing agency for the domestic fertilizer producer), SIES (responsible for distribution since 1982), and SODEVA (a regional rural development agency responsible for maintaining sales depots in the peanut basin since 1982). Fertilizer distribution to Eastern Senegal and to the Senegal River Basin has been handled directly by SODEFITEX and SAED respectively. Confusion concerning GOS policy on fertilizer marketing and the objectives with respect to designation of institutional responsibility for fertilizer distribution has contributed to supply disruptions in recent years.

The GOS, in collaboration with USAID, will be studying possibilities for reorganizing the fertilizer marketing system including an analysis of the respective roles of the private and public sectors. On the basis of the study, a plan is to be submitted within twelve months of project obligation. USAID is looking for a marketing and distribution system which will emphasize relative efficiency and cost-effectiveness. A new approach to input distribution based on introducing an element of competition in the marketing system (e.g. simultaneous operation of public and private distributors) is believed to hold some promise. A major factor in resolving institutional difficulties is the willingness of the GOS to maintain a consistent policy in this area. Specific criteria such as prompt delivery, cost minimization and responsiveness to local needs will be defined and used to assess performance of the new system.

PART 2 - SPECIFICS OF PROGRAM DESIGN

Since the $5 million fertilizer CIP will provide direct support for Senegal's economic stabilization efforts, it was decided that this non-project activity should include some conditionality with respect to objectives, pertinent to the agricultural sector, as defined by the 1983-84 IMF standby arrangement. Conditionality has deliberately been defined modestly in comparison to IMF objectives, to be compatible with the relatively small amount of resources this one-year program will provide. However, as a condition precedent to the program, dollar funds will not be disbursed until the conclusion of a 1983-84 Standby Agreement between the IMF and the GOS. Although sector level conditionality is not the major emphasis of the program, visible U.S. support for measures to reduce the public finance burden of the agricultural sector is believed to provide significant moral suasion. Furthermore, should the GOS procrastinate coping with the subsidy burden of the agricultural sector, the consequences (e.g. breakdown of the CPSP or the availability of seasonal agricultural credit) would seriously disrupt U.S. efforts to affect policy and institutional reform in the fertilizer sub-sector.

I. Reducing the Public Finance Burden of the Agricultural Sector

A. The CPSP

The role and financial difficulties of the CPSP are set out in the background section and in Tables 6 and 8. As a covenant to this program USAID is requiring that the CPSP deficit be reduced by 10% before December 1984. Assuming 1983-84 projections for the annual CPSP deficit (in the absence of reforms), a 10% reduction would imply a decrease of approximately CFAF 2.1 billion or $5.5 million. This reduction would be modest in comparison with the proposed IMF reduction of CFAF 10.1 billion from the 1982-83 deficit. Assuming that the GOS implements the price increases for imported rice, sugar, and vegetable oils as proposed by the IMF and that the world prices for peanut products and cotton do not decline significantly, then the CPSP should have no difficulty in complying with this covenant.

B. Reimbursement of Outstanding Agricultural Debt

Basic components of outstanding agricultural debt are set out in Table 5. As a covenant to the program USAID is requiring that in addition to a reduction of the CPSP deficit, the GOS mobilize sufficient resources to reimburse CFAF 10 billion by December 1984. The draft letter of intent for the IMF standby also sets out targets for the reimbursement of agricultural debt in relation to the amount of budgetary support the GOS receives in excess of CFAF 6.0 billion for the period from July 1 to September 30 and in excess of 9.0 billion for the period from July 1 to December 31,1983. These resources are to be allocated for the repayment of debts in the following descending order of priority: (1) outstanding seasonal agricultural credit for FY 1981; (2) outstanding seasonal credit for FY 1982; (3) arrears due on ONCAD debt for FY 1982 (CFAF 8.0 billion); and (4) quarterly payments (of CFAF 2.5 billion each) due on ONCAD debt for FY 1983.

Given the IMF order of priority, the USAID requirement of a reimbursement of CFAF 10 billion would be allocated to cover the outstanding principal on seasonal credit for FY 1981. On the basis of IMF projections of exceptional budgetary support for FY 1983-84, USAID does not anticipate difficulties in GOS compliance with the covenant. However, the IMF timetable for debt reimbursement, which would require the GOS, providing it receives sufficient budgetary support, to repay a combined total of CFAF 29.6 billion over FY 1983 appears to be much too optimistic.

II. Characteristics of Fertilizer Use in Senegal

A. General Background

Although it is necessary to view fertilizer consumption data with caution, it is clear that consumption has been surprisingly erratic since independence. It is not uncommon to find fertilizer consumption reduced by half from one year to the next or conversely doubling (see Table 9). Even the percentage of total annual consumption on any particular crop has a tendency to fluctuate considerably. The percentage of fertilizer allocated to peanut production, however, appears to have declined fairly consistently since the early 1960's from about 80% to about 40%. This decline can be explained by the emergence of cotton as an export crop on which fertilizer is used, and by a gradual increase in fertilizer use on millet. On a regional basis, the Sine-Saloum area of the peanut basin has traditionally been the largest consumer of fertilizer accounting for anywhere between 37% and 74% of [illegible] consumption (see Table 10). Since the early sixties the predominant position of the Sine-Saloum region has declined somewhat as the share of the Central Basin region and Eastern Senegal region have increased. The relatively large magnitude of fertilizer consumption in the peanut basin is not surprising given that about 60% of total farms and 100% of large farms are located in this area (see Table 16).

Another important aspect of fertilizer use is that it has been marginal in comparison to quantities required to maximize yields. Assuming that fertilizer is not applied to peanut production in drier areas, Senegal, according to IFDC recommendations, would still need about 114,700 tons of NPK and 71,200 tons of urea. Field tests conducted by SODEVA indicate that farmers use primarily NPK types of fertilizer supplemented by urea to meet individual farm needs. There is a wide range of variability in fertilizer application rates with generally higher rates observed for cash crops and lands cultivated by larger households. According to actual studies, about [illegible] of fields cultivated receive no fertilizer, about 60% receive less than the recommended dosage and 10% receive more than the recommended dosage. Another field study conducted in the peanut basin concludes that when less than 60% of recommended dosages of NPK are applied per hectare then yields were actually lower than in the absence of fertilizer application due to increased weed growth. The marginal aspect of fertilizer use may also explain, at least partially, why the direct correlation between fertilizer consumption and yields is not very high (see Graphs 7 and 8).

B. Farmers' Attitudes Towards Fertilizer Use

There appears to be little verified data on farmers' attitudes towards fertilizer use; however, isolated field tests have led to the formulation of some plausible hypotheses. First, farmers appear to be particularly influenced by the necessity of avoiding risks rather than maximizing profits, which would explain the relatively low levels of domestic fertilizer consumption. A principle concern appears to be the need for minimizing implicit or explicit debt in association with fertilizer use, particularly since fertilizer is not absolutely necessary to agricultural production, such as seeds. Second, farmers have not been convinced of the full extent of the potential impact of fertilizer use on yields for a number of reasons: (1) fertilizer has been used in marginal quantities; (2) fertilizer doses and proportions of NPK should be regionally adjusted for soil composition but seldom are; (3) fertilizer has been used basically to maintain the fertility of heavily cultivated soils which would normally experience a decline in yield and therefore tangible results through increased production are not apparent; (4) returns to fertilizer use on some crops (e.g. peanuts) may not be apparent over a one-year time period; and (5) farmers have learned that logistical and financial problems frequently affect the timely availability of fertilizer.

Another explanation for variability in fertilizer use may be that it is particularly sensitive to shifts in rural incomes since it is the most easily accessible means of compressing production costs. Rural incomes vary considerably in Senegal due to undependable rainfall. Supply side constraints may also be an important factor in explaining annual variations in fertilizer use. USAID through the Senegalese agricultural research institute (ISRA) is currently financing a study of various farming systems in Senegal which will include information on farmers' attitudes and may provide more definitive answers to questions on decision-making with respect to fertilizer utilization.

C. Factors Determining Supply and Demand

On the basis of background data on fertilizer use in Senegal it is possible to outline the major factors influencing supply and demand. On the supply side, institutional constraints are of primary importance particularly with respect to the marketing and distribution of fertilizer. Similarly, the GOS' inability to ensure timely payments for the importation of urea and to the domestic fertilizer producer for the purchase of NPK has, on several occasions, been directly responsible for late or partial delivery to the farmers.

With respect to demand, the situation appears to be somewhat more complex. The combined effect of a doubling of the fertilizer price from 25 CFAF/kg. to 50 CFAF/kg. in 1982-83 and of the absence of a credit mechanism (in the peanut basin and in the Casamance) seems to have provoked a sharp decline in the demand for fertilizer in these regions. Figures are not yet available to confirm this hypothesis. Nevertheless, time series data for the ratio of the producer price of groundnuts to the price of fertilizer and for fertilizer consumption seem to confirm that price is a factor in demand but with about a two-year lag (see Graph 9). Other important factors are: (1) farmers' assessment of risk associated with erratic rainfall; (2) demonstrated results of fertilizer through appropriate extension; (3) income level and alternative claims on farmers' scarce resources; and (4) timing of the fertilizer deliveries.

D. Potential Profitability of Fertilizer Use

In 1976 and again in 1977 the International Fertilizer Development Center (IFDC) conducted 32 fertilizer trials each for millet and groundnut on Senegalese farmers' fields. For more detail on the conditions under which these trials were conducted, see Annex . The purpose of the IFDC work was to determine the potential profitability of fertilizer use in Senegal (see Tables 13 through 15).

1. From the Farmers' Viewpoint

Hypotheses 1, 2, and 3 on tables 13 through 15 represent the profitability of fertilizer use from the farmers' viewpoint. According to international standards in countries with rainfall conditions like Senegal, value cost ratios should at least be equal to two (compared to an average value cost ratio in the U.S. of 1.2). Otherwise, the risk is too high to be taken by the farmers. In drier areas, like the North Basin, this ratio should be equal to 2.5 or 3 to take into account increased risks of drought. At the current 60% level of subsidy on fertilizer, fertilizer consumption is potentially profitable on all crops (cotton, millet, peanuts and rice) and in all regions. However, as the subsidy on fertilizer is reduced to 25%, while the output prices are maintained at current official levels (a rather pessimistic assumption over a five-year period), fertilizer use in no longer profitable either on peanuts, except in the Sine-Saloum region, nor on dryland rice and cotton in Eastern Senegal. But returns to fertilizer should be sufficiently high on millet in all regions..

2. From the Economy's Viewpoint

From an economic point of view, the value cost ratios should be higher than 1 plus a small percentage representing the opportunity cost of capital in Senegal. Thus, a ratio higher than 1.1 is considered satisfactory. When world market prices for fertilizer and for crops grown in Senegal are used (hypothesis 4), value cost ratios are highest for peanuts in the Sine-Saloum and for millet in the North Basin but are higher than 1.4 for all crops in all regions. A comparison of the foreign exchange value of increased crop production as a result of fertilizer use with the foreign exchange spent on fertilizer consumed (hypothesis 5) indicates substantial foreign exchange benefits to the economy. A final calculation (hypothesis 6) is made to reflect the impact of expected reductions in the production costs of NPK fertilizers (estimated to be 15%) as a result of a new chemical complex (ICS) expected to come on stream in the course of 1984. Cost value ratios in all cases are slightly higher than those for hypothesis 4.

3. From the Viewpoint of Soil Conservation

One of the GOS' primary justifications for maintaining a subsidy on fertilizer has been its presumed long-term benefits in preventing soil depletion. However, the long-term cause and effect relationship between fertilizer use (especially when it is marginal as in Senegal) and soil conservation is not altogether clear. Soil depletion has been linked to a variety of practices--overgrazing, deforestation and continuous cropping. Effective means of soil conservation, therefore, must involve an integrated approach to altering these practices, and fertilizer use in isolation will have little direct impact on arresting soil depletion. Furthermore, it has been argued that a temporary decline in fertilizer use (3 to 5 years) will not provoke long-term damage to the soils since once fertilizer use is resumed the necessary soil nutrients will be applied. Given the uncertainty of the relationship between fertilizer use and soil conservation it would not appear warranted to increase value cost ratios to reflect longer-term benefits.

III. Pricing Policy

From the data on fertilizer distribution and costs it would appear that the GOS, since independence, has not followed any consistent policy with respect to the price of fertilizer. The intention seems to have been to keep prices as low as possible thus minimizing the risk of fertilizer use to farmers (see Table 11). Price increases seem to have occurred the year following a significant increase in the total costs of the fertilizer subsidy to the GOS or simultaneously with a major increase in the price at which the GOS purchases fertilizer from the domestic producer.

A. Fertilizer Production Costs

1. SIES

The Industrial Fertilizer Company of Senegal (SIES) is, at present, the only company which produces chemical fertilizers in the country. Capital participation in SIES is as follows:

- SSEPC (Société d'Engrais et de Produits Chimiques	21.57%
- International Finance Corporation (World Bank)	17.98%
- Société Kalt und Salz A.G.	10.79%
- Entreprise Minière et Chimique	10.04%
- Société Commerciale des Potasses et de l'Azote	4.35%
- Société Sénégalaise des Phosphates à Thiès	8.99%
- Compagnie Sénégalaise des Phosphates de Taiba	3.59%
- BNDS (Banque Nationale de Développement du Sénégal)	9.89%
- Other Senegalese Banks	4.50%
- Others	8.30%

Entreprise Minière et Chimique (EMC) and Société Commerciale des Potasses et de l'Azote (SCPA) are two companies of the French group, Mines de Potasses d'Alsace (MPA). EMC and SCPA are majority shareholders of SSEPC (90%), and therefore, Mines de Potasses d'Alsace is also the major shareholder of SIES through its different participations. As will be seen below, MPA is also involved in the new ICS project.

The SIES chemical fertilizer plant has been on stream since 1968 and produces a superphosphate, DAP, and mainly NPK complex fertilizers with a capacity of approximately 60,000-120,000 metric tons of product, depending on NPK grades.

The plant consists of four production units: sulfuric acid, phosphoric acid, superphosphate, and granular DAP/NPK.

The sulfuric and phosphoric acid plants have design capacities of 200 mtpd H_2SO_4 and 70 mtpd P_2O_5, respectively, and use sulfur and phosphate rock as raw materials.

The superphosphate plant has a design capacity of 300 mtpd and can produce either SSP by reaction between sulfuric acid and phosphate rock or TSP by reaction between phosphoric acid and phosphate rock.

The NPK granulation plant has a design capacity of 300-600 mtpd, depending on fertilizer grades, by using the following raw materials: superphosphate (SSP and/or TSP), sulfuric acid, phosphoric acid, ammonia, potassium chloride, and Phosphal (calcined aluminum phosphate). This granulation plant can also produce DAP by reaction between phosphoric acid and ammonia.

The SIES factory includes a bagging unit of 800 mtpd (24 hours). Raw materials storage capacities are 2,000 mt for ammonia, 10,000 mt for sulfur, 10,000 mt for potassium chloride, and 15,000 mt for phosphate rock. Storage capacity for bulk and bagged products is 34,000 mt.

Fertilizer production from the SIES plant increased from 34,000 mtpy in 1971-72 to 100,000 mtpy in 1976-77 then decreased sharply to the 1982-83 level of about 15,000 mtpy due to a combination of external factors affecting demand, including credit and changes in the distribution system.

Except for phosphate rock, which is produced locally at Taiba and Thiès, all other raw materials, such as ammonia, sulfur and potassium chloride are imported.

Ammonia comes from Europe at a high freight cost. Indeed the storage capacity at the plant is limited to 2,000 tons and consequently shipments are of only 1,500 tons each. Such small shipments are difficult to obtain and cost more.

This situation should change in the near future as ICS will have an additional storage capacity of 9,000 tons.

Sulfur is bought through a French broker and originates in Poland.

KCL is bought in France from the parent company of SIES (i.e. EMC/Mines de Potasses d'Alsace).

However, SIES has no long-term contracts for the supply of raw materials, and therefore could be supplied from the U.S. market.

A comparison of prices that the GOS pays SIES for various fertilizer grades and international prices for similar grades shows that, if the 15% customs tax on imports is included, then SIES prices are equal or lower than CIF Dakar prices (see Table 18). Thus Senegal would not be able to decrease the costs of fertilizer by importing them directly rather than making them in country. This one-year fertilizer CIP has been designed so that SIES costs will not increase as a result of importing sulfur and urea from the U.S. (see Table 17). The additional cost per ton CIF Dakar attributable to the use of U.S. flag vessels (e.g. 30-35%) will be borne by the U.S. and not by SIES.

2. ICS

In 1984 a new chemical complex, Industries Chimiques du Sénégal (ICS) will be coming on stream. ICS share capital is as follows:

- State of Senegal	22.7%
- State of Ivory Coast	9.2%
- Federal State of Nigeria	9.2%
- State of Cameroon	9.2%
- Islamic Development Bank	9.2%
- Indian Farmers Fertilizers Corp., Ltd., Southern Petro-Chemical Industries Corp., Indian Government	18.4%
- Société Commerciale des Potasses et de l'Azote (SCPA) and SSEPC	9.2%
- Compagnie Sénégalaise des Phosphates de Taiba	6.4%
- Senegalese Bank and Insurances	5.6%
- Other	0.9%
TOTAL 25 Billion CFAF or about $73.5 million	100.0%

This company is, therefore, a regional joint effort from seven African developing countries, and also a "south-south" effort to produce phosphoric acid and derived products to cover these developing countries own needs, in collaboration with the private sector.

The management of this company is the responsibility of the same French private group which owns SIES and SSEPC, i.e., Enterprise Minière et Chimique (EMC).

ICS will have a year'y production capacity of:

- 630,000 tons of sulfuric acid
- 480,000 tons of phosphoric acid
- 45,000 tons of triple super phosphate (TSP)
- 165,000 tons of diammonium phosphate (DAP)

and in addition, the SIES facility will remain operational.

ICS expects to obtain very competitive prices both for raw materials, TSP, and DAP fertilizers due to economies of scale of the new manufacturing facilities.

For raw materials they intend to sign long-term contracts with suppliers in order to obtain favorable prices. However, these long-term contracts would not cover all supply needs since ICS will purchase a certain percentage of its supplies on the spot market. (It is therefore not an obstacle to importation of U.S. goods under a CIP program.)

For compound granulated fertilizers, they expect their prices to be 15% lower than present SIES convention prices for two reaons:

- economies of scale on supplies and production processes

- differences in the method of calculation of the cost prices:

  SIES computed the fixed cost on the basis of about half of the production capacity of the factory, in ICS case, fixed costs will be divided by the total production of ICS which is expected to be much closer to full capacity.

Urea will continue to be imported separately. The amounts needed are expected to increase substantially as more farmers follow the recommended application rates. A long-term (3 to 5 year) supply agreement could reduce landed costs.

It is conceivable that in the future a part of the TSP and DAP produced by ICS could be utilized on the local market for direct application. These products could be blended with nitrogen in the form of glanular urea and potassium in the form of granular potassium chloride, to furnish the proper NPK nutrients recommended by research and extension. This alternative supply scheme needs to be studied in depth but could have implications for reducing the costs of fertilizer. Given the expected 15% decrease in ICS production costs, it is probable that a substantial subsidy reduction can be achieved without large increases in fertilizer costs to the farmer.

B. Fertilizer Transportation Costs

Under the current agreement between the GOS and SIES, SIES receives a flat rate of 25 CFAF/kg. to cover transportation costs and import duties on imported raw materials. Transportation costs are currently cross-subsidized implying that fertilizer users close to Dakar are bearing some of the costs of transportation to more distant regions. It has been argued that this system is in fact inequitable, particularly with respect to the Casamance region. In this instance fertilizer consumers in the drier regions of the peanut basin where cost-value ratios f fertilizer are lower than in Casamance are bearing some of the costs. IFDC data on the costs of transporting fertilizer to various regions indicate that unit costs can vary by as much as 40%. The process of subsidy reduction should therefore include an elimination of the cross-subsidization of transportation costs.

C. Current Pricing System and Proposals for 1983-84

Under the current pricing system the extent to which farmers actually bear the risk of fertilizer use varies according to the region. Since the beginning of cotton cultivation in Senegal, all inputs (including fertilizer) have been given to farmers, their cost being included in SODEFITEX's operating margin. This sytem has the advantages of (1) ensuring that farmers actually consume fertilizer since they are not in a position to choose individually whether or not to use fertilizer; (2) providing insurance to farmers against crop failure since the costs of fertilizer in bad years are covered by operating profits in good years; and (3) eliminating problems of debt recording and recovery associated with a credit scheme. However, it also presents inconveniences: (1) it penalizes the most efficient farmers who may have been able to increase earnings and reduce risk through improved cultivation techniques; (2) it does not allow farmers to respond to the price mechanism by using fertilizer where returns are the highest; and (3) there is a risk that farmers will divert fertilizer intended for cotton to other crops. As the GOS reduces the subsidy on fertilizer the associated cost increase will provide additional incentives for farmers to divert large quantities of apparently "free" fertilizer to other crops or to sell the fertilizer on a "parallel" market. Thus, the objective of motivating farmers to use recommended doses on cotton would be defeated.

In Casamance and the Peanut Basin fertilizer is made available at the average cost of CFAF 50/kg on a cash basis. It is thus the farmers' decision whether or not they wish to use fertilizer. However, in an attempt to maintain fertilizer consumption in these areas, the GOS is currently considering introducing a pricing system similar to the one used on cotton. The sytem, if introduced, would suffer from the disadvantages described above and would reduce the impact of subsidy reduction on the promotion of more efficient use of fertilizer in response to price.

SAED is responsible for distributing fertilizer for use on irrigated perimeters in the Senegal River Valley. Given the relative stability of water supply under irrigated conditions the risks associated with fertilizer use are lower than in other regions. Farmers pay the average price of CFAF 50/kg. and SAED extends short-term credit for fertilizer which is reimbursed, in principle, with the proceeds from the next harvest.

D. USAID's Conditionality on Pricing Policy

The program agreement will include three special covenants setting a minimum pace for fertilizer subsidy reduction in Senegal. First, the GOS covenants that the average subsidy for fertilizer will not increase above its current 60% level through January 1984. This covenant is included to prevent the GOS from conceding to farmer pressure to lower the price of fertilizer, emanating principally from those who currently are required to pay cash. In fact, the danger of backsliding for this year is probably now minimal since fertilizer purchases for the crop year have been completed. Much to the government's surprise, farmers in the peanut basin did purchase fertilizer with cash (no figures are available) and reports claim that a last minute rush to sales depots created numerous shortages. This would tend to suggest that farmers do recognize the returns to fertilizer use, and may have implications for the issue of whether or not the availability of credit is necessary to generate effective demand for fertilizer (see Section IV B).

Second, the GOS covenants that the fertilizer subsidy will be reduced from 60% to 40% by January 1985. Assuming that the real price of fertilizer will not increase over this period (a reasonable assumption given the current excess capacity on world markets and anticipated trends in domestic production costs) this subsidy reduction would increase the average price from CFAF 50/kg. to CFAF 75/kg. The 40% figure should be viewed as a minimum since indications are that the IMF may be pressing for a more rapid decline in subsidies. USAID, however, believes that a reduction in two or three stages would be desirable in order to observe the impact of price reduction on consumption and, where possible, to take appropriate corrective action (based on IFDC recommendations).

Third, the GOS covenants that within 12 months of obligation of funds, it will present a plan to USAID for the reduction of the fertilizer subsidy to 25% by January 1987. The plan should include specifics on: (1) the pace of subsidy reduction especially between January 1985 and January 1987; (2) price proposals for specific types of fertilizer used which would bring the average subsidy to 25%; (3) proposals for eliminating the regional cross-subsidization of transportaton costs; and (4) criteria for identifying and monitoring the impact of subsidy reduction on fertilizer use.

It is likely that subsidy reduction will provoke a decline in fertilizer use in the short-term if the sale price to the farmer is increased (e.g. if offsetting declines in production costs do not materialize). More efficient fertilizer use in response to pricing signals is possible as farmers' attitudes shift to accept the premise that inputs must be purchased; however, efficient use given Senegal's constraints, may imply more intensive fertilizer application on crops and in regions with the highest returns and less fertilizer consumption elsewhere. Over the medium-term, however, consumption may actually rise if more efficient utilization leads to actual improvement in yields. Furthermore, elimination of GOS subsidies may remove an important supply constraint--the capacity of the government to ensure timely payment of subsidies.

GOS policy with respect to input-output price ratios could be of considerable importance in checking a drop in fertilizer demand. Increases in producer prices, consistent with trends in world prices for various crops, would be one means of minimizing the negative impact of subsidy reduction. At any rate, an objective of maintaining a certain stability in the ratio of input to output prices could introduce an element of certainty to farmers' decision-making with respect to fertilizer utilization. Similarly, an examination of alternative methods of reducing farmer risks without subsidization (e.g. through crop insurance, storage or marketing techniques) may be useful. Finally, there may be ways of reducing fertilizer cost by modifying recommendations for fertilizer application. For example, IFDC has suggested that a substitution of low-analysis grades with higher analysis products could reduce costs through lower charges for freight, handling, and storage. In order to facilitate the fertilizer sub-sector's transition from subsidization to cost pricing the GOS should monitor carefully (in collaboration with USAID) the impact of increased prices of fertilizer on: (1) cropping patterns; (2) yields; (3) rural incomes; (4) the direct beneficiaries of fertilizer utilization; and (5) supply and demand factors in the sub-sector. Joint monitoring will be provided through a unit set up in ISRA in the context of USAID's current Agricultural Research project.

IV. <u>Institutional Reform</u>

A. <u>Coordination Between Research and Agricultural Extension</u>

Of critical importance in promoting more efficient use of fertilizer in Senegal is the assurance that farmers have access to information allowing them to adopt improved fertilizer practices. This in turn depends on research institutions' capacity to develop appropriate regional-specific recommendations for nutrient application, on extention services effectiveness in relating this information to as many farmers as possible, and on continued coordination between research and extension services. Data on current fertilizer practices in Senegal demonstrates clearly that both extension and research institutions require strengthening.

An IFDC study of GOS fertilizer application recommendations criticizes them for not being adapted to conditions in Senegal and for being unnecessarily expensive. Excessive amounts of potassium and phosphorous are being recommended by extension services for both millet and groundnuts. Expensive nitrogen is also being recommended while the proposed application rates have not been justified by research results. IFDC therefore suggests that GOS recommendations be revised to eliminate the waste of resources on potassium and to use the savings for appropriate applications of NPK and urea. Extension services are advised to establish sites in as many villages as possible to demonstrate potential profit from a balanced use of urea and an appropriate NPK grade on the same field. A special campaign is required to expand the fertilizer knowledge of village cooperative managers, village chiefs, extension agents and progressive farmers.

Even within officially recommended formulas there is a discrepancy between those recommended by research and those recommended by extension services. The national research institute's (ISRA) basic position is that in order to maintain the long-term fertility of the soil, the amount of nutrients added to the soil should be at least equal to the amount of nutrients taken out by plants. The government view is that the amount of nutrients to be added should be the amount necessary to maximize the financial return to fertilizer use given price constraints. The IFDC has identified an important new direction for research: more decentralized, crop specific research, for example, with respect to the utility of sulfur fertilizer use on cotton and peanut production.

In recognition of the importance of improving coordination between research and extension USAID has included a special covenant in the grant agreement. The GOS covenants to continue its efforts to bring about closer cooperation between the agriculture research stations and the extension services so that results of applied research in the most efficient kind and method of application of fertilizers to specific crops can be made available to the farmer and those responsible for supplying fertilizer to the farmer. It is difficult to incorporate a quantitative benchmark in this type of covenant; however, USAID intends to monitor the cooperation between research and extension closely.

B. <u>Credit</u>

Past difficulties experienced with the use of agricultural cred[illegible] finance the acquisition of inputs have been described briefly in Part I of this paper. The single most important constraint is that a precedent has now been set for across-the-board debt forgiveness in drought years and it will be difficult to convince farmers that credit must in fact be repaid. Short-term credit for input purchase in rainfed zones is considered to be a particularly difficult type of credit on which to ensure repayment because farmer incomes fluctuate from one year to the next and in drought years production generally declines so drastically that many farmers would not have the resources to repay.

Although the proposed new Agricultural Credit Bank (CNCAS) will not initially lend for fertilizer purchases, it will be experimen[illegible]ing with a new type of group liability based on village sections which may be more effe[illegible] in ensuring credit repayments. Experience in other countries has shown [illegible] village level producer groups are an effective unit and means of mobilizin[illegible] social pressure for prompt repayment in cases of individual default. Due to difficulties with credit reimbursement it would appear to be sensible to wait for the results of the rural credit and savings study before addressing the issue of whether or not to extend credit for fertilizer.

Should the problem of ensuring repayment be resolved, there are a number of arguments in favor of extending credit for fertilizer. First, it is believed that credit is an important factor in generating effective demand for fertilizer since farmers tend to have low cash balances in May or June when fertilizer is normally purchased for the coming growing season. The study on rural credit and savings and the agricultural sector assessment (to be financed from this \$5 million grant) should examine farm budgets in various regions and for various types of farms to determine whether or not the lack of credit is indeed an important factor in the demand for fertilizer. Second, if fertilizer is used effectively, the higher rates of return on irrigated crops and in relatively predictable rainfall areas should be sufficient to allow the farmer to repay fertilizer credit even in relatively poor years.

USAID intends to approach the question of credit for fertilizer purchases with caution. However, two conditions precedent related to the disbursement of local currency funds generated from the fertilizer CIP are important in encouraging the formulation of a comprehensive approach to Senegal's agricultural credit problems. No local currency funds are to be disbursed until the GOS certifies that village level cooperatives and producer groups are authorized to have direct access to credit sources. USAID support to the proposed CNCAS shall be contingent on the recommendations emerging from the rural credit and savings study being financed from dollar technical assistance funds.

C. Marketing and Distribution

1. The Current Situation

As part of its medium-term Economic and Financial Reform Plan, the GOS has committed itself to progressive privatization of fertilizer marketing. In the context of the World Bank's SAL (which has since been cancelled), the GOS relieved SONAR of its fertilizer marketing responsibilities and accorded them to the SSEPC. The Senegalese Fertilizer and Chemical Products Company (la Société Sénégalaise de l'Engrais et de Produits Chimiques), a private company, is a 90% subsidiary of Entreprises Minières et Chimiques. For the current growing season, it is responsible for the distribution of both compound fertilizers produced by SIES and imported fertilizers (urea, KCL).

Given the difficulty involved in setting up a network of independent distributors at the national level in one year, SSEPC is utilizing the services of the RDA's and contracts have been signed with each agency for the maintenance of the following sales depots: SODEVA, 96; SAED, 38; SOMIVAC, 62; and Société des Terres Neuves for market gardening, 5. In addition, SSEPC has 5 depots of its own.

The GOS has not been satisfied with the SSEPC-RDA marketing system for three major reasons. First, the cost of CFAF 25/kg., paid to SIES/SSPEC, is higher than the distribution costs when SONAR was responsible for both fertilizer and seeds. Second, the cooperation between SSEPC and the RDA's needs to be improved. Third, the GOS has decided to postpone the phasing-out of SONAR and so in essence SONAR's personnel are now under-employed with the loss of responsibility for fertilizer distribution while these costs continue to be assumed by the Government. Hence the GOS is bearing the costs required to maintain two separate distribution networks: one for seeds and one for fertilizer.

SONAR has a fleet of 500 to 600 trucks at its disposal and controls storage for 100,000 to 120,000 metric tons of fertilizer. There are 35 to 40 intermediate regional storage centers throughout the country in addition to one or two high capacity stores in each region.

A conclusion which can be drawn from the one-year experience with SSEPC is that monopoly rights for fertilizer distribution either to the public or the private sector tend to drive up the costs. The new Minister for Rural Development is currently in the process of reviewing alternatives to the SSEPC system. Another important lesson is that a fertilizer distribution network requires time to develop and thus depends on a certain continuity in GOS policy with respect to marketing. There seems to be no fundamental reason why communications between the private and public sectors could not be improved. To be efficient, marketing requires a long-term investment in human and material resources.

Although further study is necessary, it may be beneficial to organize a marketing system involving both public and private sector participation. The parastatal could conceivably play a role of a market stabilizer while private sector competition could provide the necessary incentive to keep prices as low as possible. The feasibility of such as system would depend on the way in which responsibilities, markets, and regions were divided between the private and public sectors.

2. USAID's Conditionality

Given the current uncertainty with respect to a fertilizer marketing system, USAID has included a special covenant whereby, within 12 months of project obligation, the GOS will present a plan for reorganizing the fertilizer marketing system including a study of the respective roles of the private and public sectors. The plan is based on a study for which the terms of reference will be drawn up jointly by the GOS and USAID and should deal with the relative costs and benefits of alternative marketing systems taking into account the specific constraints in Senegal. The following aspects should be covered: (1) the services, at both national and regional levels, to be provided by the marketing system and designation of institutional responsibilities (e.g. training and farmer education, research and liaison with extension services, sales management, product selection, field organization, transportation, storage and payment collection); (2) the appropriate GOS policy framework including pricing, credit, taxation, farm technology and input supply, and farm produce marketing; (3) means of segmenting the fertilizer market to adapt the fertilizer mix to regional differences in soil, climatic factors, cropping patterns and average size of farms; and (4) selection of specific criteria to allow joint GOS/USAID monitoring of the performance of the new marketing system.

The timing for the study is crucial. It should be initiated as quickly as possible to serve as a basis for the GOS reflection on alternative marketing systems for fertilizer. With a better understanding of potential costs and benefits it is more likely that the GOS will design a realistic system. A policy framework should also be devised within which the system can be developed in a medium-term framework.

As a means of ensuring that the private sector continues to play a role in the fertilizer marketing process during the 12 month period prior to the submission of a GOS plan, USAID has included another special covenant. The GOS covenants that it will permit the private sector to import urea under this project directly from the U.S. and that it will reimburse the private sector the amount of the subsidy in a timely manner. The covenant is also designed to move away from the concept of a monopoly by allowing a number of private firms, not exclusively SSEPC, the opportunity to import the urea.

V. Conclusion

USAID, in the context of this fertilizer CIP, will be introducing a comprehensive strategy for revitalizing the fertilizer sub-sector in Senegal. The program concentrates on laying a solid basis for addressing the fundamental policy and institutional constraints to be dealt with in a multi-year context. Thus it is expected that following the successful completion of this one-year program, a request for a multi-year agriculture development assistance program will be submitted for consideration.

At the end of the 2 year life of project, USAID intends to achieve the following tangible results: (1) a minimum subsidy reduction for the price of fertilizer to an average of 40% from the current level of 60%; (2) GOS formulation of a comprehensive plan for reducing the fertilizer subsidy to a maximum of 25% by January 1987; (3) a move towards more decentralized, regional-specific fertilizer application recommendations; (4) continued improvement in the coordination between research and regional extension agencies; (5) recommendations from the rural credit and savings study on the role of credit (and the CNCAS) in generating effective demand for fertilizer; and (6) submission of a plan for reorganizing the fertilizer marketing system, including specifics concerning the GOS medium-term policy on marketing and the role of the private sector.

In addition, the timing of the proposed studies and plans has been designed to maximize their impact on GOS policy formulation and institution-building efforts in this sub-sector. Given the implications of the proposed 1983-84 IMF standby for the availability of public funds for fertilizer subsidies, the unsatisfactory experimentation with an SSPEC-RDA marketing system under the World Bank's aegis, and the new Minister for Rural Development's commitment to redefining GOS policy in the agricultural sector, the fertilizer sub-sector is clearly going to require significant reform. Through USAID's collaborative efforts with the GOS in the context of this fertilizer CIP, the GOS will have a good deal of the analytic material required to make informed decisions on the restructuring of the sub-sector.

The process of negotiating the conditionality associated with the program has been finalized with GOS agreement on all of USAID's proposals. On the basis of these discussions, USAID is convinced that a meaningful and continued policy dialogue with the government in this area is indeed possible.

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TABLE 1

SENEGAL: AGRICULTURAL PRODUCTIVITY - GROUNDNUTS

Crop Year	Area Cultivated in Thousands of Hectares	Production in Thousands of Metric Tons	Yield in Kg. per Hectare	Official Producer Price CFAF/Kg.	Rainfall in Millimeters
1960-61	977	892	913	22.5	643
1961-62	1026	995	970	22.5	789
1962-63	1015	894	880	21.5	862
1963-64	1084	952	878	22.5	943
1964-65	1055	993	941	21.5	757
1965-66	1114	1122	1007	21.5	681
1966-67	1114	857	769	20.5	629
1967-68	1164	1005	863	18.0	881
1968-69	1191	830	697	18.0	576
1969-70	963	789	828	18.5	660
1970-71	1049	583	556	19.5	684
1971-72	1060	989	933	23.1	607
1972-73	1071	570	532	23.1	349
1973-74	1026	675	658	29.5	565
1974-75	1052	994	945	41.5	583
1975-76	1203	1412	1174	41.5	645
1976-77	1295	1209	933	41.5	573
1977-78	1161	519	447	41.5	415
1978-79	1154	1053	910	41.5	600
1979-80	1096	787	718	45.5	482
1980-81	1079	530	491	50.0	436
1981-82	1010	878	869	70.0	533
1982-83 (estimates)	1121	1091	973	70.0	474

TABLE 2

SENEGAL: AGRICULTURAL PRODUCTIVITY - MILLET

Crop Year	Area Cultivated in Thousands of Hectares	Production in Thousands of Metric Tons	Yield in Kg. per Hectare	Official Producer Price CFAF/Kg.	Rainfall in Millimeters
1960-61	762	392	514	15	643
1961-62	831	407	490	16	789
1962-63	864	424	491	16	862
1963-64	959	478	498	16	943
1964-65	1011	531	525	17	757
1965-66	1069	554	518	17	681
1966-67	967	423	437	17	629
1967-68	1155	655	567	17	881
1968-69	1054	450	427	18	576
1969-70	1037	635	612	17	660
1970-71	966	401	415	18	684
1971-72	975	583	598	17	607
1972-73	936	323	345	22	349
1973-74	1103	609	552	22	565
1974-75	1145	703	614	26	583
1975-76	963	621	645	30	645
1976-77	948	507	535	35	573
1977-78	943	420	445	35	415
1978-79	1055	803	761	40	600
1979-80	924	495	536	40	482
1980-81	1083	553	511	40	436
1981-82	1176	736	626	50	533
1982-83 (estimates)	991	585	590	50	474

TABLE 3

SENEGAL: AGRICULTURAL PRODUCTIVITY - RICE

Crop Year	Area Cultivated in Thousands of Hectares	Production in Thousands of Metric Tons	Yield in Kg. per Hectare	Official Producer Price CFAF/Kg.	Rainfall in Millimeters
1960-61	68	82	1206	18.0	643
1961-62	NA	84	—	18.0	789
1962-63	NA	90	—	20.0	862
1963-64	NA	106	—	20.0	943
1964-65	NA	109	—	21.0	757
1965-66	82	125	1524	21.0	681
1966-67	NA	125	—	21.0	629
1967-68	NA	135	—	21.0	881
1968-69	NA	59	—	21.0	576
1969-70	NA	141	—	21.0	660
1970-71	88	99	1125	21.0	684
1971-72	83	108	1301	21.0	607
1972-73	54	44	815	25.0	349
1973-74	64	64	1000	22.0	565
1974-75	85	113	1329	41.5	583
1975-76	87	116	1333	41.5	645
1976-77	89	118	1326	41.5	573
1977-78	63	63	1000	41.5	415
1978-79	91	146	1604	41.5	600
1979-80	82	113	1378	41.5	482
1980-81	65	68	1046	41.5	436
1981-82	72	103	1430	51.5	533
1982-83 (estimates)	68	95	716	51.5	474

TABLE 4

SENEGAL: AGRICULTURAL PRODUCTIVITY - COTTON

Crop Year	Area Cultivated in Thousands of Hectares	Production in Thousands of Metric Tons	Yield in Kg. per Hectare	Official Producer Price CFAF/Kg.	Rainfall in Millimeters
1964-65	.12	.04	333	NA	757
1965-66	.39	.27	692	NA	681
1966-67	1.04	1.15	1106	37.7	629
1967-68	3.05	3.09	1013	37.7	881
1968-69	6.45	9.74	1510	37.7	576
1969-70	9.80	10.83	1105	32.6	660
1970-71	13.62	11.13	817	33.0	684
1971-72	18.32	21.17	1156	30.0	607
1972-73	20.36	23.38	1148	30.0	349
1973-74	28.63	32.85	1147	30.0	565
1974-75	39.07	42.10	1078	47.0	583
1975-76	39.21	30.68	783	47.0	645
1976-77	43.84	45.21	1031	49.0	573
1977-78	47.11	37.17	789	49.0	415
1978-79	48.30	33.80	700	49.0	600
1979-80	30.91	26.87	869	55.0	482
1980-81	29.91	20.61	689	60.0	436
1981-82	31.98	41.01	1282	68.0	533
1982-83 (estimates)	42.01	47.50	1131	68.0	474

TABLE 5

SENEGAL: OUTSTANDING AGRICULTURAL DEBT - ESTIMATES
(1977-78 to 1982-83)

Crop Year	Responsible Organization	Purpose of Credit	Outstanding Principal as of July 1983 (Billions of CFAF)	Accumulated Interest Costs as of July 1983 (Billions of CFAF)
1977-78 through 1979-80	ONCAD	Seasonal credit for purchase of peanuts.	22.8	13.2
1978-79 through 1979-80	ONCAD	Seasonal credit for purchase of millet and rice.	17.6	8.7
1977-78 through 1979-80	ONCAD	Cooperative debt for purchase of fertilizer and seeds.	27.3	15.6
1981-82	CPSP	Seasonal credit for purchase of peanuts.	10.5	4.9
1982-83	CPSP	Seasonal credit for purchase of peanuts.	11.0	1.1
TOTAL			89.1	43.5

TABLE 6

SENEGAL: SELECTED AGRICULTURAL SECTOR SUBSIDIES

BILLIONS OF CFA FRANCS

	1981-82 Estimates	1982-83 Estimates	1983-84 Without IMF Measures	1983-84 With IMF Measures
1. CPSP Subsidy on Export Crops[1]	9.4	13.9	13.4	10.9
- Groundnuts	(4.7)	(12.1)	(9.6)	(9.6)
- Cotton	(1.2)	(0.3)	(0.3)	(0.3)
- Interest costs of outstanding subsidy payments	(3.5)	(1.5)	(3.5)	(1.0)
2. Operating Subsidies to Rural Development Agencies	7.6	9.8	11.6	9.8
- SAED	(1.9)	(2.5)	(3.5)	(1.7)
- SODEVA	(1.4)	(1.6)	(1.8)	(1.8)
- SODEFITEX	(1.5)	(0.2)	(0.2)	(0.2)
- SOMIVAC	(0.4)	(0.5)	(0.6)	(0.6)
- SONAR	(1.3)	(1.4)	(1.5)	(1.5)
- Other[2]	(3.4)	(3.8)	(4.2)	(4.2)
3. Subsidies to Cover Seed Stock Costs	4.5	3.4	3.9	1.6
4. Fertilizer Subsidies	1.8	1.5	2.7	--
TOTAL SUBSIDIES	24.8	28.8	31.8	22.5

Source: IMF and World Bank

1. The CPSP stabilizes revenue to the groundnut oil-crushing firms and to cotton processing firms by paying a subsidy to those firms when their domestic costs of production are greater than revenue earned from sales on the world market.

2. Other rural development agencies include: ISRA, ITA, SODAGRI, SODESP, and STN.

TABLE

SENEGAL: SELECTED FOREIGN EXCHANGE IMPLICATIONS OF THE AGRICULTURAL SECTOR (1979-1982)
IN MILLIONS OF CFA

	1978	1979	1980	1981	1982 (Estimates)
A. Exports					
Groundnut Products	23,539	42,254	17,571	9,231	44,650
Cotton	4,815	3,528	2,685	2,464	5,170
Other Agricultural Products	1,899	2,480	847	1,086	2,310
TOTAL	30,253	48,262	21,103	12,781	52,130
B. Imports					
Cereals	15,748	20,512	23,879	31,314	29,460
Other Food Items	6,366	6,952	7,611	8,573	8,480
Sugar	3,708	3,351	5,369	4,832	2,630
Fats and Oils	2,993	2,355	5,150	5,716	5,350
Chemicals	1,386	1,476	1,315	1,493	1,320
Machinery	6,204	6,778	7,035	7,681	7,840
TOTAL	36,405	41,424	50,359	59,609	55,080
C. Net Foreign Exchange Gain or Loss (-)	-6,152	+6,838	-26,480	-46,828	-2,950

TABLE 8

SENEGAL: OPERATIONS OF THE EQUALIZATION AND STABILIZATION FUND
BILLIONS OF CFA FRANCS

RECEIPTS	1980-81 Actual	1981-82 Estimates	1982-83 Estimates	1983-84 Without Price Increases	1983-84 With Price Increases
1. Export Crops	—	--	0.3	0.6	0.6
- Cotton	—	--	(0.3)	(0.6)	(0.6)
2. Consumption Goods	—	—	2.3	0.7	7.1
- Flour	—	—	(0.3)	(0.3)	(0.3)
- Rice	—	—	(2.0)	--	(2.6)
- Vegetable Oils (Peanut and Mixed)	—	—	—	(0.4)	(4.2)
3. STABEX	—	0.6	--	--	--
4. Taxes and Levies	0.5	0.3	0.3	0.3	0.3
TOTAL RECEIPTS	0.5	0.9	2.9	1.6	8.0
EXPENDITURES					
1. Administrative and Capital	0.3	1.8	1.9	2.0	2.0
2. Export Crops	2.1	9.4	13.9	13.4	10.9
- Groundnuts	(1.1)	(4.7)	(12.1)	(9.6)	(9.6)
- Cotton	(1.0)	(1.2)	(0.3)	(0.3)	(0.3)
- Interest Costs of Outstanding Subsidy Payments	—	(3.5)	(1.5)	(3.5)	(1.0)
3. Consumption Goods	7.0	9.7	3.0	7.4	0.9
- Flour (millet and wheat)	(1.1)	(1.5)	(0.1)	(0.1)	(0.1)
- Rice	(1.5)	(0.5)	—	(1.5)	--
- Sugar	(3.7)	(2.0)	(2.8)	(5.8)	(0.8)
- Tomatoes	--	(0.6)	--	--	--
- Vegetable Oils (Peanut and Mixed)	(0.7)	(5.1)	(0.1)	--	--
4. Other	--	0.1	--	--	--
TOTAL EXPENDITURES	9.4	20.9	18.8	22.8	13.8
NET CPSP DEFICIT	8.9	20.0	15.9	21.2	5.8
Memorandum Item: Exchange Rate (CFAF/$)	256.6	312.1	348.4	370.0	370.0

Source: IMF

TABLE 9

SENEGAL: FERTILIZER CONSUMPTION BY CROP
(1961-62 to 1982-83)

Crop Year	Groundnuts		Millet		Rice		Cotton		Other		Total
	Amount in Metric Tons	% of Total Consumed	Amount in Metric Tons	% of Total Consumed	Amount in Metric Tons	% of Total Consumed	Amount in Metric Tons	% of Total Consumed	Amount in Metric Tons	% of total Consumed	
1961-62	11,669	83.8	1,607	11.5	300	2.1	--	0	356	2.6	13,932
1962-63	21,215	85.6	2,256	9.1	946	3.8	--	0	375	1.5	24,792
1963-64	23,081	86.8	2,857	10.7	410	1.5	--	0	252	1.0	26,600
1964-65	32,157	85.1	4,740	12.5	591	1.6	--	0	288	0.8	37,776
1965-66	26,106	81.7	4,685	14.7	834	2.6	--	0	310	1.0	31,935
1966-67	38,423	78.2	9,122	18.6	948	1.9	106	0.2	522	1.1	49,121
1967-68	48,214	76.9	12,096	19.3	1,381	2.2	312	0.4	761	1.2	62,764
1968-69	25,891	68.3	9,645	25.5	1,208	3.2	648	1.7	492	1.3	37,884
1969-70	12,790	51.3	8,400	33.7	1,975	7.9	974	3.9	780	3.2	24,919
1970-71	6,490	43.8	6,199	41.8	494	3.3	1,574	10.6	66	0.5	14,823
1971-72	12,598	42.2	10,482	35.2	956	3.2	2,400	8.0	3,387	11.4	29,823
1972-73	22,426	45.2	16,435	33.1	882	1.8	3,301	6.7	6,533	13.2	49,577
1973-74	16,610	34.9	10,776	22.6	10,291	21.6	4,889	10.3	5,028	10.6	47,594
1974-75	30,473	47.7	24,909	39.0	4,324	6.8	4,027	6.3	120	0.2	63,853
1975-76	36,892	47.4	28,201	36.2	3,925	5.0	7,408	9.5	1,457	1.9	77,883
1976-77	46,859	50.2	30,644	32.8	6,997	7.5	7,219	7.7	1,597	1.8	93,316
1977-78	34,247	51.0	19,328	28.8	3,834	5.7	7,643	11.4	2,164	3.1	67,216
1978-79	36,700	42.8	33,133	38.7	4,613	5.4	8,971	10.5	2,291	2.6	85,708
1979-80	22,915	43.2	13,841	26.2	5,224	9.8	7,862	14.8	3,207	6.0	53,049
1980-81 (estimates)	23,595	36.4	26,640	41.1	4,445	6.9	5,321	8.2	4,872	7.4	64,873
1981-82 (estimates)	16,250	34.2	19,540	41.1	4,620	9.7	5,809	12.2	1,320	2.8	47,539
Average of 1977-78 to 1981-82	26,741	41.5	22,496	35.2	4,547	7.5	7,121	11.4	2,771	4.4	63,677

SENEGAL: FERTILIZER CONS[illegible]ION AND RAINFALL IN SELECT[illegible]

CROP YEARS	CASAMANCE		DIOURBEL/LOUGA		SENEGAL ORIENTAL		SINE SALOUM		THIES	
	Average Fertilizer Use in MT	Average Rainfall (mm)	Average Fertilizer Use in MT	Average Rainfall (mm)	Average Fertilizer Use in MT	Average Rainfall (mm)	Average Fertilizer Use in MT	Average Rainfall (mm)	Average Fertilizer Use in MT	Average Rainfall (mm)
1961-62 to 1963-64	1,070	1264	3,591	502	1,032	865	12,978	633	2,699	720
1964-65 to 1966-67	956	1340	4,383	535	943	1066	28,867	770	3,620	600
1967-68 to 1969-70	1,320	1196	5,735	508	1,284	834	25,785	667	5,922	594
1970-71 to 1972-73	4,246	940	5,419	358	1,741	846	13,536	556	5,931	404
1973-74 to 1975-76	8,140	1183	15,008	364	5,699	821	23,080	574	9,689	566
1976-77 to 1978-79	11,204	1118	17,342	364	6,477	826	30,854	632	13,291	428

TABLE 11

SENEGAL: FERTILIZER DISTRIBUTION AND COSTS[1]
(1965-66 to 1982-83)

Crop Year	Total Fertilizer Used (Thousands of Metric Tons)	Costs to the Farmer		Cost to the GOS		Total Costs of Fertilizer Used (Millions of CFAF)	Percentage of Subsidy (Not including transportation)
		Ave. Price (CFAF/Kg.)	Total Cost (Millions of CFAF)	Ave. Price (CFAF/Kg.)	Total Cost to GOS (Millions of CFAF)		
1965-66	31,935	12.0	382.8	22.0	319.0	701.8	45.5
1966-67	49,121	12.0	589.4	23.1	544.8	1134.2	48.0
1967-68	62,764	13.0	815.9	22.0	564.8	1380.7	40.9
1968-69	37,884	12.0	454.6	22.0	378.8	833.4	45.5
1969-70	24,919	11.0	273.9	21.3	256.5	530.4	48.4
1970-71	14,823	11 0	163.0	22.4	169.0	332.0	50.9
1971-72	29,823	12.0	357.6	23.9	355.1	712.7	49.8
1972-73	49,577	12.0	594.9	23.6	575.1	1170.0	49.2
1973-74	47,594	16.0	761.5	24.6	409.3	1170.8	35.0
1974-75	63,853	16.0	1021.6	33.0	1085.5	2107.1	51.5
1975-76	77,883	20.0	1557.7	48.6	2227.4	3785.1	58.8
1976-77	93,316	25.0	2332.9	42.2	1605.0	3937.9	40.8
1977-78	67,216	25.0	1680.4	45.4	1371.2	3051.6	44.9
1978-79	85,708	25.0	2142.7	43.3	1568.5	3711.2	42.3
1979-80	53,049	25.0	1326.2	49.4	1294.4	2620.6	49.4
1980-81	64,873	25.0	1621.8	58.5	2173.3	3795.1	57.0
1981-82 (estimates)	47,539	25.0	1188.5	71.9	2229.5	3418.0	65.2
1982-83 (estimates)	38,700	50.0	1935.0	83.9	1311.9	3246.9	40.4

1. Not including transportation costs.

TABLE 12

SENEGAL: ESTIMATED FERTILIZER USE AND COSTS FOR 1983-84
(WITHOUT IMF MEASURES)

Type of Fertilizer	Crop	Sales Forecast (In Tons)	Subsidy (In CFAF/Kg.)	Percent Subsidy	Total Subsidy Cost (In Millions of CFAF)
NPK 14.7.7	Millet/Sorghum	8,000	74.4	62.3	595.2
NPK 6.20.10	Groundnuts	4,000	68.3	60.3	273.2
NPK 8.18.27	Cotton and Maize	7,500	82.2	61.3	616.5
Other NPK	--	3,500	85.0	61.4	297.5
Urea	Cereals and Cotton	10,000	76.0	62.8	760.0
KCL	Cotton	5,000	75.0	61.8	375.0
TOTAL OR AVERAGE		38,000	76.8	61.6	2917.4

TABLE 13

SENEGAL: REGIONAL VALUE COST FOR FERTILIZER USE ON GROUNDNUTS
(IFDC Recommendations)

Hypothesis Number	Price Assumptions	North Basin	Central Basin	North Sine-Saloum	South Sine-Saloum
A. FARMERS' RETURNS TO FERTILIZER USE					
Hypothesis 1: 60% subsidy on fertilizer.	Current Official Prices: 60 CFAF/Kg. for groundnuts 20 CFAF/Kg. for straw 50 CFAF/Kg. for fertilizer (ave.)	3.27	3.68	3.97	4.36
Hypothesis 2: 40% subsidy on fertilizer.	Current Producer Prices: 60 CFAF/Kg. for groundnuts 20 CFAF/Kg. for straw 75 CFAF/Kg. for fertilizer (ave.)	2.88	2.43	2.52	3.20
Hypothesis 3: 25% subsidy on fertilizer.	Current Producer Prices: 60 CFAF/Kg. for groundnuts 20 CFAF/Kg. for straw 94 CFAF/Kg. for fertilizer (ave.)	2.30	1.95	2.33	2.56
B. ECONOMY'S RETURNS TO FERTILLIZER USE					
Hypothesis 4: No subsidy on fertilizer.	World Market Prices: 68 CFAF/Kg. for groundnuts 20 CFAF/Kg. for straw 125 CFAF/Kg. for fertilizer (ave.)	1.90	1.60	1.90	2.10
Hypothesis 5: Ratio of Foreign Exchange earned on groundnuts to Foreign Exchange spent on fertilizer.	Foreign Exchange Benefits: \$o.20/Kg. earned through increased groundnut production \$0.16/Kg. spent on fertilizer used (ave.)	7.06	4.04	3.98	4.37
Hypothesis 6: Reduced cost of fertilizer with ICS plant production.[1]	World Market Prices: 68 CFAF/Kg. for groundnuts 20 CFAF/Kg. for straw 106 CFAF/Kg. for fertilizer (ave.)	2.31	1.95	2.33	2.56

1. Since urea is imported directly it is not affected by a reduction in ICS production costs.

ABLE 14

SENEGAL: REGIONAL VALUE CO[illegible] RATIOS FOR FERTILIZER USE ON
(IFDC [illegible] commendations)

Hypothesis Number	Price Assumptions	North Basin	Central Basin	North Sine-Saloum	South Sine-Saloum
A. FARMERS' RETURNS TO FERTILIZER USE					
Hypothesis 1: 60% subsidy on fertilizer.	Current Official Prices: 55 CFAF/Kg. for millet 50 CFAF/Kg. for fertilizer (ave.)	5.41	4.54	4.63	4.09
Hypothesis 2: 40% subsidy on fertilizer.	Current Producer Prices: 55 CFAF/Kg. for millet 75 CFAF/Kg. for fertilizer (ave.)	3.61	3.03	3.09	2.73
Hypothesis 3: 25% subsidy on fertilizer.	Current Producer Prices: 55 CFAF/Kg. for millet 94 CFAF/Kg. for fertilizer (ave.)	3.43	3.18	2.73	2.35
B. ECONOMY'S RETURNS TO FERTILIZER USE					
Hypothesis 4: No subsidy on fertilizer.	World Market Prices: 48 CFAF/Kg. for millet 125 CFAF/Kg. for fertilizer (ave.)	2.06	1.81	1.64	1.47
Hypothesis 5: Ratio of Foreign Exchange saved on millet to Foreign Exchange spent on fertilizer.	Foreign Exchange Benefits: $0.14/Kg. saved through increased millet production $0.16/Kg. spent on fertilizer used (ave.)	4.26	3.15	3.21	2.81
Hypothesis 6: Reduced cost of fertilizer with ICS plant production.[1]	World Market Prices: 48 CFAF/Kg. for millet 106 CFAF/Kg. for fertilizer (ave.)	2.27	1.94	1.82	1.67

1. Since urea is imported directly it is not affected by a reduction in ICS production costs.

TABLE 15

SENEGAL: REGIONAL VALUE COST RATIOS FOR FERTILIZER USE ON COTTON AND RICE

Hypothesis Number	Price Assumptions	Casamance Rice	Eastern Senegal Dryland Rice	Eastern Senegal Cotton
A. FARMERS' RETURNS TO FERTILIZER USE				
Hypothesis 1: 60% subsidy on fertilizer.	Current Official Prices: 61.5 CFAF/Kg. for cotton 60.0 CFAF/Kg. for rice 50.0 CFAF/Kg. for fertilizer (ave.)	5.46	2.34	2.19
Hypothesis 2: 40% subsidy on fertilizer.	Current Producer Prices: 61.5 CFAF/Kg. for cotton 60.0 CFAF/Kg. for rice 75.0 CFAF/Kg. for fertilizer (ave.)	3.66	1.57	1.46
Hypothesis 3: 25% subsidy on fertilizer.	Current Producer Prices: 61.5 CFAF/Kg. for cotton 60.0 CFAF/Kg. for rice 94.0 CFAF/Kg. for fertilizer (ave.)	3.60	1.54	1.20
B. ECONOMY'S RETURNS TO FERTILIZER USE				
Hypothesis 4: No subsidy on fertilizer.	World Market Prices: 133 CFAF/Kg. for cotton 77 CFAF/Kg. for rice 125 CFAF/Kg. for fertilizer (ave.)	3.16	1.35	1.92
Hypothesis 5: The ratio of Foreign Exchange earned or saved on agricultural production to Foreign Exchange spent on fertilizer.	Foreign Exchange Benefits \$0.39/Kg. earned through increased cotton production \$0.23/Kg. saved through increased rice production \$0.16/Kg. spent on fertilizer used (ave.)	5.34	2.29	4.13
Hypothesis 6: Reduced cost of fertilizer with ICS plant production.[1]	World Market Prices: 133 CFAF/Kg. for cotton 77 CFAF/Kg. for rice 106 CFAF/Kg. for fertilizer (ave.)	3.45	1.48	2.24

1. Since urea is imported directly it is not affected by a reduction in ICS production costs.

TABLE 16

SENEGAL: SIZE DISTRIBUTION OF FARMS BY REGION - 1975

Region	1-5 Hectares Per Farm	6-10 Hectares Per Farm	10-50 Hectares Per Farm	50-100 Hectares Per Farm	TOTAL
Casamance	77,000	—	—	—	77,000
Eastern Senegal	38,500	—	—	—	38,500
Fleuve	31,000	—	—	—	31,000
Peanut Basin (Center)	57,000	—	—	—	57,000
Peanut Basin (North)	—	80,000	—	1,000	81,000
Peanut Basin (South)	—	57,000	20,000	—	77,000
TOTAL	203,500	137,000	20,000	1,000	361,500

Source: World Bank Agricultural Survey.

TABLE 17

COMPARISON OF PRICES PAID BY SIES WITH US MARKET PRICES

	Prices paid by SIES in 1983 FOB	CIF Dakar	U.S. Market Prices FOB	US Flag	Non-US Flag
Ammonia	$170	$283	$140		
Sulfur	$106	$130	$105[1]	$220	$150
KCL		50,000 FCFA = 139 dollars	$ 85	$200	$130
Urea (bulk)[2]	$125	$155	$125	$240	$170

1 Secton VI E 3(e) entitled Value of Transaction uses a slightly higher FOB price of $115 for sulfur since the prices represent different time periods. The actual price will depend on the responses to the IFB's in the fall of 1983.

2 Urea is in practice imported via SSEPC. Urea prices are presented here only for comparative purposes.

Source: IFDC and SIES

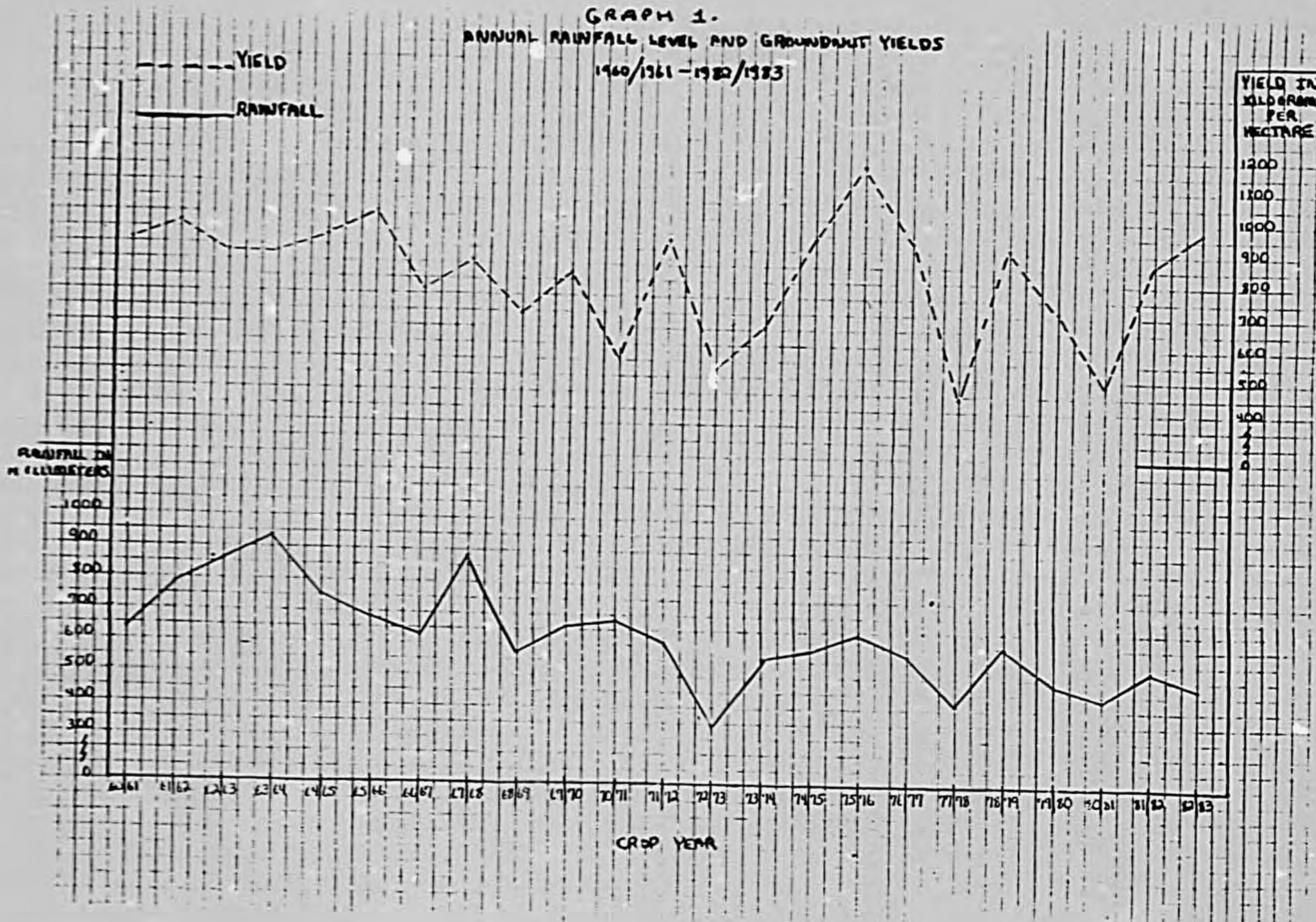
TABLE 18

COMPARISON OF GOS/SIES ("CONVENTION") PRICES WITH INTERNATIONAL PRICES FOR SIMILAR GRADES

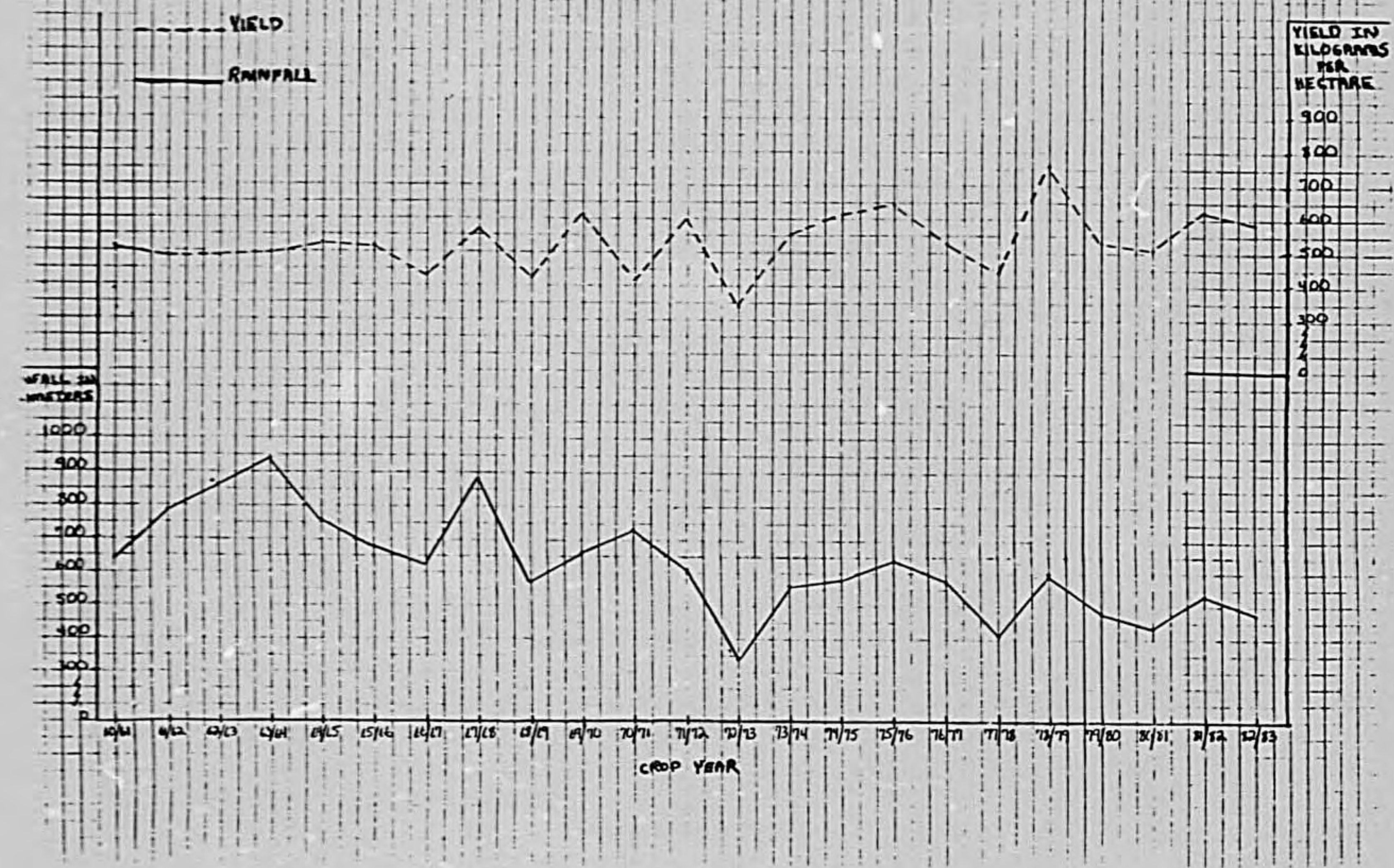
Formulas	SIES Convention Prices $/ton[3]	FOB US PORT $/ton	CIF Dakar US Flag $/ton	CIF Dakar Non-US Flag $/ton	CIF Dakar Non-US Flag plus 15% Customs duty $/ton
6-20-10	245	185	330	245	282
14-7-7	262	165	310	225	259
8-18-27	303	210	355	270	311

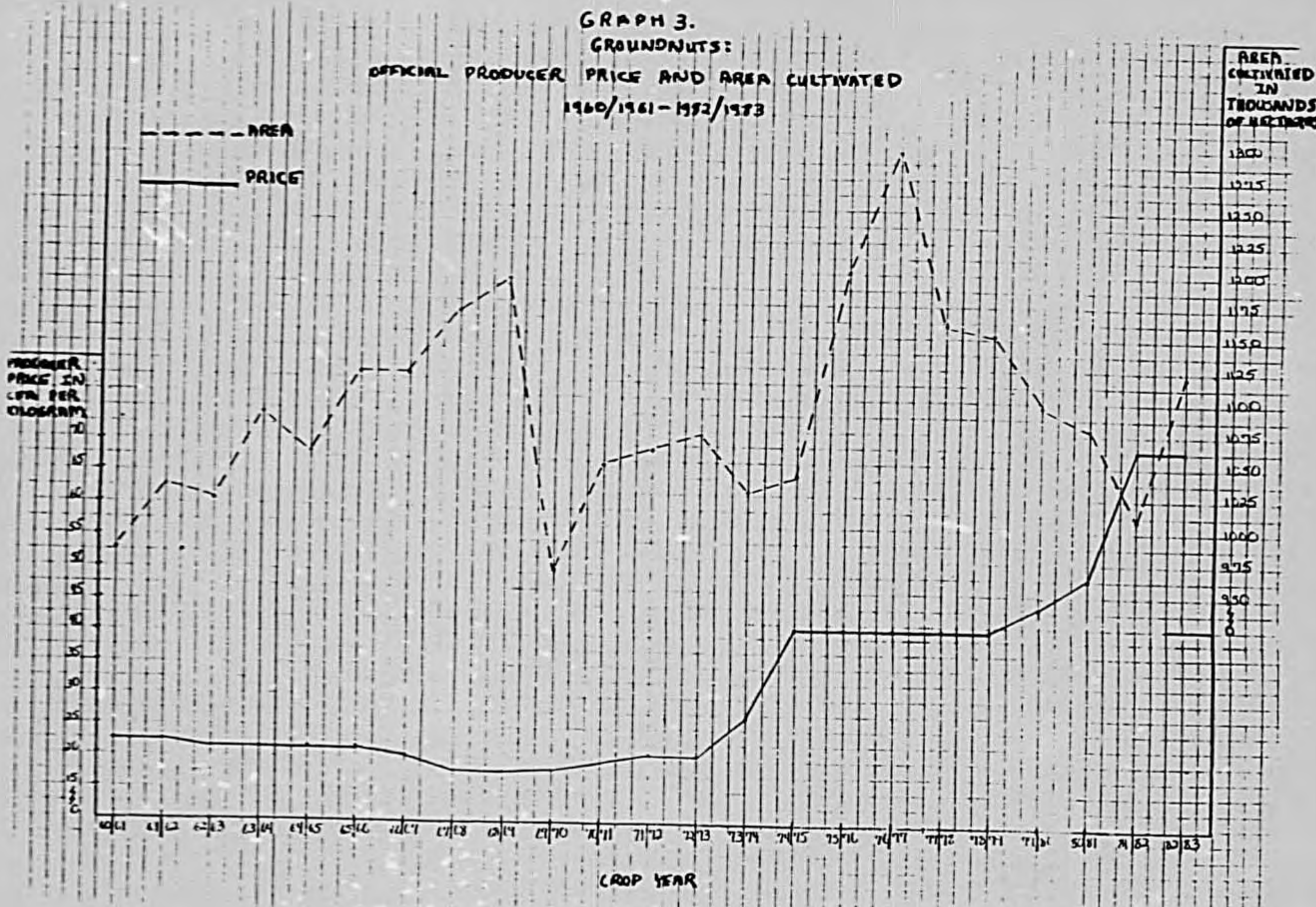
3 Rate of exchange used: $1 equals 360CFAF

Source: IFDC.


GRAPH 1.
ANNUAL RAINFALL LEVEL AND GROUNDNUT YIELDS
1960/1961 – 1982/1983
YIELD
RAINFALL
YIELD IN KILOGRAMS PER HECTARE
1200
1100
1000
900
800
700
600
500
400
0
RAINFALL IN MILLIMETERS
1000
900
800
700
600
500
400
300
0
CROP YEAR

Graph 2.
ANNUAL RAINFALL LEVEL AND MILLET YIELDS
1960/1961 – 1982/1983



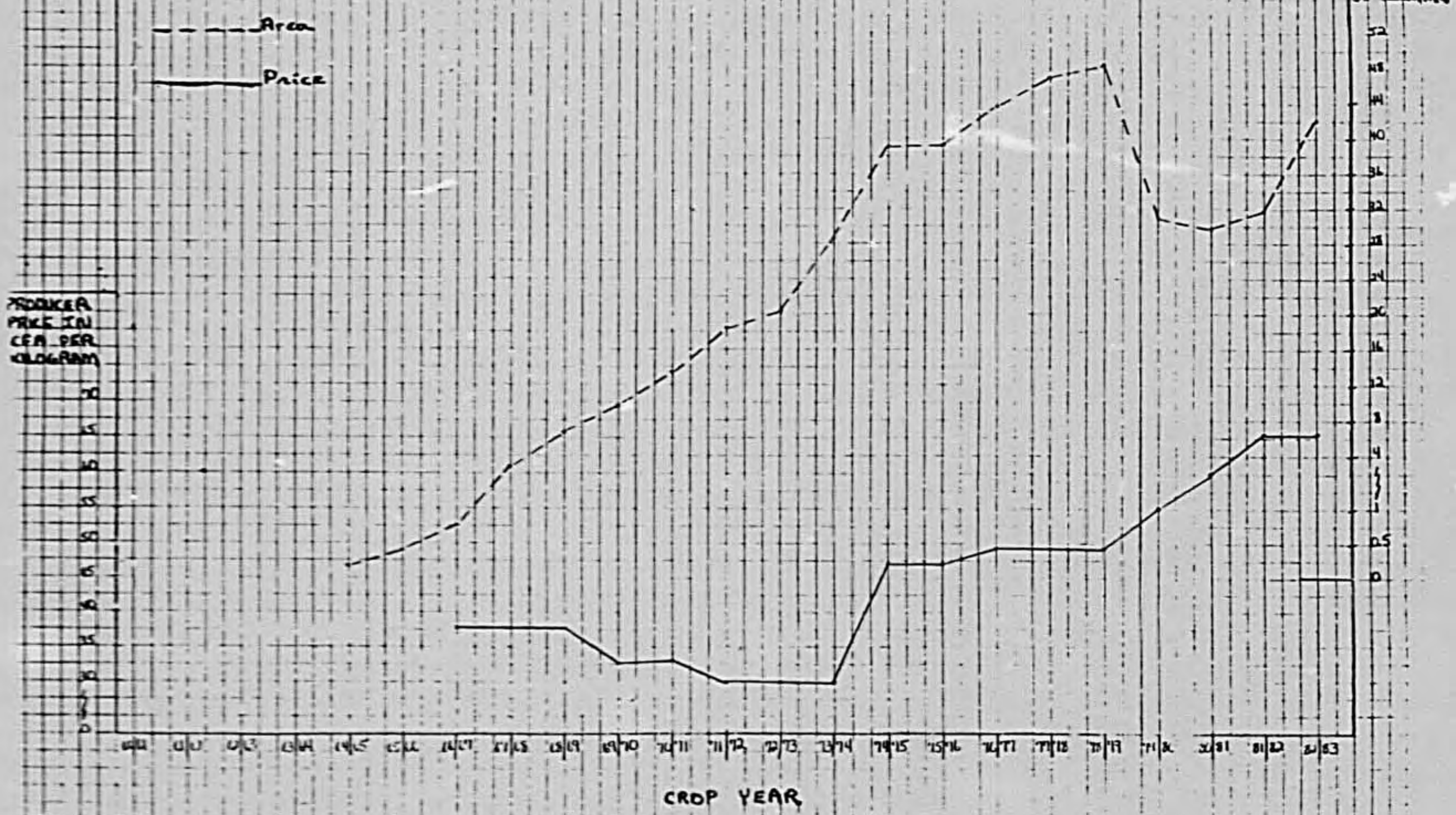

GRAPH 3.
GROUNDNUTS:
OFFICIAL PRODUCER PRICE AND AREA CULTIVATED
1960/1961 – 1982/1983
AREA
PRICE
PRODUCER PRICE IN CENTS PER KILOGRAM
AREA CULTIVATED IN THOUSANDS OF HECTARES
CROP YEAR

GRAPH 4.

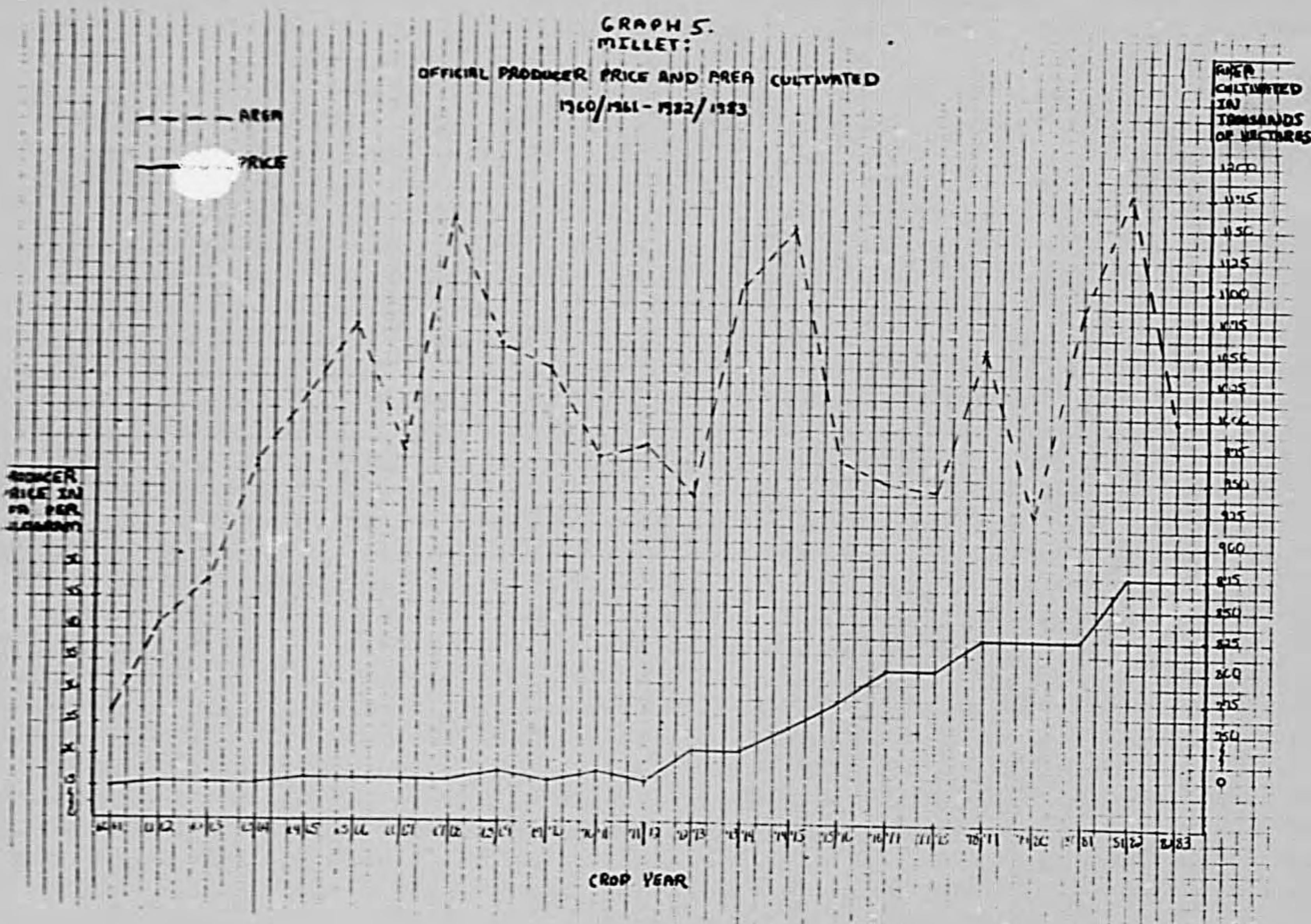
COTTON:

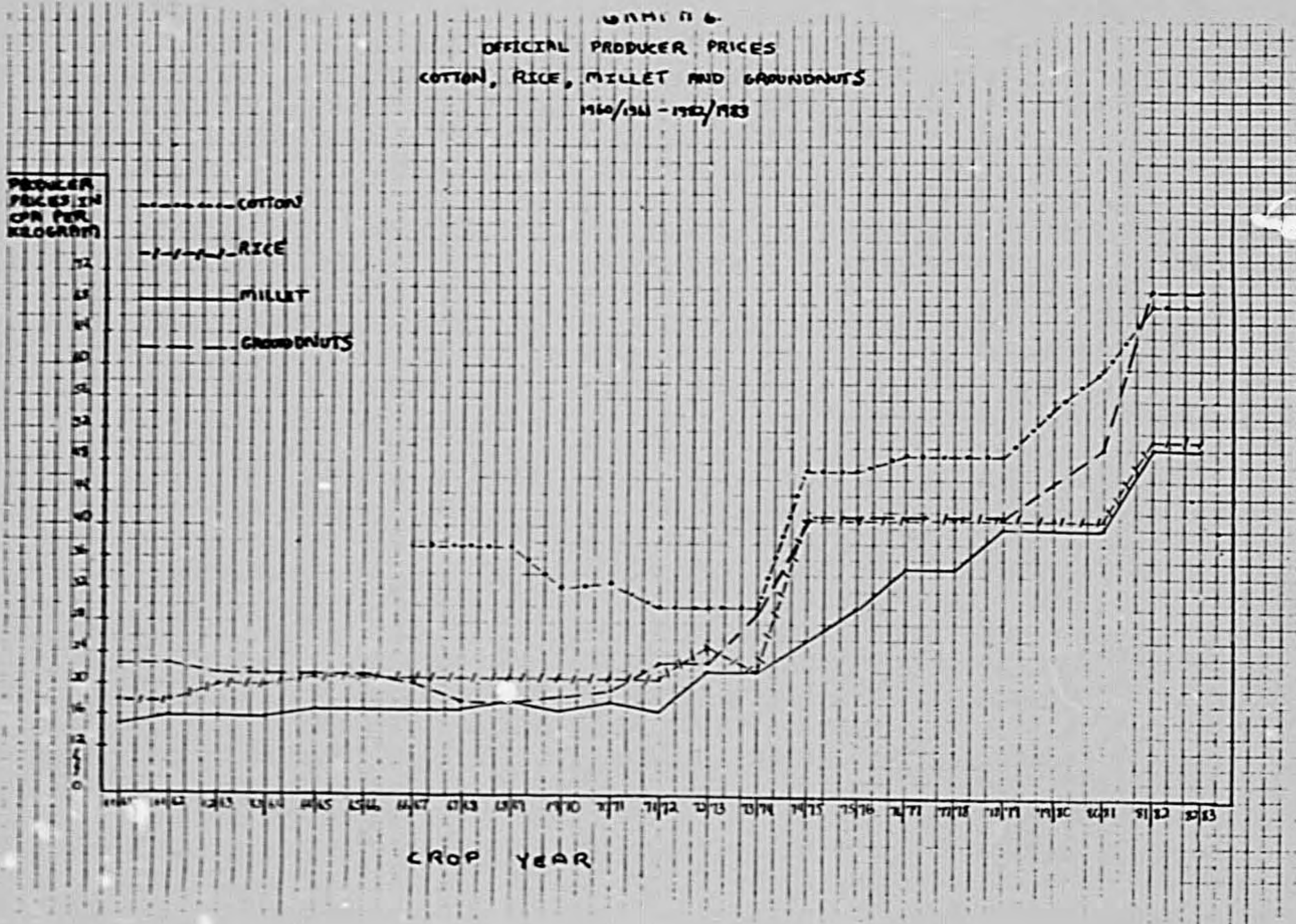
OFFICIAL PRODUCER PRICE AND AREA CULTIVATED

1964/1965 – 1982/1983 *

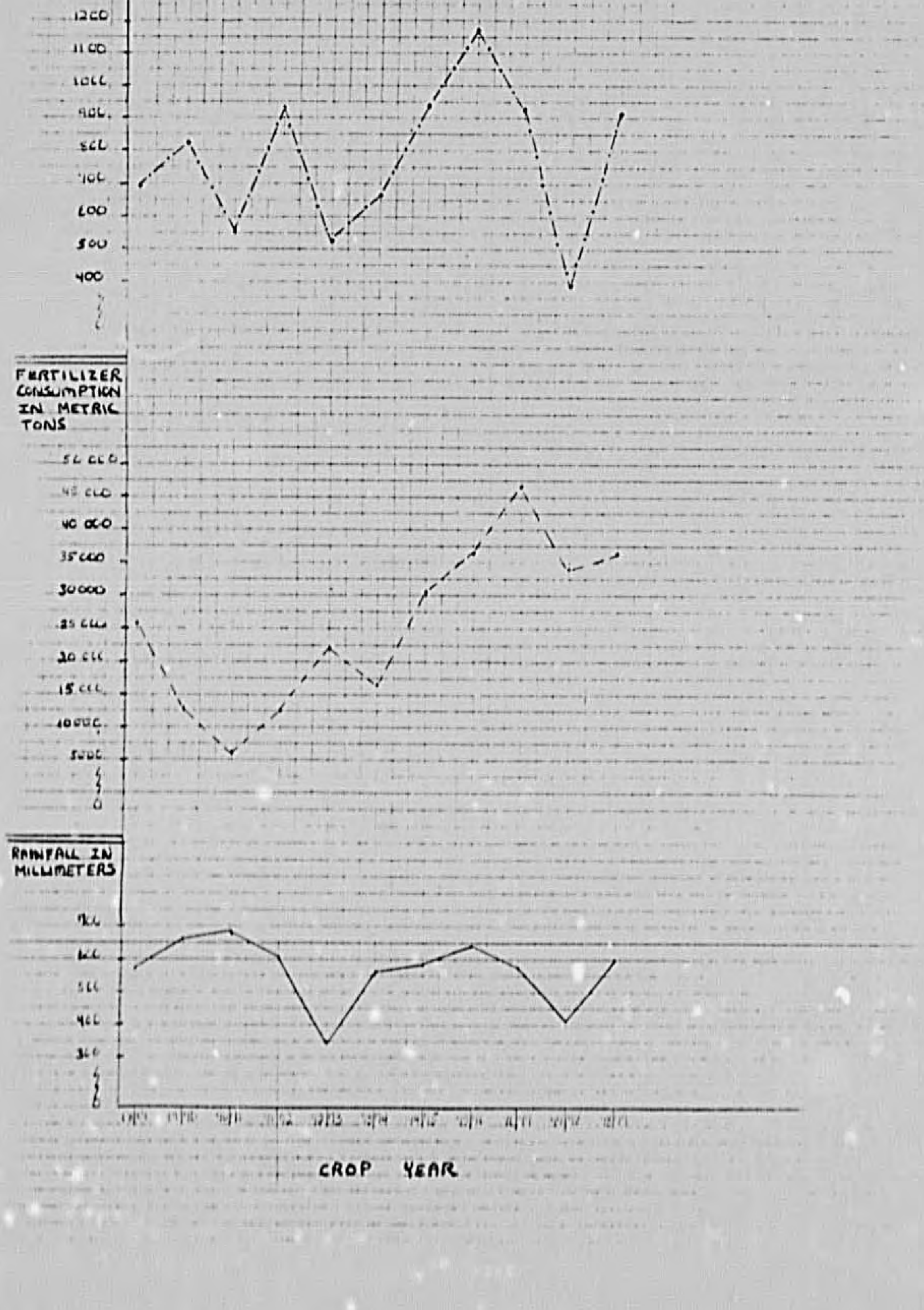


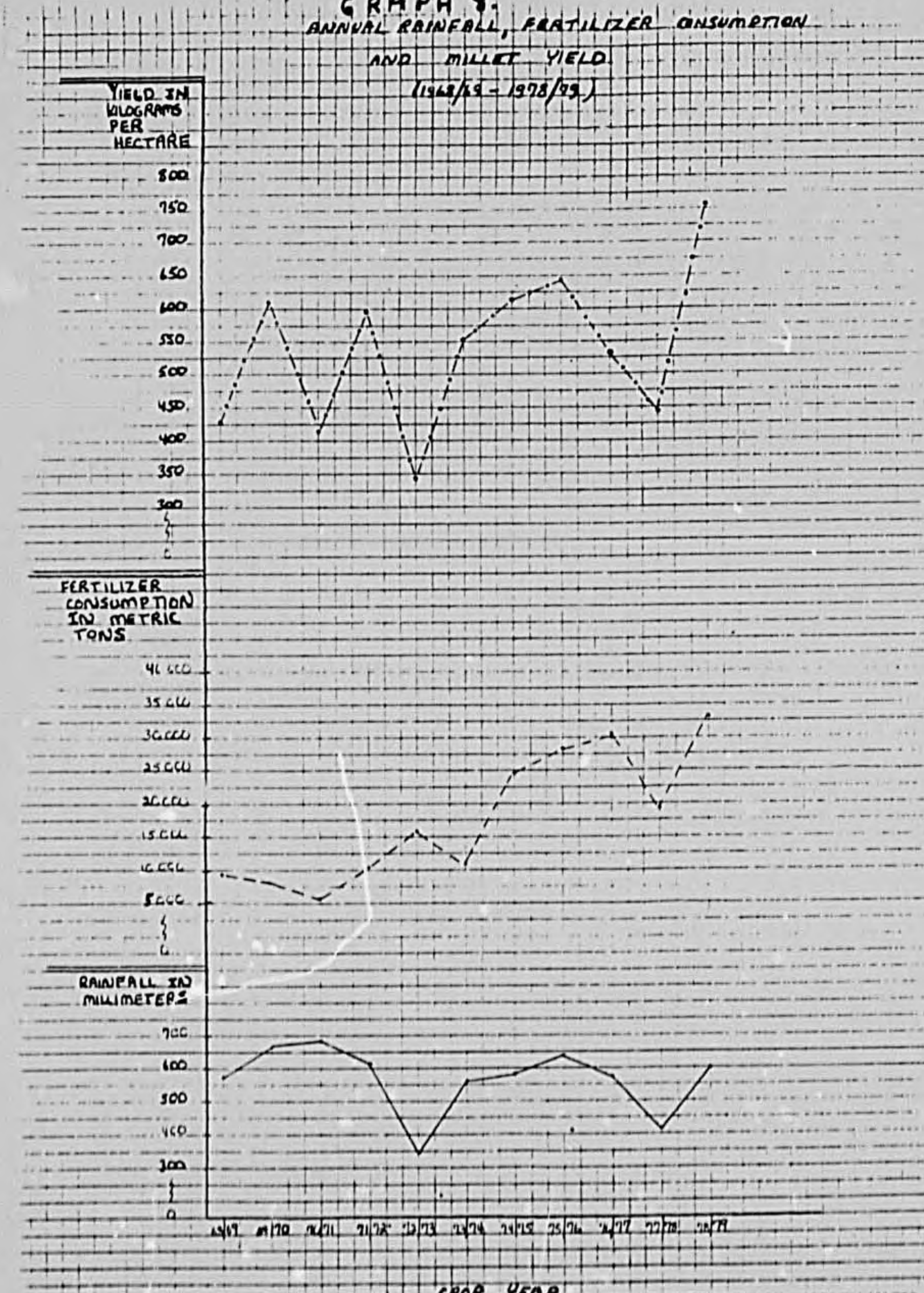
* Figures on area not available before 1964/1965
** Figures on price not available before 1966/1967


GRAPH 5.
MILLET:
OFFICIAL PRODUCER PRICE AND AREA CULTIVATED
1960/1961 - 1982/1983
AREA
PRICE
AREA CULTIVATED IN THOUSANDS OF HECTARES
CROP YEAR

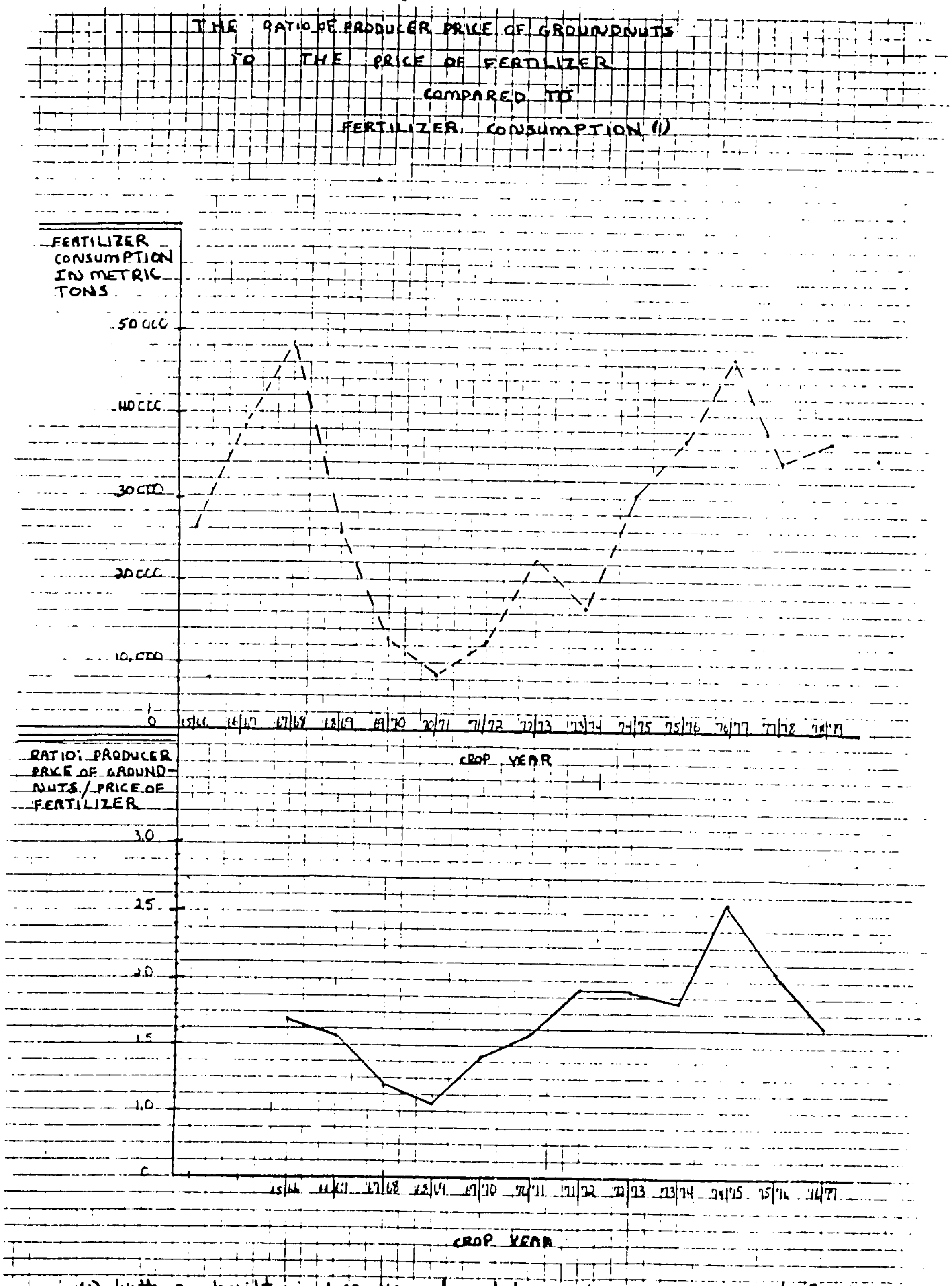

OFFICIAL PRODUCER PRICES
COTTON, RICE, MILLET AND GROUNDNUTS
1960/1961 - 1982/1983
PRODUCER PRICES IN CFA PER KILOGRAM
COTTON
RICE
MILLET
GROUNDNUTS
CROP YEAR

GRAPH 7.
ANNUAL RAINFALL, FERTILIZER CONSUMPTION
AND GROUNDNUT YIELD
(1968/69-1978/79)




GRAPH 8.
ANNUAL RAINFALL, FERTILIZER CONSUMPTION
AND MILLET YIELD
(1968/69 - 1978/79)
YIELD IN KILOGRAMS PER HECTARE
800
750
700
650
600
550
500
450
400
350
300
0
FERTILIZER CONSUMPTION IN METRIC TONS
40 000
35 000
30 000
25 000
20 000
15 000
10 000
5000
0
RAINFALL IN MILLIMETERS
700
600
500
400
300
0
68/69 69/70 70/71 71/72 72/73 73/74 74/75 75/76 76/77 77/78 78/79
CROP YEAR

GRAPH 9.



(1) with a builtin two year lag between the price ratio and fertilizer consumption

CONDITIONS UNDER WHICH IFDC FIELD TRIALS WERE CONDUCTED AND METHOD OF CALCULATING COST-VALUE RATIOS

A. Field Trials

The value cost ratios which are utilized in this paper have been obtained on the basis of fertilizer nutrient trials, conducted on farmers' fields, by the International Fertilizer Development Center (IFDC) in 1976 and 1977. 32 trials each for millet and groundnut were effected in the Peanut Basin under the technical supervision of SODEVA.

In addition to crop yield data, records were maintained for plot size variables, such as plant density, daily rainfall, date of seeding, weeding and fertilization, and soil characteristics data. One of the nutrients was applied at varying rates while the other two nutrients were applied at a rate considered to be near optimum. Thus at each trial, yield responses were observed for each of the three nutrients. An elaborate statistical procedure, based primarily on correlation and regression methods, was used to analyze the data on millet and groundnut response

This IFDC analysis has been criticized by the Senegalese Agronomic Research Institute (ISRA) at two levels. First, it was considered that field trials on a two-year period do not give a good enough statistical basis, particularly since the year 1977 received below average rainfall. Consequently, the effect of fertilizers on crops might have been underestimated. Second, the recommendations in terms of formulas proposed by IFDC are based on the idea of maximizing the economic returns to fertilizer.

ISRA has another approach, and looks at the nutrient needed to maintain or improve the fertility of the land over a longer period, and consequently recommends higher quantities of fertilizers than does IFDC.

However, with these reservations, the IFDC survey is the most recent and best organized one available.

B. Method of Calculating Cost-Value Ratios

Senegal is analyzed from two viewpoints:

(a) Is fertilizer profitable from the point of view of the farmer?
(b) Is it profitable from the viewpoint of the country as a whole?

The approaches and the economic returns might be very different, in particular due to the amount of subsidies to the farmer on fertilizer prices, and due to the Government's purchase price of groundnuts which is above the international export price.

The methodology to evaluate these economic returns is straight forward: the value cost ratios generated by the use of fertilizers are calculated. The values will be the increase in yield (Y) resulting from the application of fertilizer multiplied by the Price (P_p) at which the production is sold. The cost will be the number of kilos of fertilizer (F) applied multiplied by the price per kilo of this fertilizer (P_f)

Therefore:

$$R = \frac{Y \times P_p}{F \times P_f}$$

P_p and P_f can vary to take into account different hypotheses. The basic information needed is the effect of fertilizer nutrients on crop yield in Senegal.

The general technique used to obtain data on the relationship between nutrients and yields is to make a large number of trials over several years controlling for variables like rain and quality of the soil. On the basis of these results it is possible, by using regression analysis techniques to determine the curve linking yields and nutrient use.

This curve is a function of the shape $Y = aF^2+bF+c$
with Y = crop yield in kilos
with F = amount of nutrient applied in kilos

On the basis of this curve, and knowing the respective prices of nutrients and crops, it is possible to make recommendations on the amount of nutrients to apply in order to maximize the return on investment.

V. USE OF LOCAL CURRENCY

A. Background

Local currency generated under this program ($3.05 million in CFAF) will be utilized for activities, programs and projects in the agriculture sector of long-term development value. While each of the activities listed below supports the Reform Plan, is of high priority, and has been requested by the Government, changes can be made as mutually agreed as long as the new activity meets the criteria and follows the procedures set out in Annex F. A Joint GOS/USAID Local Currency Management Committee will approve withdrawals of counterpart funds from the Special Account at the Central Bank.

B. The Approval Procedure

Briefly, all requests for financing specific local currency activities, prior to being sent to the Joint l/c Management Committee for approval will have obtained the approbation of the GOS technical ministry. Once this step is completed the Joint l/c Management Committee will review and approve the proposal in line with the criteria set out in Annex F. The major task of the l/c Management Committee will be program management in nature rather than technical. It will have a responsibility to examine such things as the adequacy of the budget for the level of effort proposed, whether provision for quarterly financial and progress reports are clear, and whether evaluations and audits have been properly provided. Copies of the criteria will be made available to the technical ministries preparing project proposals so that these requirements will have been met prior to submission of the proposal for approval.

The Government has suggested employing the existing Joint GOS/USAID Local Currency Management Committee already established to review and approve Title III l/c projects for this program. This committee is chaired by the Ministry of Plan and has three other members--Finance, Commerce and USAID. The Committee, which has been functioning for over a year now in its present form, is operating successfully.

C. Local Currency Activities

There follows brief summaries of the activities and projects planned to utilize the proceeds generated from the fertilizer imports. Annex K includes more detailed descriptions of the major local currency projects which together are expected to utilize $3.05 million equivalent in CFAF.

1. Agriculture Credit and Savings Bank support (CNCAS)

With the failure of the Governments's major rural credit manager (ONCAD) in 1979, the Government constituted an interministerial group under the Prime Minister's office to work on the problem of rural credit reform. Most of the Committee's studies were made by or under the guidance of the French aid financing organization (Caisse Centrale de Cooperation Economique -CCCE) with assistance from the French Agriculture Credit organization. In the summary report ("Rapport de Synthese") put out in late 1982, the group defined the philosophy behind this new credit institution, and the practical approach which was proposed in order to avoid past mistakes.

One of the principal conclusions was that any new credit institution should be free of any undue influence from the Government, in particular as far as lending was concerned. The present charter calls only for 15% direct government participation and another 15% via its National Development Bank (BNDS). The balance is a mix of other donor participation, such as: CCCE (France), CNCAF (France), West African Development Bank (BOAD), BCEAO (West African Monetary Union), private Senaglese banks, and private individuals. AID has also been asked to participate in the capital formation of the bank. (A breakdown of various donor percentages is contained in Annex G..1). While not 100% in private hands, the composition of the Board will provide substantial insulation from Government interference, especially at the individual loan level.

The CNCAS capital has been fixed at 2.3 billion CFAF or about $6.4 million. $4.6 million will be requested at the time of the creation of the credit institution and the rest will be solicited during the second year. USAID has been asked to contribute at three levels: (a) by taking a 10% share of the capital of CNCAS ($460,000 at present exchange rates); (b) by furnishing soft loans to CNCAS for general credit activities; and (c) by furnishing lines of credit in support of specific activities. (USAID understands that there is a proposal in the FY 1984 AID Request to Congress to give authority to PRE to take equity investments in institutions of this type.)

The mandate of CNCAS will enable it to lend to a broad spectrum of borrowers in the rural sector: agriculture, fishing, animal breeding, rural handicrafts, agribusiness, and all activities related to the rural environment including trade. In addition, it is expected to attract savings from the rural area.

Five major types of borrowers are provided for: individuals with collateral, private firms, cooperatives (usually 10-20 villages), village level producer groups, and village sections (single village sub-cooperatives). (Detailed criteria has been developed for each category to guide lending.)

Substantial decentralizaion and control is envisaged by giving local CNCAS agents responsibility for granting credit. It is expected that this will be more effective because of their knowledge of the local scene. Larger loan requests will be handled at the regional or national level.

Because this kind of an organizational structure is new to Senegal, considerable in-country, in-service training will be required at all levels. It is planned to start slowly in order to test carefully the procedures and organization. Three areas of the country have been chosen where field offices will be installed first. The national organization will be set up pending the results of the testing phase. The full program is expected to take 7 years.

USAID participation of $1.8 million in CFAF will be contingent on a positive finding from the dollar-financed Rural Credit and Savings study (see Annex I for description of the study). The study will be asked to demonstrate demand for this kind of credit which cannot be met by existing indigenous sources; and if so, can CNCAS potentially make a sufficiently positive contribution to merit its financing.

2. Strengthening village level producer groups (sub-coops)

Through the proposed local currency program, USAID will assist the Government in establishing the village sections of the cooperatives (sub-coops) and provide training to farmers and village leaders to enable them to effectively manage their local cooperative organizations. The $1.0 million in CFAF will be used primarily to train farmers, village leaders, and extension agents for a two year period in two regions of the country - the Senegal River Basin and the Casamance.[1] The successful implementation of this program will enhance the farmers' management and decision-making capabilities in private sector farm business enterprises. It will support the development of a solid village level base of organizations through which other government reforms, in such areas as marketing, credit, and provision of agriculture supplies, can be implemented.

Over the last 10-15 years, the majority of the 1953 registered agriculture cooperatives, for all practical purposes, have been managed and controlled by Government. These cooperatives which group from 10 to 20 villages were considered ineffective, costly and subject to major monitoring errors. The village level producer groups (sub-coops) generally involve only one village. Therefore, at the village level, the farmer will have a stronger voice in the management of his farm business activities. For this to work, farmers, village leaders and extension agents will need substantial training to be able to effectively handle these new responsibilities.

The USAID is especially interested in the program since it will (a) encourage village level private sector sub-coop business activities, (b) enhance the role of the farmer in the democratic decision-making process of his local coop, and (c) support the development of a solid village level base of organization through which other Government reforms can be implemented.

The main elements of the program which will be facilitated by this local currency project are:

- Training of up to 500 extension workers
- Organization at the village level of 2400 village sections
- Leadership training provided for an estimated 14,400 leaders including village facilitators (6 per village)
- Village facilitators (included in above calculation) trained to teach literacy and numeracy to members of the village sections

The main impact of this program will be at the village level. Farmers will receive training that will enable them to better understand the role the village section and cooperatives can play in producing greater economic benefits for them. They will be able to understand their individual records and accounts, as well as their rights and responsibilities vis-a-vis the sub-coop and main cooperative. The program will establish an ongoing program of education, functional literacy and numeracy.

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1 USAID deliberately did not include the Sine Saloum region since it will be working with village level coops in that region via the PVO project (685-0260) and wished to try out both systems.

(Annex G.2 entitled "Strengthening Village Level Producer Groups (Sub-coops)" contains a more detailed description of this program and how it will function.)

3. <u>Contingencies and other uses</u>

Some $200,000 in local currency will be set aside for unforeseen expenditures or priority development activities, projects, or programs in support of the Government's Reform Plan or long-term development objectives. Since the full amount of local currency will not be available before the Fall of 1984, although initial deposits will begin in early 1984, this flexibility, which will permit the proposal of new ideas or allow the amendment of old ones, seems necessary. (Some possible illustrative uses might include: field studies for water resource development and conservation, reducing crop losses from nematodes, new concepts in environmental protection, nontraditional energy development and conservation on growing trees with commercially marketable byproducts, and a marketing study for private fertilizer distribution down to the retail level.) All new or revised project proposals would have to meet the criteria set out in Annex F and be approved by the Joint l/c Management Committee.

4. <u>Joint Local Currency Management Committee support</u>

As stated above, it is expected that the additional workload placed on the Title III l/c Management Committee secretariat will require an additional $25,000 annually for the next two years. $50,000 in local currency has been set aside for this purpose. This additional resource will assure the necessary follow-up and record keeping for the local currency program financed under this PAAD and other program assistance, such as the ESF funded PAAD.

5. <u>Land regeneration</u>

This is a backup project to be considered if the dollar funded study on Rural Credit and Savings does not report favorably on the need for a credit program or the viability of the National Agriculture Bank (CNCAS). USAID has a project description prepared and could submit it should the need arise.

D. <u>Illustrative Local Currency Use Budget</u>

a.	Strengthening Village Level Producer Groups (Sub-coops)	$1.00 million (350 million CFAF)
b.	Financial Support of the Agriculture Credit Bank (CNCAS)[1]	$1.80 million (630 million CFAF)
c.	Contingencies and Other Uses (Fertilizer Marketing Study, etc.)	$0.20 million (70 million CFAF)
d.	Joint Local Currency Management Committee Support	$0.05 million (17.5 million CFAF)
e.	Land Regeneration (Back-up project -$1.8 million in CFAF - should item b. above not be approved.)	

<u>Total in dollars and CFAF = $3.05 million (1,068 million CFAF)</u>

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1 Use of l/c for Credit and Savings Bank contingent on positive finding from the Credit and Savings Study team.

VI. FERTILIZER IMPORT PROGRAM

A. Objectives

There are 4 objectives which can be spelled out for this proposed fertilizer importation:

1. Influence on fertilizer sector policy decisions

Senegal is in the process of reorganizing the fertilizer sector. This grant will allow USAID to influence significantly the decisions taken in particular on two key issues: the decrease of the subsidy and the privatization of marketing. The underlying objective is that through more efficient use of fertilizers, Senegal will be able to become more self-reliant in producing food to meet its needs.

2. Use of local currency

The local currency generation will permit support of activities to strengthen village level producer groups ($1.0 million in CFAF) and support for the National Agriculture Bank ($1.8 million in CFAF). The latter project is contingent on a positive finding regarding the need for such an institution in the dollar-financed technical assistance (Rural Credit and Savings) study provided for in the PAAD. $0.2 million in CFAF funds are set aside for contingencies and other priority development projects that may require financing between now and the fall of 1984 when the full amount of counterpart will have been deposited. Also included is $50,000 for secretariat support of the Joint GOS/USAID l/c Management Committee.

3. Balance of payments support

As mentioned in the Macroeconomic Justification (Annex K), Senegal's balance of payments situation is serious, and the amount of foreign exchange which will be saved by this grant for fertilizer will provide needed relief to the GOS.

4. Indirect balance of payments support

The indirect effect on the balance of payments of fertilizer import may be considered as even more important than the direct effects. The use of fertilizer will increase crop production. This increased production represents either a foreign exchange savings if it reduces the amount of imported cereals, or a foreign exchange earning if more peanuts are exported. In Annex I, Table 14 an estimate of the foreign exchange earnings or savings has been complliled, indicating that a $4.25 million import of fertilizer[1] could generate or save between $7.4 and 9.0 million in foreign exchange.

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1 $4.25 million for fertilizer imports include the $1.2 million Section 640C grant to cover the shipping differential for using U.S. Flag vessels.

B. Commodities to be Financed

Bulk urea and sulfur, chemical components used in the production of NPK fertilizer will be financed under this grant. Specifications for each of these can be found in Handbook 15, Appendix B:

- Urea, 46% Grade — Page 67
  Schedule B No. 480.3000
  Biuret content maximum 1%, prilled

- Sulfur, granular or prilled, dry bulk, — Page 18
  to make NPK Grades
  Schedule B No. 415.1500

Empty bags will be shipped with the urea per specifications for polypropylene bags (page 88) and liners (page 89). AID emblems will be required on the bags, plus any additional marking that the GOS may require. 1% spare bags of the total bags shipped will be supplied with the shipment, to allow for breakage during handling.

C. Funding of U.S. Flag Freight Differential (F.A.A. Section 640C) (See Handbook 15, page 2-36, paragraph 2.g.2(d)).

It is requested that the funds necessary to cover the cost of the U.S. Flag freight differential for the 17,000 mt of fertilizer (5,000 mt of sulfur and 12,000 mt of urea), as provided for under Section 640C of the Foreign Assistance Act be granted to the Government of Senegal to cover this cost which is estimated to be 175% higher than non-U.S. Flag, or $70 more per ton. Rounded off, this difference comes to $1.2 million. (Section VI.D.2(d) shows how the $1.2 million was calculated.)

There follows a justification for the above request:

1. Authority for this grant comes from Section 640 C of the Foreign Assistance Act which reads as follows:

> "Sec. 640C. Shipping Differential - For purpose of facilitating implementation of section 901 (b) of the Merchant Marine Act, 1936, (46 U.S.C. 1241(b)), funds made available for the purposes of Chapter 1 of Part 1 or for purposes of Part V may be used to make grants to recipients to pay all or any portion of such differential as is determined by the Secretary of Commerce to exist between United States and foreign-flag vessel charter or freight rates. Grants made under this section shall be paid with United States-owned foreign currencies wherever feasible."

2. Section 640 is designed to accomplish the following purposes: (a) to relieve the importing country and the end-user of the added cost of the requirements of the Cargo Preference Act to ship on U.S. flag vessels; (b) to identify the fact that payment of shipping differentials is not assistance to the cooperating country but rather support for the U.S. maritime industry; and (c) to assist privately owned and operated U.S. flag vessels to secure cargoes under AID financing. Therefore, no counterpart deposit will be required in an amount equal to the shipping differential.

3. Senegal has serious balance of payment and budgetary problems. Deposit of counterpart in an amount equal to the shipping differential is not required under this grant, and thereby avoids the additional burden that otherwise would be placed on the Senegalese budget, of providing counterpart to meet the added cost of shipping on a U.S. vessel. (IMF Standby ceilings have placed severe limits on GOS budgetary expenditures.) Payment of this cost under this Grant will also avoid significantly increasing the amount of Government subsidy on fertilizer beyond the international cost of fertilizer. Further, importing the fertilizer at competitive prices will facilitate the task of moving future purchases and marketing to the private sector--an objective of the GOS and USAID. For example, the privately run ICS plant, which will use the sulfur import has in its charter that it can pay no more for its chemical imports than the lowest international price. Lastly, payment of the U.S. Flag shipping differential under this grant will encourage the use of a privately owned and operated U.S. Flag vessel since no extra costs are incurred in its use.

D. Environmental Rationale for a Negative Determination

The Initial Environmental Examination or IEE (Annex) concludes that this program assistance will not have a significant negative effect on the environment. It recommends a Negative Determination.

Some dollars from this grant will be used to finance an agriculture sector assessment and a credit and savings program study. Local currency generated will be used to promote cooperative reform measures, to stimulate the private fertilizer distribution system and to reduce fertilizer subsidies. So as to ensure that the GOS is advised on AID environmental concerns, the Joint GOS/USAID l/c Committee will be given a briefing on AID environmental guidelines with such materials as Environmental Design Considerations for Rural Development Projects, (AID Publication, October 1980) and a French translation of Regulation No. 16 and instructed in their purposes.

E. Program Implementation, Administration and Evaluation

1. Program implementation

a. Authorized source for fertilizer procurement

The authorized geographic code for source and origin of all commodities and commodity-related services is AID Geographic Code 000, United States only.

b. Implementation schedule for fertilizer procurement

It is planned that this schedule should begin no later than September 15, 1983 in order to assure delivery in time for the 1984/85 agriculture campaign.

Implementation Schedule

Elapsed Time	Days Required	Activity (Fertilizer Procurement)
0		-Production schedule finalized by fertilizer plant; requirement determined
30	30	-IFB terms and conditions drafted and approved by GOS and USAID/Dakar
45	15 Max	-Draft IFB transmitted to AID/W
60	15	-IFB finalized by M/SER/COM
75	15	-IFB printed, requirement advertised
105	30 Max	-IFB available to potential suppliers
120	15	-Bid opening, approval of awards, L/C issued
165	45	-Shipment of commodities delivered to U.S. port of exit
185	20	-Shipment from USA to Dakar
200	15	-Unloading and distribution (to plant for blending or bagging, to warehouse)

2. Program administration

a. Administrative responsibility

(1) Government of Senegal

The government of Senegal (Ministry of Rural Development) has designated the Industrial Chemicals of Senegal (ICS) to be responsible for imports of fertilizer raw materials which will also have the responsibility of monitoring and accounting for the raw materials.

Urea imports will go directly to the Senegalese Society of Fertilizer and Chemical Products (SSEPC), for eventual distribution to farmers through the Government agencies responsible for agriculture development (SODEFITEX, SODEVA, SAED, SOMIVAC). Since the sales price is set by the Government annually before the crop season, ICS has a separate contract ("contract plan") with the Ministry of Rural Development under which the Ministry pays the difference between the official sales price and the ex-factory plus transportation and handling costs price.

A special local currency (counterpart) account will be established in the Central Bank to hold the local currency deposited by the GOS equivalent to the dollar value of the fertilizer imports plus freight on a non-U.S. Flag vessel ($3.05 million). It is planned that the GOS will deposit 25% of the dollar value when the IFB is opened and the tenders awarded. The balance due (75%) will be deposited no later than 6 months after receipt of the shipping documents. Allocation of these funds will be jointly agreed upon by the GOS and AID.

(2) USAID

As a member of the Management Committee, USAID/Senegal assist in the administration of the Grant, and will monitor the use of the local currency account. The REDSO/WCA Legal Advisor is providing guidance and assistance in drafting the Grant Agreement.

b. AID procurement procedures

One Invitation for Bid (IFB) will be issued for the commodities, approximately 3 months before the commodities are needed in Senegal. Optimum arrival of urea is in February. The Ministry of Rural Development and ICS will determine these dates.

The IFB will be drafted by the Supply Management Office of USAID/Dakar. All terms and conditions will be with the concurrence of ICS and the GOS. The draft IFB will be finalized by M/SER/COM and approved by AID/W prior to issuance. M/SER/COM will:

- Arrange for printing and distribution of the IFB document.

- Arrange for the appropriate announcements to the fertilizer trade in the United States of the issuance of the IFB.

- The bid opening is to be held at the Embassy of Senegal in Washington, preferably with a representative of ICS present. If the representative is not impowered to make procurement decisions, AID/W, ICS representative and the Senegalese Embassy's commercial office will evaluate bids and cable recommendations to USAID/Senegal for concurrence by USAID, GOS and ICS. Upon receipt of cabled response, SER/COM will arrange with the Embassy of Senegal for award notifications, contract preparations and signing. Successful bidder(s) will be instructed to submit performance bonds in place of the bid bonds originally submitted.

- Procurement will be on CIF Dakar basis with shipment on U.S. flag vessel only in compliance with cargo preference requirements per AID Regulation 1, Section 201.15. If Geographic Code 000 flag vessels are not available, a determination of nonavailability will be made by M/SER/COM/TS, to allow financing of shipment on non-U.S. flag vessels. The shipping differential between U.S. and non-U.S. flag vessels will be paid by a Section 640C grant at an estimated $70.00 per ton. M/SER/COM will confer with the Department of Transportation to determine the exact rates at the time of tender opening.

- To initiate payment procedures, the GOS will submit Financing Requests (AID Form 1130-2) to USAID/Dakar for transmittal to AID/W, to cover payments, for Bank Letters of Commitment for the purchase of fertilizer and components, and for ocean transportation. Alternatively, the GOS may request the USAID to arrange through AID/W for issuance of Direct Letters of Commitment to suppliers.

c. Value of transaction

Below are estimated costs of urea and sulfur, and the recommended amounts to be procurred. The exact costs, especially the freight component, vary and can be determined only at time of tender.

Product	Amount mt	Estimated Cost F.O.B. U.S.$/mt	Total Cost (U.S.$)
Urea 46% bulk	12,000	$ 140	1,680,000
Bag[1] (242,400 at $.50)			121,200
Sulfur, bulk	5,000	$ 115	575,000
Shipping rate via U.S. flag vessel	17,000	$ 110	1,870,000
TOTAL			4,246,000

1 Empty bags, capacity 50 kg., per AID specifications, will accompany shipment. Quantity includes 1% extra to allow for damage in handling.

Freight differential is estimated as follows:

U.S. flag rate, 17,000 mt at $110/mt equals	$1,870,000
Non-U.S. flag rate, 17,000 mt at $40/mt equals	$680,000
Freight differential equals	$1,190,000

The shipping differential between U.S. and non-U.S. flag vessels will be paid by a Section 640C grant at an estimated $70.00 per ton. M/SER/COM will confer with the Department of Transportation to determine the exact rates at time of tender opening.

d. Commodity arrival, discharge and delivery

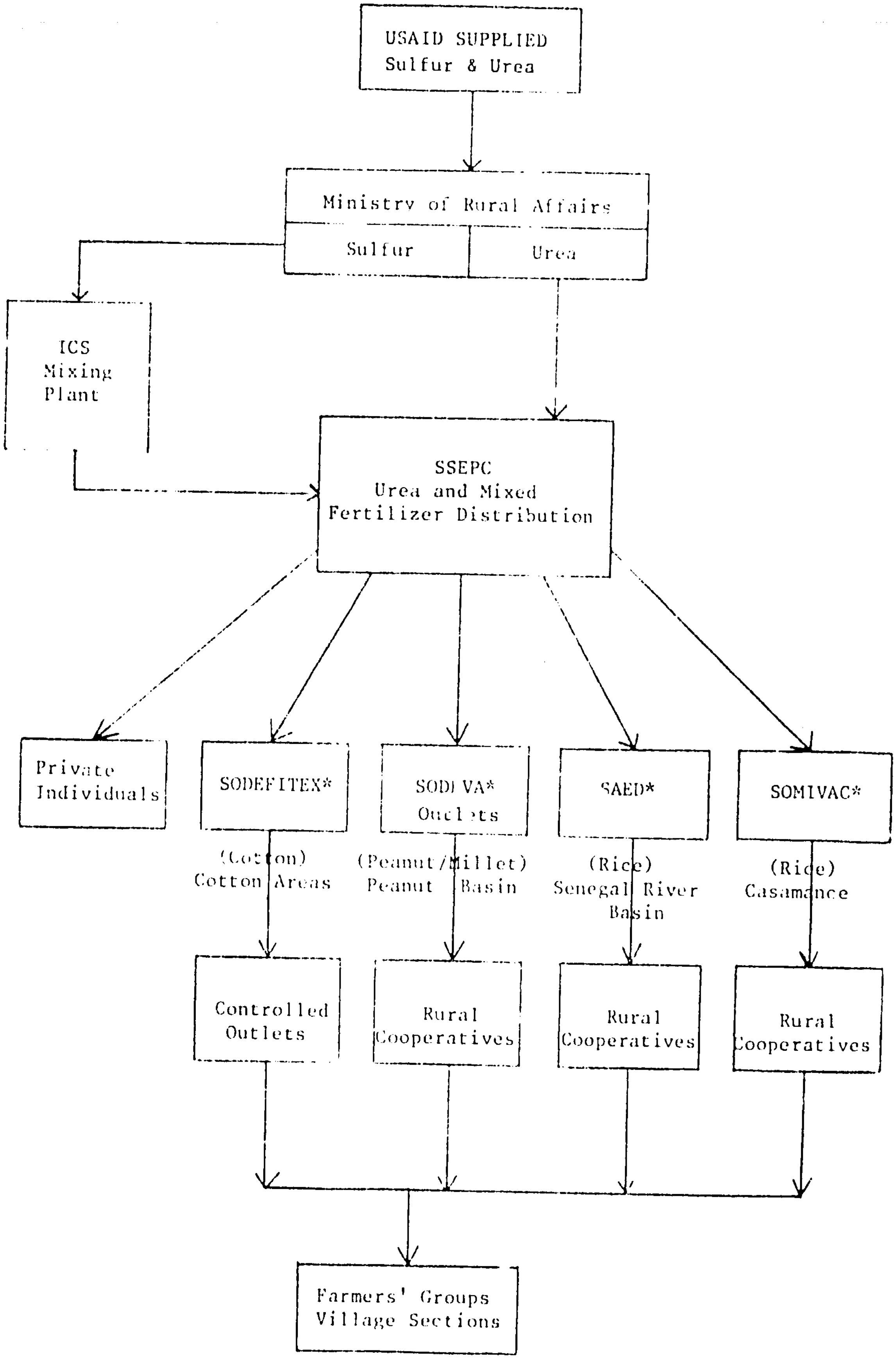
(1) Port facilities

Most of Senegal's international traffic is via Port of Dakar, which is capable of handling any size vessel and is equipped for bulk or liner cargoes. The port is located at latitude 140 degrees 4 seconds North and 17 degrees 24 second West. The safe harbor has an entrance depth of more than 10 m (34 feet). The Port of Dakar has 21 berths for general cargoes, water depth alongside ranges from 6 1/2 to 10 m. Dakar is 3,976 nautical miles from Tampa with an estimated steaming time (17 knots) of 9.8 days.

(2) Handling and bagging

As bulk sulfur is used as a raw material for the production of fertilizer, no bagging operation will be needed. Bulk products can be imported by up to 30,000 mt shipments, and are normally unloaded from the ship by ship's clam shells. The AFK and SOCOPAO companies have had experience in handling and transporting bulk sulfur to the fertilizer plant for many years.

MATERIALS FLOW CHART



* Rural Development Agencies

For unloading and bagging the shipment of bulk urea, SSEPC has indicated that the product can be off-loaded from the ship, via conveyor, at the rate of 5,000 mtpd. At the port, 30,000 mt of storage capacity is available. The bulk urea will then be trucked to SSEPC for bagging and storage, where there are ample facilities.

(3) Distribution

SSEPC has direct contact with its sales depots on a continuing basis. In addition, the outlets of the Rural Development Agencies will procure fertilizer with their own network of outlets. Ample trucks are available from RDA's, SSEPC and other private sources for transport to the regional storage areas.

SSEPC will ship bagged urea in lots of 10 tons directly to sales depots and will collect the official price of the product. It is estimated that at least 10,000 mt will be utilized during the 1984 crop year. As a reserve stock, it is planned to store 1,000 mt in the SSEPC warehouse, and a minimum of 10 tons at each of the 100 sales depots, in order to ensure against late arrival or nonavailability to farmers.

The transportation network in Senegal is adequate for serving this area of Africa. Only short distances are traversed between most areas. Most of the 14,000 km of roads and 1,032 km of railway lines are connected with Dakar. About 58% of the roads are either paved, gravel, or earth all-weather roads.

A main railway line 660 km long originates in Dakar and extends to Mali. A northbound branch line connects Dakar with St. Louis (290 km) and also branches off to provide access to Linguere in north central Senegal.

The World Bank has loaned US $19.3 million to Societe d'Exploitation Ferroviaire des Industries Chimiques du Senegal (SEFICS), a majority-owned subsidiary of ICS, for the support of the ICS fertilizer project. This money is to be spent for (a) upgrading and renewing about 6 km of siding track serving the ICS plant at M'Bao; (b) constructing terminal track works at M'Bao, Darou Khoudoss, and the Port of Dakar; and (c) procuring, operating, and maintaining 3 mainline locomotives, 3 shunting locomotives, and about 30 hopper wagons; and (d) constructing and equipping a workshop at Darou, Khoudoss to maintain the locomotives and wagons.

In addition to overland modes of transport, about 1,500 km of waterways are seasonally navigable. Water movement i not heavily relied upon.

Transportation rates vary within Senegal, depending upon the mode and extent of infrastructure development. Truck rates are extremely sensitive to road conditions. From Dakar, some government agencies transport their shipments by a railroad/road combination to village storage. The rail wagons can carry 20, 25, and 30 mt lots. The railroad transport costs are variable and are established on an individual contract basis.

Fertilizers that are transported by private trucks (20-mt lots) from Dakar move at a rate of 16 CFAF/mt/km. Secondary transport by truck (10 mt lots) from railroads to village storage costs 22 CFAF/mt/km. The cost of handling each transfer of fertilizer in 50 kg bags is about 1,600 CFAF/mt for off-loading and loading.

(4) Storage

Storage does not seem to present a serious problem. Joint use of retail (village level) facilities for both grain and fertilizer is customary. USAID provided 30,000 MT of such facilities in addition to those built by the Title III program. Fertilizer, when properly bagged, can be stored outside on dunnage and under a tarp during the period from November until May. This is during the period when stocks are built up at the village level.

The Ministry of Rural Development via SONAR has under its control storage for 100,000-120,000 mt of fertilizer. An argument can be made for SSEPC to use these facilities as well as the RDAs (Rural Development Agencies). There are 35-40 intermediate regional storage centers throughout the country in addition to one or two high capacity stores in each region. Storage capacity of these centers ranges from 100-2,000 mt, the largest being in the regional capitals. The system has moved as much as 106,000 mtpy as recently as 1976. SIES can produce NPK products at the rate of at least 300 mtpd. The plant has storage capacity for 30,000 mt of bagged fertilizer products.

3. Program Monitoring and Evaluation

a. The project manager will ensure preparation of a monitoring plan that will provide quarterly and annual reports by project on implementation of the grant. The reports will be designed to provide information to GOS and USAID on the composition and arrival of commodity imports, the generation of local currency, the establishment of local currency accounts, and on disbursements, by the GOS and USAID.

b. The USAID Economic Unit will keep under continuous review the macroeconomic aspects of this grant and will further monitor the GOS performance in meeting the conditions, covenants and targets agreed between the IMF and the GOS in the extension of the Standby agreement and with the World Bank in the Structural Adjustment Loan. Quarterly reports will be made to the USAID Director of the results of the monitoring, or more frequently should developments make it desireable.

c. The Joint GOS/USAID l/c Management Committee (in addition to approving proposals for l/c financing, see V.B. above), will carry out an annual joint review for the purpose of establishing, reaffirming and/or altering priorities governing the uses of funds and reviewing achievements against plans. The USAID project manager will call on USAID resources for any additional help and guidance he needs for this evaluation meeting.

Following the meeting, the project manager will prepare an assessment report. The annual meeting will accomplish the following objectives:

(1) Assess the import component of the program, including types of commodities, rate of import inflows, and rate of generation of local currency.

(2) Review and make any adjustments deemed necessary for local currency funded activities.

d. Based on the information obtained from the exercises described in b and c above, senior management of the USAID will meet annually (or more often if required) with their counterparts in the Senegalese government to discuss balance of payments, other macroeconomic issues, progress of the Economic Reform Plan agreed with the IMF and the World Bank, etc. This annual policy level review and evaluation will provide a sound basis on which the USAID can recommend to AID/W further project and program assistance. It will also provide a concrete opportunity for the USAID to encourage the government to take the specific but difficult policy actions needed for the success of the Economic Reform Plan, and to achieve their goals in the agriculture sector.

VII ADDITIONAL CONSIDERATIONS

A. Import Market Analysis

With the GOS's commitment to stabilize crop prices, and develop a firm policy toward availability of credit to the farmer, it is predicted that fertilizer use will increase at an annual rate of from 8% to 12% over the next several years.

The maximum potential demand for fertilizers for nutrient replacement in the next crop season is estimated to be 212,417 mt, per chart, below. Estimated effective demand, according to the SSEPC is 38,000 mt.

Projections of Potential Demand For Fertilizer Material by Crop
Senegal, 1983/84

Crop	Potential Demand (mt)	Distribution of Fertilizer Products (% of total)
Groundnuts	85,000	40
Millet	95,537	45
Rice	18,700	9
Cotton	7,680	3.6
Maize	5,500	2.4

A conservative estimate of potential urea needs is about 70,000 mtpy. The entire amount must be imported, since it cannot be produced in Senegal. (Refer to Table 13, Annex E, "Economic, Technical and Financial Justification for Fertilizer Imports.")

5,000 mt of sulfur will be utilized to produce about 20,000 - 25,000 mt of NPK grades of fertilizer. Depending on the specific grades produced, the total use of NPK grades is estimated at 115,000 mt. All sulfur requirements must be imported, as there is no local source.

B. U.S. Trade Statistics

The only indigenous component for NPK fertilizers is phosphate rock. All other raw materials are imported. These include ammonia, sulfur, and potassium chloride. Presently, the U.S. is not a traditional supplier of these materials. Ammonia is supplied from England, while sulfur comes from Poland, and potassium chloride is imported from Germany. Both sulfur and potassium chloride are readily available from the U.S.

The latest trade statistics available from the U.S. Department of Commerce and from the Chamber of Commerce of Senegal are for CY 1981. Imports from the U.S. were valued at $42 million, or 8% of all GOS imports. Some $27 million or 63% of U.S. source imports was for food products. No fertilizer was imported from the U.S. in 1981. Imports from the U.S. are second to France, which provides approximately 40% of all imports. While annual amounts vary, there should be ample opportunity for this modest commodity import program to succeed.

C. Absorptive Capacity

In the last 5 years, U.S. exports to Senegal have varied in a range between 40 and 60 million dollars. However, as mentioned earlier, more than 60% of these amounts are agriculture products.

Still some 15 to 20 million dollars worth of nonfood products are imported from the U.S. each year. The $4.25 million import of fertilizer components (urea and sulfur) represents therefore between 20 and 30% of U.S. nonfood imports. This should be feasible from a financial flow point of view. Based on estimates of the Senegalese government and private sector firm for distribution (SSEPC) the fertilizer market can absorb 12,000 tons of urea and 5,000 tons of sulfur. In the past, fertilizer has not been a traditional import from the U.S., and will therefore present new opportunities for U.S. exporters.

The potential market for urea as explained in Annex E, on fertilizers, is over 45,000 tons a year. The consumption in 1982/83 was around 12,000 tons. However, the limitation was not on the demand side, but on the supply side, as the Government was unable to pay for a larger consumption of urea in the country. One advantage of urea is that it is applied after the plant is already partly developed, at a time when it is possible to foresee the results of the season. If rains are infrequent, it is not worth applying urea, but if the rainy season is normal, the increase in plant size and yield due to urea are spectacular. This explains why Senegalese farmers are readily prepared to buy urea. One frequent problem though is to convince them that urea is not to be applied alone.

An import of 12,000 tons of urea will therefore cover the estimated yearly consumption of this product in the present context of Senegal, but should be largely below the potential demand for the product.

Sulfur is needed to produce sulfuric acid for the composition of compound fertilizers. 5,000 tons of sulfur will therefore be needed for the fabrication of 20-25,000 tons of NPK.

During the 1982/83 season when fertilizer consumption was the lowest in Senegal for more than a decade, the consumption of NPK was about 15,000 tons. However, when the new fertilizer plant, ICS, begins operation in 1984, the needs for sulfur will be about 50,000 tons or more per year, to produce phosphate fertilizer for export.

In summation, the Senegalese economy is fully able to absorb this amount of fertilizer imports with no difficulty.

D. Impact on U.S. Balance of Payments

The short-term impact of this grant on the U.S. balance of payment position is negligible.

E. Relationship to Overseas Private Investment Corporation (OPIC) and U.S Export Import Bank Activities

1. OPIC

OPIC's insurance coverage in Senegal is not significant.

OPIC Insurance Exposure in Senegal

(September 1982)

	($000) Inconvertibility	Expropriation	War
Current % of worldwide exposure	360 0.03	5007 0.21	3792 0.18
Maximum under contract % of world-wide exposure	7612 0.28	7674 0.20	6460 0.19
Pending applications	5226	7948	7948

2. Export-Import Bank

The Export-Import Bank has several loans in Senegal totaling $17 million at the end of 1982, mostly with the GOS. Part of the reimbursement on these loans has been rescheduled recently.

The proposed fertilizer CIP will not overlap with the Export-Import Bank activities in Senegal. However, AID will continue to coordinate closely with the Bank and the American Embassy, Dakar to assure that the AID grant does not finance items which the Export-Import Bank has already agreed to finance.

F. Internal Financial Effects

Given the small amount of local currency generated and inserted into the Government budget, and given the length of time (1 to 2 years) to expend the local currency, no measurable internal financial effect is expected.

G. Past Performance and Current Status of Nonproject Import Programs (PL-480 Title III)

1. Objectives

The purpose of the three-year (FY 1980-82) $21 million Title III program was to provide encouragement to the GOS in key policy areas. The specific policies being supported were (1) decentralization of agriculture development through specialization of the regional development agencies (RDAs) on extension services, (2) strengthening the role of village sections, (3) management and conservation of natural resources, and (4) review of marketing and pricing policies. A one year extension is proposed for FY 1983.

In FY 1983 this program, along with two other program activities (the ESF funded CIP 685-0262, and the SDF funded fertilizer import program 685-0249), will provide substantial BOP support, and within the framework of the IMF/IBRD/GOS economic plan encourage the GOS to make those difficult economic and social decisions necessary for success.

Title III local currencies have been used to support policies that are consistent with the GOS Economic Reform plan and with those of this program. They are as follows: (1) agriculture policy studies, (2) construction of cooperative storage, (3) physical infrastructure for decentralized agriculture research, (4) physical infrastructure for rural technical schools, (5) dune fixation, and (6) a small agriculture development fund. In January 1983, an evaluation of the PL 480 Title III program was conducted demonstrating that the GOS has proven its capability to plan, manage, and evaluate nonproject import programs.

2. Usage of commodities

The rice which is imported under this program is purchased using a letter of credit/commitment system, with USDA's Commodity Credit Corporation funds. The GOS also must set up letters of credit for, and arrange, the ocean transportation. The rice is sold into the commercial market and funds are deposited in a Special Account.

The GOS agency responsible for this is the Price Equalization and Stabilization Fund (CPSP), who imports all commercial rice. They arrange for the purchase of the rice in the U.S., and its transportation, arrange the letters of credit, receive, store and sell the rice, and deposit the proceeds into the Special Account. As a result of a previous evaluation, it was found that the CPSP is the only entity which has authority to deposit funds in the Special Account for Title III proceeds.

The CPSP is competent to undertake its functions and has performed reasonably well, except for one problem. The rice imported has been at a price and at a dollar-CFAF exchange rate which has made it difficult-to-impossible to sell at a price which would cover all their expenses (special account, transportation, handling, etc.) and still be at an acceptable price to the consumer. Even after lowering the price to slightly above that of commerical imports, the pace of rice sales is too slow to provide sufficient funds to the Title III activities when they are needed. This has resulted in two problems: slowdown in flow of funds in activities and a shortfall in proceeds.

3. Usage of local currency generations

As mentioned above, under Title III, the activities to be funded with local currency proceeds were designed as part of the total Project Paper.

Each activity has a separate account to which funds are deposited from the Special Account. Each activity has a yearly budget, and normally disbursements are scheduled quarterly. (Not the actual practice because of lack of proceeds). The Management Committee, comprising a representative of the Ministry of Plan as Chairman, Minister of Finance as Permanent Secretary, Minister of Commerce and USAID, approve the budgets, review progress and requests for funds and have sole authority to disburse funds from the Special Account into the project accounts.

One of the problems which has caused confusion has been the initial LOP budgets set only in dollars. Activity managers were not exactly sure the CFAF amount they were allotted and mistakenly assumed that, as the exchange rate increased, their activity budgets would also increase. As the result of an evaluation recommendation, activity budgets have been set in CFAF. There remains the problem of possible "windfall" proceeds due to increase with the exchange rate. In discussions, the concensus was to have a shelf-item activity which could be used if extra funds do become available and use any windfall as contingency for the portfolio. At present, a shortfall is not anticipated in the account.

4. Current status

The first Title III program was for three years (FY80-82), amounting to $21 million. In order to avoid a gap in support, in FY83, a one-year, $ million, extension to this initial Title III program is being proposed. At this time, it is anticipated that commodities under this extension will be sorghum and rice. This extension will give the GOS and USAID the time to investigate the best solution to the problem of commodity and vehicle (Title I or Title III) in the future. The time will also be available to develop a coherent package of policies and projects for a Phase II Food for Development program, a package that will fit into the coordinated mosaic of other U.S. bilateral assistance (ESF, SDF, etc.).

The three-year Phase II Food for Development program is targeted for FY84-86, at $10 million per year, for a total of $30 million. Based on experience gained during the FY83 extension, commodities might include sorghum, rice and some wheat.

5. Conclusions

There has been one main problem with Title III: PL-480 rice (20% broken) is generally too expensive and not similar enough to Senegalese consumer habits. Other problems of management have been ironed out through the annual evaluation recommendations and yearly agreement amendments.

The Title III program has demonstrated that a commodity import program is viable in Senegal. The GOS has the potential both for importing, selling and depositing local currency proceeds from the U.S. commodities, and for implementing activities with those proceeds.

VIII. BACKGROUND DESCRIPTIONS

A. Political Framework

Senegal is a nonaligned, moderate, functioning democracy now in its twenty-fourth year of independence. Following nearly 21 years of development under the leadership of former President Leopold Sedar Senghor (who retired in 1980), Senegal in February 1983 held its first seriously contested multi-party elections with 5 parties competing for the Presidency and 8 parties presenting slates for the 120 seats in the National Assembly. Acting President Abdou Diouf was overwhelmingly elected as President to his first full term in office with 84% of the vote, and his socialist party (PS) captured 111 out of the 120 national assembly seats. Over 50% of Senegal's voters actually went to the polls, and the elections were carried out in a quiet and orderly fashion throughout the country. This is indeed a historic event not only for Senegal, but for Africa as a whole (especially when one considers how few multi-party states are left, and of these, how few allow free elections. Senegal is probably unique in this regard.) With this election, Senegal established its credentials as the leading democracy on the Continent.

This strong win at the polls should help the government face up to the vital, but difficult decisions ahead in overcoming its economic problems, many of which are structural. These decisions will require courage and firm political will to carry out. The Government of Senegal has already demonstrated its political will over the last two years and willingness to take tough decisions when it stopped all agriculture credit, raised prices of millet and groundnuts, increased taxes on imports, such as rice, sugar, cooking oil, and gasoline, reduced fertilizer subsidies, abolished one rural development parasatal (ONCAD), and reduced personnel in two others. These are only a few of the major reforms. However, as important as these actions are, they are only initial steps on the long road ahead. Senegal's economic and social difficulties are indeed grave; however, its strong commitment to democratic practice and the rule of law bodes well for the nation's ability to face up to these challenges.

On the international scene, Senegal has been a positive force for moderation and reason. It has worked closely and effectively with other moderate states in the UN and other forums. (For example, Senegal is the only black African state which provided military personnel as part of International Peace keeping forces in Shaba, Lebanon, Chad, and the Sinai.) Senegal has been in the forefront of moderate African nations trying to contain Libya's aggressive actions in Africa, and has played a key role in the OAU and other Pan African forums. Senegal, in July 1981, was instrumental in putting down the Marxist-inspired coup attempt in the Gambia.

Senegal's geographic location on the western most tip of Africa has a special interest for the United States, and is of significant strategic importance in world terms. Senegal demonstrated this importance in World War II and in the Falkand crisis in 1982. Dakar serves as the only emergency landing site for the NASA space shuttle immediately after launching. Senegal has among the best air, seaport, and communications facilities in West Africa.

Within its West African subregion, many of Senegal's neighbors are politically insecure, and the country represents an island of stability and moderation. The GOS has been an active and highly regarded member of the CILSS and in working with the Paris Club. It is therefore in the U.S. and other friendly countries' self-interest to help Senegal preserve its moderate views and democratic tradition. Not only is this help vital to Senegal's ability to continue its own progress, economically and socially, but it will also set an important example for its immediate neighbors and the West African sub-region as a whole.

As further testimony of the importance of Senegal to the West in general and the U.S. in particular, over the past four years a number of senior U.S. Government officials and Members of Congress have called in Dakar. These visitors have included both Vice Presidents - George Bush and Walter Mondale, and former Secretary of State Alexander Haig.

To sum up, Senegal's influence as a nonaligned country extends well beyond its borders, and because of its mature, centrist posture, and its quiet but effective role in international affairs, it is held in esteem by many less developed countries, Western Europe and the United States.

B. Government of Senegal Development Setting and Strategy

1. Background

Senegal's economy has been generally declining since the great drought of 1973 which followed five years of substandard rains. In the ensuing years of that decade, the fragile and rebuilding Senegalese economy again shook under tremendous strain, this time as a result of:

a. the sharp fall-off in world prices for peanuts and phosphates, two of which were then the country's principal exports;

b. rising import prices for food and manufactured goods as well as for petroleum; and

c. an overly ambitious and relatively unproductive public investment program coupled with extensive government intervention in the economy.

By 1977, the slide began to assume crisis proportions. Severe droughts during three of the four years, 1977-81, adversely affected cereals output and drastically reduced the production and exports of peanuts, the backbone of the economy. The four year average in these years was 22% below the twenty year average. As Senegal's foreign exchange earnings fell sharply, the real GDP per capita declined over the period by an estimated 18%.

In an effort to cushion the adverse impact on consumption and public investment, the GOS turned to heavy foreign borrowing and subsidizing of consumer imports, forgiving farmer debts, and increasing government employment. As a result, in 1981, Senegal's foreign debt reached over 60% of GDP. Debt servicing would have required 28% of export earnings if not for emergency debt rescheduling. The current account deficit reached a high of 18.1% of GDP in 1981 (up from 3.6% in 1977). Projections for 1983 were somewhat better with an estimated current account deficit of 15.2% of GDP. Domestic savings turned negative and, nonetheless, real per capita consumption fell. Domestic savings showed a modest improvement in 1982 rising to 3% of GDP. In short, even with some modest improvements Senegal was facing its worst economic and financial crisis since independence in 1960.

The GOS response was the adoption of an Economic and Financial Reform Plan ("Plan de Redressement") introduced in December 1979 and developed in close consultation with the IMF and the World Bank. The French Government has given this plan its full support. The purpose of the Reform Plan is to reduce the balance of payments and budgetary deficits, thus stabilizing the economy during an initial two-year period. Coupled with large-scale extraordinary assistance[1] which has been made largely contingent upon GOS adherence to a far-reaching series of reforms, the Reform Plan also aimed at clarifying and reducing the role of the public and parastatal sector, so as to enable it to operate more efficiently in defined areas, and at reducing the constraints on private sector production and marketing activities in agriculture, industry, and services. The Reform Plan constitutes the principal framework and reference point for assistance of all major donors to Senegal. The principal monitors of Reform Plan progress are the IMF and World Bank.[2]

2. <u>Agriculture sector</u>

Seventy percent of the population of Senegal lives in the rural areas. In a normal year this population produces agriculture products (principally peanuts) accounting for more than half of the country's total export earnings. In fact, in 1981, more than 50% of the population was, in one way or another, dependent on the peanut industry for its livelihood.

While technical assistance for an up-to-date assessment of the agriculture sector is provided for in this PAAD[3] (the last assessment being the World Bank study issued in 1979), the principal problems are described below.

a. <u>Water shortages and irregularities</u>

In the short term, insufficient rainfall is the most significant factor influencing agriculture development in Senegal, followed closely by government policies which have served as disincentives to production. For the crop years 1979/80 and 1980/81, rains were well below the long-term average, in some areas less than 50% of the norm. Farmers subsisted on a combination of their meager yields and stocks accumulated in the good production year 1978/1979. In 1980/1981, poor rains led to near complete

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1 See Annex I, Table 19 for a detailed breakdown of other donor assistance.

2 An IMF Extended Fund Facility permitting Senegal to purchase SDR 184.8 million over a three year period was negotiated. The World Bank also made a Structural Adjustment loan of $60 million.

3 See Annex H for a description of the dollar-financed basic study entitled "Assessment of the Senegal Agriculture Sector."

failure of the peanut crop, placing extreme pressure on the GOS to maintain crucial food and import levels. As a result of depleted food reserves in villages and households, limited peanut seeds of good quality, and frustration over marketing through cooperatives, the area planted for the 1981/82 peanut crop was approximately 10% below normal. In 1982/83, the rainfall was adequate yet food production was down due to a variety of reasons, including inadequate fertilizer use. For this 1982/83 crop season, crop growth or yields: peanut production was 891,000 tons (vs. 790,000 the previous year), millet was 497,440 tons (vs. 736,000 tons), and paddy rice was 105,225 tons (vs. 103,000 tons). While attempts to ease water deficiencies through irrigation are very much part of Senegal's planning, over the medium-term, it is rain that will remain the key variable.

b. Soil depletion

As the level of agriculture production in Senegal has increased, the demands for crop nutrients have progressively exceeded the supply from natural weathering and build-up of soil material. A portion of the plant needs have been traditionally "supplied" by leaving the land in fallow. There are local norms for different soils and crops allowing for 1 or 2 years of production after fallow periods of 3 to 20 years. However with increasing population and greater demand for agriculture production for food and commerce, the periods of fallow have been shortened or eliminated so that farmers are now "mining" the soil nutrient resource. In some zones, farmers have reduced this effect somewhat by crop rotation and the use of animal manure when it is available. Neither of these practices compensate for the demands for high yields so that signs of nutrient deficiency can be observed in field crops. The IFDC has estimated the plant nutrient removal in air average year at 30,222 tons of N, 11,383 tons of P_2O_5, and 46,834 tons of K_2O. Using current grades of fertilizer materials, it would be necessary to apply more than 250,000 tons of commerical fertilizers to replace these nutrients. The critical deficiency in soil nutrients is impressively demonstrated by field trials of various fertilization practices. And the strong demand for fertilizer provides a clear indication that farmers are well aware of the problem and its solution.

c. Overdependence on a single crop

In normal years, the peanut crop accounts for 40 to 50% of Senegal's annual export earnings, which now exceed a total of $370 million. Because of a lack of water, irregularity in distribution of improved and maintained seed varieties, reduced fertilizer use and poor management of soil resources, increased volume of peanut production is not promising. Further, since millet and sorghum, the subsistence staples of the rural populations, are usually planted by the same farmers who plant peanuts, competition for land is another source of limitation to peanut production. Finally, the GOS is also reluctant to increase its dependence on the peanut crop, given future projections in the world oilseed market which indicate that competition from other types of oil make Senegal's products less attractive. Consequently, the GOS has turned to the Senegal River Basin and the Casamance region to develop and increase food production in general and rice production in particular.

The agriculture sector in Senegal also includes significant livestock production in the northern and eastern pastoral zones as well as cotton production in the eastern and southern zones. Commercial fruits and vegetables exist in all regions of the country for local fresh markets, though these enterprises are of modest consequence in the economy of the agriculture sector. The GOS also wishes to seriously examine the ways and means of diversifying production in the Peanut Basin to include maize, soy beans, leguminous crops, and vegetables over the next ten years. However, for the next decade at least, Senegal is likely to remain a basically mono-crop country, its fortunes bound to its peanut fields.

d. Malfunction of agriculture institutions: Regional Development Agencies and cooperatives.

The institutional support structure of the agriculture sector has been largely influenced by the Regional Development Agencies (known as RDA's)

(1) Société d'Amenagement et d'Exploitation des Terres du Delta (SAED-Senegal River Basin Region);

(2) Société de Developpement et Vulgarisation Agricole (SODEVA - Peanut Basin);

(3) Société pour la Mise en Valeur de la Casamance (SOMIVAC - Casamance);

(4) Société de Developpement de l'Elevage dans la Zone Sylvo-Pastoral (SODESP - Central Plains);

(5) Société pour le Developpement des Fibres Textiles (SODEFITEX - Eastern Senegal).

From independence in 1960 through 1978, the GOS had progressively placed greater responsibilities and resources in the hands of the RDA's as a means of achieving growth in the agriculture sector. These agencies were to provide farmers with improved technology, necessary inputs, improved access to markets and in general, to expand the acreage of the principal crops. By the late 1970s, the RDA's had become cumbersome bureaucracies that were intimately involved in the rural sector and were a burden to, rather than a leader of, agriculture development. In 1978, the RDA's consumed 15% of the country's Gross Agriculture Product. In the Peanut Basin, the GOS parastatal, ONCAD, controlled the supply of all agriculture inputs and marketing of peanuts. This organization, corrupt and inept, was abolished as an initial measure under the Reform Plan in 1980.

The cooperatives in Senegal, particularly in the Peanut Basin, have earned a bad reputation. This comes largely from the fact that the peanut cooperatives, economically and traditionally the most important of Senegalese cooperatives, have been dominated by a centrally-controlled agriculture and marketing policy. The result has been effective elimination of farmer participation in cooperative management which in turn has provided an open door to corruption of the cooperative system and has led to the alienation of cooperative members.

The cooperatives and their members suffered from a number of deficiencies, including the undue control by local "notables," especially the president and weigher, who were usually literate. The membership are basically illiterate and lack numeracy skills necessary to understand cooperative records. Members have no voice in selection of which members receive credit despite the fact that all members are responsible for the cooperative's debts. Cooperatives have had no control over produce once it leaves the coooperative even though losses incurred in transport and handling are charged to the cooperative's account. Furthermore, cooperatives here had no voice in determining the price of their products and no say in the quantity, quality, or price of inputs to be made available to them.

The conclusion that can be drawn from the above list is that the farmer does not have control over the local coooperative upon which he is dependent for his factors of production, nor does he have an effective voice in determining the policies of the economic system that relies heavily on him and peanut production for survival. In recognition of this, the Government's Reform Plan provides for the reconstruction of the cooperative system starting at the level of the primary village section. In part with local currency generated from this PAAD, the GOS intends to begin immediately to strengthen village level cooperatives and producer groups. Section V entitled "Use of Local Currency" and Annex G provide a detailed description of this part of the program.)

e. Failure of the agriculture credit system

Farmers in Senegal use agriculture credit for the purchase of seeds, fertilizer, implements, pumps, draft animals and cattle for fattening. Credit had been extended in kind by cooperatives and by the RDA's, with farmers' accounts being settled by the delivery of produce or payment in cash. However, basic management and audit systems have been inadequate and the system gradually built up a debt roughly equal to the value of one year's peanut production, or approximately 56 billion CFAF ($ 160 million). Recent village survey work also revealed that as much as 50% of the registered farm debt is either inadequately recorded or perhaps falsely entered in the books. To offset the adverse affects of bad weather, and to respond to farmers' complaints about the management of the credit program, the GOS has twice forgiven debts in the past five years. This debt forgiveness has seriously undermined the integrity of the agriculture credit system, making reform all the more essential.

The austerity imposed by the Economic Reform Plan has forced the GOS to restrict funds available for credit. As a result, the USAID has observed such signs of reduced farming intensity as increased use of poorer quality village-grown seeds, lower rates of fertilizer use, and the continued use of old and unrepaired implements. These suggest that production is being constrained by the restricted credit supply. Visits to villages by USAID staff during the last agriculture campaign confirmed the severe hardship to farmers consequent to the lack of credit.

Given the importance of rural credit, and the need to have an up-to-date assessment, this PAAD provides for a study of Senegal's rural credit and savings to determine if additional sources of credit are needed.

If a need is confirmed, the study will further determine whether the newly created National Agriculture Credit Bank (Caisse Nationale du Credit Agricole du Senegal--CNCAS) is an appropiate instituion to provide these services. (For a more detailed description of the activities planned in the field of credit and savings, see Section V and Annexes I and G.1.)

f. Agriculture pricing

During the past two years, the official market prices paid to producers of peanuts, rice and millet have risen an average of about 25%. As expected, farmers appear to have responded by increasing production, generally by investing more labor and management attention. Despite the farm-gate price increases, however, certain crops were diverted from normal marketing channels and sold for higher prices in other localities. For example, some rice producers along the Senegal River sold their surplus in Mali at 80 CFA/kg. (vs. GOS price of 60 CFA/kg).

Current GOS plans indicate that costs to the farmer for fertilizer, seeds and farm implements are likely to rise with the removal of State control over the factors of production, including a reduction in subsidies. It is not yet apparent if price increases in these items will be coordinated with further farm-gate price increases in order to maintain the production incentives that have been established for the current agriculture season. The narrowing of incentives could again become a major constraint, as it was in the past when prices were kept low to provide the Government with a substantial margin after the sale of products on the world market. The GOS used this margin to balance urban industry and provide increasingly large food imports for urban populations.

3. Key elements of the GOS strategy to deal with agriculture sector problems

As set forth in the Reform Plan, the key elements of the GOS strategy for revitalizing the agriculture sector are:

a. reorganization of the seed distribution and marketing systems;

b. reorganization of the Rural Development Agencies (RDA's) to decentralize their management, reduce operating costs, increase efficiency and liberate areas for private sector initiative;

c. encouragement of private sector initiative in areas of marketing and agriculture services;

d. greater involvement of cooperatives and village level groups in decision-making related to commercial agriculture;

e. revamping of agriculture credit; and

f. revising the structure for the agriculture research program;

In 1980, and 1981 the GOS initiated actions of a practical nature to implement elements of the above agriculture strategy. For example:

- Peanut prices were raised 11% from 45.5 CFA/kg. to 50 CFA/kg.

- The GOS, in 1980, began negotiations of revised terms of reference and budgets for the RDA's. Known as Program Contracts ("Contrat Plan"), the new agreements are to clearly state the responsibility of the GOS for support of staff and operating budgets. In return, the RDA's must commit themselves to specific production targets, reduce the number of staff, and withdraw from certain activities so as to create opportunities for private sector replacement. Program contract negotiations were concluded with SAED containing explicit statements of production objectives and reorganization. SODEVA also has reduced its staff by 50%.

- The government farm supply agency (ONCAD) was disbanded and approximately 400 workers were removed from government roles. Steps to have the private sector handle the peanut trade were undertaken when the GOS placed this responsibility with the oil manufacturers.

- A working group was set up in 1980 to define pclicy and institutional objectives for agriculture credit and in 1981 a plan for the complete revision of the agriculture credit program was drawn up by the Prime Minister's Working Group for Agriculture Credit (of which USAID is a member).

- Plans were begun for a major program of farming systems research which was put into effect in 1981.

- Other reforms, such as increases in consumer prices (and reduced subsidies) of bread, cooking oil and petrol products, averaging nearly 25% were initiated.

In 1982, while the GOS remained faithful to the main lines of its Reform Plan, particularly in the agriculture sector, it had some difficulty remaining within the financial ceilings for credit and budgetary expenditures, and in meeting the targets set out in the Standby agreement with the IMF and some of the conditions of the World Bank structural adjustment which were set to support the IMF's monetary targets.

The dramatic fall in the world price of peanuts aggravated the foreign exchange deficit, and increased the budgetary deficit.

As 1982 was a pre-election year in a multi-party democratic context (elections were held at the end of February 1983), the imposition of additional spending restraints after the courageous steps taken in 1980 and 1981 became extremely difficult for the government. As a result, the GOS did not make all of its 1982 targets, and foreign exchange releases under both the IMF Standby and World Bank Structural Adjustment Loans were held up, pending resolution in 1983, after elections. (Annex K , Macroeconomic Justification discusses this situation in more detail.)

4. Other sectors

Before 1960, Senegal was the administrative, commercial and industrial center of the West African Federation,[1] and enjoyed all the benefits conferred by that status. Independence deprived the country of this role, and during most of the sixties, Senegal had to adjust its administrative structure, transit activity, and its infant industry to better match the more limited needs of its domestic market. With a secondary sector contributing about 23% of GDP in 1979, Senegal can be characterized by African standards, as a semi-industrialized country. However, the average growth of the industrial sector since 1960 has been a rather modest 4% per annum (p.a.) on average.

The principal lines of industrial development have been production and processing of primary products (phosphate, cement, groundnut oil), and light manufacturing industry for import substitution. In 1984, a privately run, world-class fertilizer facility, Industrial Chemicals of Senegal (ICS), will come on stream using the locally-mined phosphate, and mixing it with imported sulfur to make Diammonium Phosphate (DAP) and Triple Super Phosphate (TSP). While the complex is mainly for export (first year exports are expected to be 212,000 mt of fertilizer and 200,000 mt of phosphoric acid p.a.), part of the production will be sold on the domestic market. It is a mixed corporation with equity capital of 225 billion CFA francs ($66 million) held by Nigeria, Ivory Coast, Senegal, India, the Islamic Development Bank, and private banks and firms. Principal loans have been made to ICS by the World Bank, Islamic Bank, Caisse Centrale, IFC, African Development Bank, EIB, EDF, and OPEC. The secondary sector, including the phosphate mine, employs about 7% of the labor force. Highly skilled and managerial positions in most large and medium-scale enterprises are occupied by expatriates. The future of the mining and industrial sectors is moderately promising. In mining, in addition to phosphates (estimates show 45 years of reserves at the current production rate of 1.5 million tons p.a), Senegal has modest offshore oil reserves and large iron ore deposits of a quality that would seem appropriate for a modern steel industry. However, oil and iron ore reserves have not been fully explored. Ore deposits are located far from existing transport centers; consequently, their development would involve very high investment costs in transport infrastructure, and commercial exploitation is unlikely to start during the present decade. With respect to manufacturing, there are still some possibilities for developing import substitution industries. More importantly, the country's political stability, its well-developed urban and port infrastructure, its proximity to Europe, and its strong political and economic links with major European countries, could make it attractive to foreign investors and foster the development of an export-oriented industry.

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1 Under colonial rule, the Federation was comprised of the francophone countries of Benin, Guinea, Ivory Coast, Mauritania, Sudan (Mali), Upper Volta and Senegal.

At least two other areas hold more promise. Senegal has rich territorial waters with a large and diversified fish stock; in fact, the domestic fishing and fish processing industry is one of the few truly dynamic branches of economic activity.

Also, the pleasant coastal climate almost throughout the year, the abundance of attractive beaches, and the development of efficient airport facilities, have served to encourage the growth of a vibrant tourism industry which has contributed significantly to the real growth in the tertiary sector.

5. Social factors

Senegal's population shares most of the characteristics of African demography: a rapid rate of growth (officially 2.8% p.a.), a high dependency ratio (slightly below 1:1) reflecting a very young population structure, and a low but increasing rate of primary school attendance (over 40% in 1980). More importantly, the rate of demographic growth seems to be accelerating, and the rate of growth of the working age population (2.2% p.a.), though also increasing, is distinctly below the overall population growth rate. The attendant social costs of these basic features (in terms of demand for education, health, other basic services, and for jobs) create potentially serious problems within a slow-growing economy such as Senegal's.

Other socio-demographic factors more specific to Senegal have a direct bearing on the economic environment. One is the large concentration of population in the Dakar area, now a highly developed city and administrative and cultural center of close to one million people, with a large university and several other institutes of higher education. Another is the impact of Senegal's long historical exposure to the Western world. The most perceptible consequences of these two factors are a strong bias towards a "European" pattern of consumption, a well-organized labor force with highly vocal unions, and a liberal political system with officially recognized and influential opposition parties. The overall impact is the continuing popular demand for higher wages, job security, and various forms of social welfare all of which are expected to be provided by or through the Government. Thus, labor costs are high by international standards, in a country which is often considered as a labor-abundant economy.

C. USAID Assistance Strategy

1. Overview

The USAID Senegal CDSS for FY83, submitted in January 1981, elaborated the Mission strategy for responding to the economic situation in-country. This strategy was accepted by the Africa Bureau, per State Cable 77365, on March 6, 1981. AID/W accepted the FY84 CDSS supplement, detailing the training and health programs in support of approved goals, on April 8, 1982 per State Cable 165374.

The FY85 CDSS update, submitted in February, 1983: (a) reviewed Senegal's progress in implementing its Economic Reform Plan, now entering its third year, (b) set out the Mission's Country Development Strategy Statement related to this reform for the 1983-1987 period, (c) summarized the chief means by which the AID program would carry out the Senegal Strategy, through measures in support of policy reform, institutional development, the private sector, and technology transfer, and (d) underscored the requirement that the Mission put the programs previously approved from a policy standpoint in place during FY83 in support of the Country Strategy if the strategy is to continue to have meaning. Dialogue about policies could be vitiated if practical measures are not taken within a reasonable period of time.

Section VIII.B.3, "Key Elements of the GOS Strategy..." above lists a number of specific examples of actions taken by the government over the last three years. The USAID program supports the GOS Reform Plan.

Some of the highlights of USAID's assistance strategy for the period 1983-1987 are listed below. (The chart on the next page sets out graphically USAID's strategy in terms of GOS's long-term goal, Mission's goal, purpose, projects and outputs.)

2. <u>Goal: food self-reliance</u>

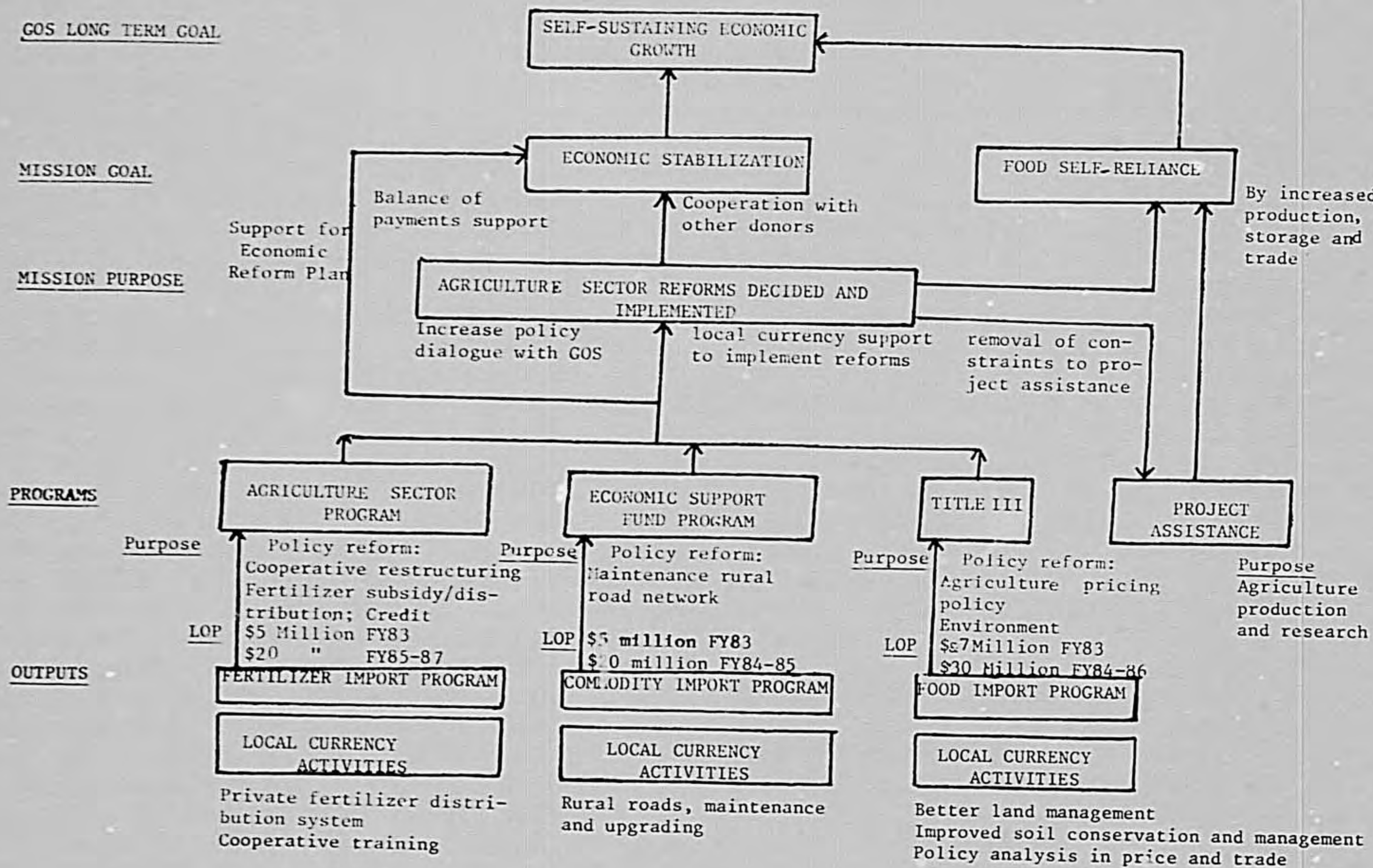
The goal of the USAID program is Senegal's achievement of the capacity to feed its people, by domestic production and by trade, even in drought years, by the close of this century. Increased agriculture production is the key in Senegal to both higher per capita income and to an improved balance of payments.

With food self-reliance the goal, the USAID program in Senegal has two principal emphases. The first is upon increased food production in ways favoring the maximum participation of the population, together with an accent upon the regeneration of soil and fuelwood resources required to cultivate and cook food products. USAID's second and related emphasis is upon the delivery of health and family planning services at local levels, both to increase the productivity of the farming population as well as to reduce, over time, the rapid annual rate of population increase, officially estimated at 2.8%. If unchecked, present demographic trends will push Senegal's attainment of food self-reliance into the far-distant future.

3. <u>Major targets</u>

Towards the goal of food self-reliance, the USAID, with GOS collaboration, has set four chief targets in agriculture:

- the progressive decontrol and commercialization of rural production (by activating farmers' groups, streamlining the RDA's, and encouraging the private sector);
- the development of more effective agronomic practices (through improved research and extension, pricing, credit, mixed farming);
- the increase of cultivated land area (in the Senegal River basin and the Casamance Region); and


GOS LONG TERM GOAL
SELF-SUSTAINING ECONOMIC GROWTH
MISSION GOAL
ECONOMIC STABILIZATION
FOOD SELF-RELIANCE
Balance of payments support
Cooperation with other donors
By increased production, storage and trade
Support for Economic Reform Plan
MISSION PURPOSE
AGRICULTURE SECTOR REFORMS DECIDED AND IMPLEMENTED
Increase policy dialogue with GOS
local currency support to implement reforms
removal of constraints to project assistance
PROGRAMS
AGRICULTURE SECTOR PROGRAM
ECONOMIC SUPPORT FUND PROGRAM
TITLE III
PROJECT ASSISTANCE
Purpose
Policy reform:
Cooperative restructuring
Fertilizer subsidy/distribution; Credit
LOP
$5 Million FY83
$20 " FY85-87
Purpose
Policy reform:
Maintenance rural road network
LOP
$5 million FY83
$10 million FY84-85
Purpose
Policy reform:
Agriculture pricing policy
Environment
LOP
$27Million FY83
$30 Million FY84-86
Purpose
Agriculture production and research
OUTPUTS
FERTILIZER IMPORT PROGRAM
COMMODITY IMPORT PROGRAM
FOOD IMPORT PROGRAM
LOCAL CURRENCY ACTIVITIES
LOCAL CURRENCY ACTIVITIES
LOCAL CURRENCY ACTIVITIES
Private fertilizer distribution system
Cooperative training
Rural roads, maintenance and upgrading
Better land management
Improved soil conservation and management
Policy analysis in price and trade

the improved management of soil and water resources (irrigation practices in the Senegal River and Casamance River basins, land reclamation in the Peanut Basin).

The USAID assistance strategy also establishes a human development program to assure the support of, and to derive benefit from, the agriculture priorities. It recognizes that better nutrition, wider training, and readier access to primary health care are both the means and the ends of agriculture development. The strategy underlines the point that, whereas a demographic program is in the long run essential, the necessary foundation for establishing family planning services in Senegal is an affordable nutrition and health program within the reach of the general population. Accordingly, USAID plans to continue efforts begun in the late seventies to establish a model user/payer village health system in the Sine Saloum Region. Coupled with agriculture activities, the Mission will continue (based on negotiations held before the joint assessment) to establish a family health program which ultimately will depend upon rural clinics. Also USAID will concentrate upon functional literacy and rural project management training in support of rural producer groups and village level cooperative groups. Only very recently is Senegal beginning to show evidence of a fundamental concern with the inefficiency of its primary education system. When there is a clear Senegalese commitment to reform in this area, USAID intends to review what assistance, if any, the U.S. should offer.

4. <u>Focus of 1983-1987 program</u>

The USAID program for 1983-1987 will be distinguished in four principal ways from that set in place between 1974-1982.

As indicated above, the 1983-1987 program gives a much more important place to program assistance. This segment is planned via:

a. a PL-480 Title III program ($7 in FY83 and $10 million annually FY84-86),

b. a proposed $25 million grant for the development of agriculture ($5.0 million in FY83, and $20 million over three years, beginning in FY85), and

c. a proposed Economic Support Fund grant of $5.0 million in FY83, and $10 million per year for FY84-85.

Under this program segment, the U.S. will finance essential imports and generate local currency to support food production soils, crops, credit and savings, regeneration programs, rural road maintenance, and food and other policy studies. The financing of imports will help Senegal to stabilize its balance of payments; the major thrust of the first phase of the Reform. An import program will also assure the United States a continuing role in national policy discussions with the government and with Senegal's other major donors. (Annex K, Macroeconomic Justification, goes into this high priority need in some detail.) Program assistance is a more flexible tool in that it provides shorter lead time in supplying balance of payments support. Furthermore the disbursement time is much shorter. It provides budgetary support through the l/c generation drawing on GOS resources to manage the monies while reducing the USAID supervisory time required.

The second major difference in the 1983-1987 program for Senegal is the emphasis AID will place upon local producer groups and the private sector. At the same time, USAID will continue to help strengthen two or three of the RDA's as extension agencies, and by this means, increase the capabilities of rural producers. USAID will also initiate additional means to strengthen the position of food producers and rural entrepreneurs. Under this program, some aspects of which are described in detail in subsequent sections of this PAAD, AID will apply the local currencies generated from the program activities to support functional literacy training of village level cooperatives and local producer groups, to enlist the help of Private Voluntary Agencies with farmer groups and entrepreneurs, and after appropriate study, help the government undertake revised credit and marketing programs on their behalf.

A third feature of the USAID program in 1983-1987 will be its greater geographic concentration. This is necessary to increase the impact of the program, bringing its health and agriculture activities into direct proximity, and to increase management efficiency. Thus, from the six regions in which USAID is currently engaged, new funding beginning in FY85 will be focused on three regions with above-average water resources and farm production potential: the Senegal River Basin (through the OMVS programs), the Sine Saloum, and the Casamance. AID is already involved in important programs in these areas. Similarly, over the same period, USAID will reduce the number of active projects from 30 to 13, although the overall program in dollar terms is projected to substantially increase.

The fourth and final characteristic of the program is the degree to which it is based upon an intense and continuing collaboration with the Government itself, and with the major donors, including the IMF, the IBRD, EEC, and France, which are concerned essentially with the implementation of Senegal's Reform Plan. That the government of President Abdou Diouf is determined to continue his Government's close cooperation and dialogue with all donors, bilateral and multilateral appears clear from the President's major economic report to the National Assembly's Economic and Social Council on April 14, 1983 in which he strongly supported the results of the measures taken to date, and exhorted the nation to continue and increase its efforts. Earlier at the donors' conference which the government (with close IBRD support) convened and chaired in Paris in October 1981, and subsequently through the follow-up conferences on sectoral and project levels held throughout 1982, the Government showed its determination to improve donor coordination. In 1983, the Government enlisted the staff support of the CILSS and the Club du Sahel for the next major meeting of the donors to discuss Senegal's agriculture sector plans and programs.

D. USAID Program Elements

This agriculture PAAD is for one year and is so designed that all program elements are self-contained. There is also a multi-year, long-term economic development value in each of the proposed activities, be they dollar or local currency. The PAAD forms a vital part of the U.S. Assistance Strategy for 1983-1987 described above.

Within the substantive areas, goals and priorities described above, the USAID's overall program is divided basically into two elements:

program and project assistance. The two programs are interrelated, mutually reinforcing and designed to support the U.S. Assistance Strategy.

1. Program assistance

For FY 1983, the proposed program totals some $18.0[1] million, broken down as follows:

- Title III (685-0231)
  $ 7.0 million

- ESF (685-0262)
  $ 5.0 million

- SDF (685-0249)
  $ 5.0 million

  Total FY83 program assistance
  $17.0 million[1]

These activities taken together at the macro-level (dollar foreign exchange) are designed to provide urgently needed balance of payments support, and to achieve the maximum leverage possible to help the GOS live up to its commitments to the IMF/World Bank, and to help put into effect more rapidly the Government's structural reforms set out in the Reform Plan. (Both are summarized in Annexes D and E.) The policy leverage made possible by the program assistance mode is enhanced because of the GOS hope for continued program support in the coming years along the lines outlined in the U.S. Assistance Strategy above.

At the sectoral-level utilizing the imports (e.g., fertilizer), it is hoped to encourage specific reforms (e.g. distribution of fertilizer in the private sector, lowering of subsidy).

Through judicious use of the counterpart or local currency generated by the import programs, GOS economic reforms can be assisted (e.g. before agreeing to the release of local currency for the support of private village level cooperatives, the government must complete legislation giving village level groups direct access to credit from banks or other lending institutions). For the planned local currency support for rural-based road maintenance and upgrading activity (ESF PAAD), the GOS will need to have agreed to fund the first "tranche" of its share of the highway maintenance fund being established under the IBRD Fifth Highway Project now under negotation.

1 $0.75 million of the $5.0 million SDF is for two Technical Assistance projects and is not considered as direct balance of payments support. Therefore, when discussing the amount of balance of payments support, the amount of $16.25 million is used.

2. Project assistance

For FY 1983, the requested technical assistance on project assistance including regional activities in Senegal totals $23.4 million dollars and should be viewed within the context of the USAID's agriculture strategy for achieving food self-reliance by increasing production, storage and trade, and the supporting activities in rural public health and human resource development such as:

- Cereals production. (Cereals I and Cereals II projects)
- Livestock production. (Bakel and SODESP projects)
- Research. (Ag. Research & Planning Project; Renewable Energy and Casamance project)
- Storage (Grain Storage Project)
- Private Rural Initiatives. (PVO Community and Small Enterprise Development Project)
- Regional Projects. Senegal River Basin (OMVS) and Gambia River Basin (OMVG) Crop Protection, etc. These regional activities provide significant benefits to Senegal.
- Rural Public Health and Family Planning
- U.S. Embassy Self-Help Fund
- Human Resource Development
- Title II-CRS Administered Maternal Child Health Program and Resettlement Family Assistance [1]

The grand total for program and project assistance is $41.4 million. While the projects and program assistance activities and Title II outlined above have separate definable roles, they are complementary one to the other, and should be considered as a total package of resources (or level of effort) provided by the U.S.

1 Title II-CRS Administered Program was $7.0 million out of the Project Assistance total of $23.4 million.

ANNEX A

GOS Request for Assistance

The Minister of Plan

Dakar, May 11, 1983

The Director
USAID/Senegal
POB 49
Dakar, Senegal

Subject: Balance of Payments Assistance Program.

Dear Mr. Director:

Under the Economic and Financial Reform Plan implemented by the Government of Senegal, the United States Government has decided to grant $18 Million to Senegal for fiscal year 1983 to support its balance of payments.

This grant will cover three programs:

- the first, amounting to $8.0 million, pertains to a one year extension of the current Title III rice import program for which the request was made last month.

- the second, amounting to $5.0 million is designed to finance imports of goods and services from the United States.

The equivalent of this amount in local currency, will be used for the improvement and maintenance of certain rural roads in the Senegal River Basin and the regions of Sine Saloum and Casamance.

The third, also amounting to $5.0 million, will allow the import of urea. and raw materials for blending fertilizer, up to $4.25 million.

The balance of grant, or $0.75 million, will be used to finance the costs related to the comprehensive evaluation of the rural sector, notably rural savings and credit, in order to assess the highest priority requirements of Senegal's agriculture sector. Of course, this evaluation should take into account previous studies carried out in this area.

Finally, the equivalent of the dollar amount in local currency for the import of the raw materials for blending fertilizer will permit the financing of activities in support of village level cooperatives and producer groups in middle and Upper Casamance and to strengthen the "Caisse Nationale de Credit Agricole du Sénégal".(CNCAS Project), subject to the results of the Credit Study.

Given the importance attached by the Government to Senegal's balance of payments situation, and to the carrying out of the Reform in the rural areas, I would appreciate your assistance and prumpt action do that these programs can be implemented as soon as possible.

Sincerely.

Cheikh H. Kane.

ANNEX B

COMMODITY IMPORT GRANT AGREEMENT
685-0249

ANNEX B

COMMODITY IMPORT GRANT AGREEMENT
685-0249

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COMMODITY IMPORT GRANT AGREEMENT

Agriculture Development Assistance

Grant Number
685-0249

Dated , 1983

Between

The Republic of Senegal

and

The United States of America, acting through the Agency for International Development ("AID")

Article 1: The Grant

To finance the foreign exchange costs of certain commodities and commodity-related services ("Eligible Items") necessary to promote the economic development of the Republic of Senegal, the United States, pursuant to the Foreign Assistance Act of 1961, as amended, agrees to grant the Government of the Republic of Senegal under the terms of this Agreement from Sahel Development Funds, not to exceed Five Million United States Dollars ($5,000,000) (the "Grant"). Approximately $3.05 million will be for import of commodities (fertilizer), $1.2 million for a Section 640C grant to cover the shipping differential caused by using U.S. Flag vessels, and $0.75 million will be for technical assistance.

Article 2: Conditions Precedent to Disbursement

Section 2.1. Conditions Precedent to First Disbursement. Prior to the first disbursement under the Grant, or to the issuance of AID of documentation pursuant to which disbursement will be made, the Granteee will, except as the Parties may otherwise agree in writing, furnish to AID, in form and substance satisfactory to AID:

(a) An opinion of counsel acceptable to AID that this Agreement has been duly authorized and/or ratified by, and executed on behalf of, the Grantee, and that it constitutes a valid and legally binding obligation of the Grantee in accordance with all of its terms;

(b) A statement representing and warranting that the named person or persons have the authority to act as the representative or representatives of the Grantee pursuant to Section 7.2, together with a specimen signature of each person certified as to its authenticity.

(c) A procurement plan including the procedures by which all procurement financed under this Grant will be carried out, and the mechanism for publicizing procurement and making awards.

(d) a written statement that the Grantee has sent a formal letter to the International Monetary Fund (IMF) setting forth its proposals for a IMF Standby Agreement for Senegal's fiscal year 1983/84, and written confirmation that this proposal is acceptable to the IMF.

Section 2.2. Conditions Precedent to Disbursement of Local Currency Generated

(a) No funds will be released from the Special local currency account to be established in the Central Bank until arrangements for a joint GOS/USAID Counterpart Management Committee have been finalized. (See Section 5.1 (a)).

(b) No funds will be released from the Special local currency account to be established in the Central Bank until the government certifies that village level cooperatives and producer groups are authorized to have direct access to credit sources.

(c) Disbursement of local currency funds from the Special local currency account for the National Agriculture bank (CNCAS) shall be contingent on a positive finding by the Rural Credit and Savings Study team being financed from dollar technical assistance funds provided in Title I of this agreement.

Section 2.3 Notification. When AID has determined that the conditions specified in Section 2.1 have been met, it will promptly notify the Grantee.

Section 2.4. Terminal Date for Conditions Precedent. If not all the conditions specified in Section 2.1 have been met within ninety (90) days from the date of this Agreement, or such later date as AID may specify in writing, AID, at its option, may terminate this Agreement by written notice to Grantee.

Article 3: Procurement, Eligibility, and Utilization of Commodities

Section 3.1. AID Regulation 1. This Grant and the procurement and utilization of commodities and commodity-related services financed under it are subject to the terms and conditions of AID Regulation 1 as from time to time amended and in effect, except as AID may otherwise specify in writing. If any provision of AID Regulation 1 is inconsistent with a provision of this Agreement, the provision of this Agreement shall govern.

Section 3.2. Eligible Items. The commodities eligible for financing under this Grant shall be specified in Implementation Letters and Commodity Procurement Instructions issued to Grantee. In accordance with Section 8.1 of this Agreement, no pesticides will be procured under this Grant. Commodity-related services as defined in AID Reguation 1 are eligible for financing under this Grant. Other items shall become eligible for financing only with the written agreement of AID. AID may decline to finance any specific commodity or commodity-related service when in its judgment such financing would be inconsistent with the purpose of the Grant or of the Foreign Assistance Act of 1961, as amended.

Section 3.3 Procurement Source. All Eligible Items shall have their source and origin in the "United States" (Code 000 of the AID Geographic Code Book), except as AID may specify in Implementation Letters or as it may otherwise agree in writing.

Section 3.4. Eligibility Date. No commodities or commodity-related services may be financed under this Grant if they were procured pursuant to orders or to contracts firmly placed or entered into prior to the date of this Agreement, except as AID may otherwise agree in writing.

Section 3.5. Technical Services. Procurement of Technical Services will be carried out utilizing AID normal rules in accordance with instructions which will be issued through Implementation Letters.

Section 3.6. Procurement for Private Sector. Procurement by private importers will be subject to the negotiated procurement procedures of Section 201.23 of AID Regulation 1, except as AID may otherwise agree in writing or the importer elects procurement through the formal competitive procedures of Section 201.22.

Section 3.7. Utilization of Commodities

(a) Grantee will assure that commodities financed under this Grant will be effectively used for the purposes for which the assistance is made available. To this end, the Grantee will use its best efforts to assure that the following procedures are followed:

(i) accurate arrival and clearance records are maintained by customs authorities; commodity imports are promptly processed through customs at ports of entry; such commodities are removed from customs and/or bonded warehouses within ninety (90) calendar days from the date the commodities are unloaded from the vessels at the port of entry, unless the importer is hindered by force majeure or AID otherwise agrees in writing; and

(ii) the commodities are consumed or used by the importer not later than one (1) year from the date the commodities are removed from customs, unless a longer period can be justified to the satisfaction of AID by reason of force majeure or special market conditions or other circumstances.

(b) Grantee will assure that commodities financed under this Grant will not be reexported in the same or substantially the same form, unless specifically authorized by AID.

Section 3.8. Shipping

(a) Commodities which are to be transported to the territory of the Grantee may not be financed under this Grant if transported either: (1) on an ocean vessel or aircraft under flag registry of a country which is not included in AID Geographic Code 935 as in effect at the time of shipment, or (2) on an ocean vessel which AID, by written notice to the Grantee has designated as ineligible, or (3) under an ocean or air charter which has not received prior AID approval.

(b) Unless otherwise authorized, AID will finance only those transportation costs incurred on aircraft or ocean vessels under flag registry of a country included in the Geographic Code authorized in Section 3.3 of the Agreement.

(c) Unless AID determines that privately owned United States-flag commercial ocean vessels are not available at fair and reasonable rates for such vessels, (1) at least fifty percent (50%) of the gross tonnage of all goods (computed separately for dry bulk carriers, dry cargo liners and tankers) financed by AID which may be transported on ocean vessels will be transported on privately owned United States-flag commercial vessels, and (2) at least fifty percent (50%) of the gross freight revenue generated by all shipments financed by AID and transported to the Republic of Senegal on dry cargo liners shall be paid to or for the benefit of privately owned United States-flag commercial vessels.

Section 3.9. Insurance

Marine insurance on commodities financed by AID under this Grant may also be financed under this Grant provided that such insurance is placed in a country included in the Geographic Code authorized in Section 3.3 of this Agreement.

Article 4: Disbursement

Section 4.1. Letters of Commitment to United States Banks. After satisfaction of the condititions precedent, the Grantee may obtain disbursements of funds under this Grant by submitting Financing Requests to AID for the issuance of letters of commitment for specified amounts to one or more banking institutions in the United States designated by Grantee and satisfactory to AID. Such letters will commit AID to reimburse the bank or banks on behalf of the Grantee for payments made by the banks to suppliers or contractors, under letters of credit or otherwise, pursuant to such documentation requirements as AID may prescribe. Banking charges incurred in connection with letters of commitment and disbursements shall be for the account of Grantee and may be financed by this Grant.

Section 4.2. Other Forms of Disbursement Authorizations. Disbursements of the Grant may also be made through such other means as the Parties may agree to in writing.

Section 4.3. Terminal Date for Requests for Disbursement Authorizations. No Letter of Commitment or other disbursement authorization will be issued in response to a request after eighteen (18) months from the date of this Agreement, except as AID may otherwise agree in writing.

Section 4.4. Terminal Date for Requests for Disbursement. No disbursement of Grant funds shall be made against documentation received by AID or any bank described in Section 4.1 after twenty-four (24) months from the date of signing of this Agreement, except as AID may otherwise agree in writing.

Section 4.5. Date of Disbursement. Disbursements by AID shall be deemed to occur on the date on which AID makes a disbursement to the Grantee, or its designee, or to a bank, contractor or supplier pursuant to a Letter of Commitment or other form of disbursement authorization.

Section 4.6. Documentation Requirements. AID Regulation 1 specifies in detail the documents required to substantiate disbursements under this Agreement by Letter of Commitment or other method of financing. The document number shown on the Letter of Commitment or other disbursing authorization document shall be the number reflected on all disbursement documents submitted to AID. In addition to the above, the Grantee shall maintain records adequate to establish that commodities financed hereunder have been utilized in accordance with Section 3.8 of this Agreement. Additional documents may also be required by AID with respect to specific commodities, as may be set forth in detail in Implementation Letters.

Article 5: General Covenants

Section 5.1. Use of Local Currency.

(a) Grantee will establish a Special Account in the Central Bank of Senegal and deposit therein currency of the Government of the Republic of Senegal in amounts equal to the value of the importation of the Eligible Items (including equivalent of non-U.S. Flag ocean freight or other eligible costs financed by AID), or such lesser amount as shall be agreed to by AID in writing. Funds in the Special Account may be used for such purposes as are mutually agreed upon by AID and the Grantee.

(b) Deposits to the Special Account shall become due and payable upon advice from AID as follows:

- 35% of the value of the eligible imports including equivalent of non-U.S. Flag ocean freight and other eligible costs at the time of the IFB opening and award of the tender.

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- 75% of the value of the eligible imports including equivalent of non-U.S. Flag ocean freight and other eligible costs no later than 6 months after the shipping documents have been received.

(c) Any unencumbered balances of funds which remain in the Special Account upon termination of assistance hereunder shall be disbursed for such purposes as may, subject to applicable law, be agreed to between Grantee and AID.

Section 5.2. Taxation. This Agreement and the Grant will be free from any taxation or fees imposed under laws in effect in the Republic of Senegal. To the extent that any commodity procurement transaction financed hereunder is not exempt from identifiable taxes, tariffs, duties and other levies imposed under laws in effect within the Republic of Senegal, the same shall not be paid with funds provided under this Grant.

Section 5.3. Reports and Records. In addition to the requirements in AID Regulation 1, the Grantee will:

(a) Furnish AID such reports and information relating to the goods and services financed by this Grant and the performance of the Grantee's obligations under this agreement as AID may reasonably request;

(b) Maintain or cause to be maintained, in accordance with generally accepted accounting principles and practices consistently applied, such books and records relating to this Grant as may be prescribed in Implementation Letters. Such books and records may be inspected by AID or any of its authorized representatives at all times as AID may reasonably require, and shall be maintained for three years after the date of last disbursement by AID under this Grant; and

(c) Permit AID or any of its authorized representatives at all reasonable times during the three-year period to inspect the commodities financed under this Grant at any point, including the point of use.

Section 5.4. Completeness of Information. The Grantee confirms:

(a) That the facts and circumstances of which it has informed AID, or caused AID to be informed, in the course of reaching agreement with AID on the grant, are accurate and complete, and include all facts and circumstances that might materially affect the Grant and the discharge of responsibilities under this Agreement; and

(b) That it will inform AID in timely fashion of any subsequent facts and circumstances that might materially affect the Grant and the discharge of responsibilities under this Agreement.

Section 5.5. Other Payments. Grantee affirms that no payments have been or will be received by any official of the Grantee in connection with the procurement of goods or services financed under the Grant, except fees, taxes, or similar payments legally established in the country of the Grantee.

Section 5.6. Minimum Size of Transaction. No foreign exchange allocation or Letter of Credit issued pursuant to this Agreement shall be in an amount less than Ten Thousand Dollars ($10,000), except as AID may otherwise agree in writing.

"Section 6: Special Covenants Concerning Program Implementation and Achievement of Program Objectives

Section 6.1. Fertilizer Subsidies.

6.1a Within 12 months of obligation of funds, the GOS will present a plan to the USAID for the reduction of the fertilizer subsidy from the current 60% level to 25% by June 1987.

6.1b GOS average price for fertilizer does not drop below 50 CFA per kilo through January 1984.

6.1c Reduction of fertilizer subsidy to at most 40% by January 1985.

Section 6.2 Fertilizer Marketing

6.2a Within 12 months of program obligation, the GOS will present a plan for reorganizing the fertilizer marketing system including analysis of the role of the private sector. This plan will recommend methods of reorganization for maximizing efficiency, minimizing costs and responding to local farmer needs.

6.2b The GOS will permit a private sector distributor to import urea under this program directly from the U.S. without the GOS serving as an intermediary.

Section 6.3 Fertilizer Use. Grantee covenants to continue its efforts to bring about closer cooperation between the agriculture research stations and the extension services so that results of applied research concerning the most efficient kind and method of application of fertilizers to specific crops can be made available to the farmer, and to those responsible for supplying fertilizer to the farmer.

Section 6.4 Macro-Level Reforms.

6.4a Selection of specific targets from the IMF 1983-84 Standby Agreement which are relevant to the agricultural sector for performance monitoring.

6.4b Reduction of the deficit of the CPSP (Price Stabilization Board) by 10% by December 1984.

6.4c Reduction of outstanding seasonal agricultural credit through a reimbursement of 10 billion CFA by December 1984.

Section 6.5 Periodic Consultations. Grantee and AID agree to meet periodically, but no less than annually, to discuss the progress of the implementation of the aforementioned covenants, to discuss the status of the economy, associated economic issues and the relationship of the AID program to those matters.

Article 7: Termination; Remedies

Section 7.1. Termination. This Agreement may be terminated by mutual agreement of the Parties at any time. Either Party terminate this Agreement by giving the other Party thirty (30) days notice.

Section 7.2. Suspension. If at any time:

(a) Grantee shall fail to comply with any provision of this Agreement; or

(b) Any representation or warranty made by or on behalf of Grantee with respect to obtaining this Grant or made or required to be made under this agreement is incorrect in any material respect; or

(c) An event occurs that AID determines to be an extraordinary situation that makes it improbable either that the purposes of the Grant will be attained or that the Grantee will be able to perform its obligations under this agreement; or

(d) Any disbursement by AID would be in violation of the legislation governing AID; or

(e) A default shall have occurred under any other agreement between Grantee or any of its agencies and the Government of the United States or any of its agencies;

Then, in addition to remedies provided in AID Regulation 1, AID may:

(1) suspend or cancel outstanding commitment documents to the extent that they have not been utilized through irrevocable commitments to third parties or otherwise, or to the extent that AID has not made direct reimbursement to the Grantee thereunder, giving prompt notice to Grantee thereafter;

(2) decline to issue additional commitment documents or to make disbursements other than under existing ones; and

(3) at AID's expense, direct that title to goods financed under the Grant be vested in AID if the goods are in a deliverable state and have not been offloaded in ports of entry of the Republic of Sennegal.

Section 7.3. Cancellation by AID. If, within sixty (60) days from the date of any suspension of disbursements pursuant to Section 7.2, the cause or causes thereof have not been corrected, AID may cancel any part of the Grant that is not then disbursed or irrevocably committed to third parties.

Section 7.4. Refunds.

(a) In addition to any refund otherwise required by AID pursuant to AID Regulation 1, if AID determines that any disbursement is not supported by valid documentation in accordance with this Agreement, or is in violation of United States law, or is not made or used in accordance with the terms of this Agreement, AID may require the Grantee to refund the amount of such disbursement in U.S. dollars to A.I.D. within sixty (60) days after receipt of request therefore. Refunds paid by the Grantee to AID resulting from violations of the terms of Agreement shall be considered as a reduction in the amount of AID's obligation under the Agreement and shall be available for reuse under the Agreement if authorized by AID in writing.

(b) The right to require such a refund of a disbursement will continue, notwithstanding any other provision of the Agreement, for three (3) years from the date of the last disbursement under this Agreement.

Section 7.5. Nonwaiver of Remedies. No delay in exercising or omitting to exercise, any right, power, or remedy accruing to AID under this Agreement will be construed as a waiver of such rights, powers, or remedies.

Article 8: Miscellaneous

Section 8.1. Implementation Letters. From time to time, for the information and guidance of both parties, AID will issue Implementation Letters and Commodity Procurement Instructions describing the procedures applicable to the Implementation of the Agreement. Except as permitted by particular provisions of this Agreement, Implementation Letters and Commodity Procurement Instructions will not be used to amend or modify the text of this Agreement.

Section 8.2. Representatives. For all purposes relevant to this Agreement, the Grantee will be represented by the individual holding or acting in the Office of the Minister of Plan and Cooperation and AID will be represented by the individual holding or acting in the Office of the Director, USAID/Senegal, each of whom, by written notice, may designate additional representatives. The names of the representatives of the Grantee, with specimen signatures, will be provided to AID, which may accept as duly authorized any instrument signed by such representatives in implementation of this Agreement, until receipt of written notice of revocation of their authority.

Section 8.3. Communications. Any notice, request, document or other communication submitted by either Party to the other under this Agreement will be in writing or by telegram or cable, and will be deemed duly given or sent when delivered to such party at the following address.

To the Grantee:	Ministry of Plan and Cooperation Dakar, Senegal
Mail Address:	Ministry of Plan and Cooperation Dakar, Senegal
To AID:	Director, USAID Dakar, Senegal
Mail Address:	USAID c/o American Embassy B.P. 49 Dakar, Senegal

All such communications will be in French unless the Parties otherwise agree in writing. Other addresses may be substituted for the above upon giving of notice. The Grantee, in addition, will provide the USAID Mission with a copy of each communication sent to AID/Washington.

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Section 8.4. Information and Marking. The Grantee will give appropriate publicity to the Grant as a program to which the United States has contributed, and mark goods financed by AID, as described in Implementation Letters.

Section 8.5. Language of Agreement. This Agreement is prepared in English and French. In the event of ambiguity or conflict between the two versions, the English version will control.

IN WITNESS WHEREOF, the Grantee and the United States of America, each acting through its duly authorized representative, have caused this Agreement to be signed in their names and delivered as of the day and year first above written.

REPUBLIC OF SENEGAL	UNITED STATES OF AMERICA
BY:______________________	BY:______________________
TITLE:___________________	TITLE:___________________

ANNEX C

SUMMARY OF GOS DECLARATION ON ECONOMIC POLICY (1980)

ANNEX C

SUMMARY OF GOS DECLARATION ON ECONOMIC POLICY (1980)

A. Introduction

In order to redress the economic situation in Senegal and in recognition of the long-term structural nature of Senegal's economic difficulties, the GOS adopted in the course of 1980 a comprehensive medium-term plan for economic policy reform. The plan calls for the following general measures:

- improved management of public finances, of the parapublic sector and of external debt, to ensure the implementation of an adequate public investment program without compromising Senegal's credit-worthiness;
- the introduction of a restrictive and selective credit policy;
- the introduction of a new foreign trade policy;
- a more systematic reliance on market mechanisms and economic incentives to encourage private investment;
- a reorientation of the national investment program towards the most productive sectors and projects; and
- the introduction of institutional reforms in the rural sector.

B. Public Finances

As a means of moving towards a balanced budget and of restoring a sound financial situation the GOS undertakes (1) to maintain the rate of growth of current government expenditures below that of current revenues and (2) to progressively reduce the share of outlays on personnel.

The GOS will progressively cut back its financial participations and reduce the role of public enterprises in the economy. Public enterprises will operate within the framework of program contracts designed to establish functions, objectives and responsibilities of the GOS and various public enterprises, especially in the financial area.

C. Money and Credit

A restrictive credit policy will be continued through increases in interest rates, where necessary, and the use of a system of advance authorizations for credit requests of or above CFAF 70 million (approx. $245,000).

D. Balance of Payments and External Debt

A priority goal is to reduce the balance of payments deficit to a manageable level in the long-term (e.g. 6-7% of GDP). The key to success lies in limiting imports while expanding and diversifying exports. This is to be accomplished through the progressive introduction of an increase in import duties and a selective export subsidy to encourage sectors that offer real export possibilities (e.g. textiles, knitted goods, fertilizers, agricultural equipment and canned fish products.)

The GOS will make every effort to limit the yearly service on external public debt to 15% of export earnings. Commercial borrowing will be used only for directly productive projects.

E. Prices and Wages

The GOS will continue to implement the policy of "true economic prices". Except for four sensitive food products (rice, bread, sugar and groundnut oil) and producer prices for certain crops, all prices will be subject either to preliminary approval, to monitored reporting, or will be entirely uncontrolled as of the end of 1980. Producer prices for groundnuts and cotton will be fixed each year at the highest possible level compatible with the anticipated export price and intermediate costs to the GOS, though the Price Equalization and Stabilization Fund will attempt to avoid excessive price fluctuations for basic necessities, particularly cereals.

The GOS will keep wage level increases within the limits of the projected growth in GDP and domestic consumption in coming years. Annual wage adjustment will be based on 60% of the rise in the consumer price index since the previous wage increase, plus the growth in real terms of per capita GDP over the same period.

F. Investment Policy

Under the Sixth Plan (1981-85), the GOS will attempt to increase the investment rate through:

- maintenance of fixed investment at an average just below 17% of GDP, and 10% of GDP for public investment;
- allocation of 55% of investment to directly productive sectors; and an
- increase in the contribution of public savings from 15% of public investment at the beginning of the period to 25% by the end of the period.

The economic rate of return on investments must be improved through a judicious choice of projects. Thus an internal economic rate of return will be calculated in accordance with standard rules, which will then be compared to the estimated opportunity cost of capital in Senegal. Planning authorities will be strengthened. Improved monitoring of public sector projects will allow corrective measures to be applied, where necessary.

G. Actions in the Agriculture Sector

GOS policy in the rural sector has the following priority objectives:

- the development of food crops to decrease import dependency;
- an increase and diversification of agriculture production;
- the encouragement of farmers to accept more responsibility by providing them with extension services and training in cooperative organisation; and
- an increase in the incomes of farm families.

1. Incentive prices in agriculture

The GOS has taken major steps by setting and maintaining remunerative prices for groundnuts and cotton. Levies on groundnut sales are now limited to the amount sufficient to cover fertilizer subsidies. The aim of future pricing will be to adapt producer prices of export products to medium-term world market prices while taking into account the need to maintain a proper balance among the producer prices of various agriculture products.

To achieve the goal of food self-reliancy, the pricing policy for cereals (e.g. millet) is designed to provide an incentive and to keep prices in line with those of export products. The GOS' long-run aim is to stimulate a nationwide cereals market through the removal of physical obstacles to the free circulation of cereals (e.g. lack of feeder roads). GOS intervention in the millet market is to be restricted to stockpiling and minimizing seasonal fluctuations in food supply. The consumer prices of imported food products are determined by import costs.

2. Reorganization of regional and national rural development institutions

Groundnut marketing will be the responsibility of the cooperatives, which will deliver their production directly to the oil crushers. The cooperative movement has become the responsibility of the regional rural development agencies, under the guidance of the Ministry of Rural Development. Although the public sector will retain responsibility for input distribution in the immediate future, this function will be progressively transferred to the suppliers of inputs, the regional societies and the cooperative movement. The village sections should be strengthened, particularly in seed management.

Pending the strengthening of village sections the GOS has created a new agency (SONAR) to supply farmers with inputs. Financial mechanisms are being set up so that SONAR does not have to provide financing for fertilizer subsidies. The GOS has set up a study group to suggest the most efficient structure and management of SONAR and proposals for partial or total recovery of its recurrent charges from beneficiaries.

In view of the dissolution of ONCAD (Office National de Coopération et d'Assistance au Developpement) the GOS has made arrangements to draw up a liquidation statement by the end of the first half of 1981, to make arrangements for settling ONCAD's liabilities vis-a-vis its suppliers and the banks, and to report on former ONCAD personnel who have been retired by public or parapublic enterprises.

The regional rural development institutions will become the principal agents providing assistance to the cooperatives and promoting rural development. This will require the setting up of flexible manangement systems capable of working closely with village communities. A new internal structure for SAED, based on autonomy of the irrigated perimeters and participation by the farmers in their management, is being developed.

In the context of strengthening regional and national rural development institutions, program contracts will be agreed between the agencies and the GOS. The program contracts will set forth action programs allowing each agency the autonomy for staff recruitment and management but requiring cuts in personnel in line with needs and financial resources. The restructuring of the rural sector should be accompanied by a general review of the organization and personnel needs of the sector as a whole.

3. Reorganization of the Price Equalization and Stabilization Fund

The GOS has abolished subsidies for consumer goods through CPSP and intends to increase the price of these goods in line with cost increases. A study of the financial management will be made and will examine ways of assisting farmers adversely affected by the drought without resorting to debt cancellation, which would undermine the basic principles of agriculture credit. The GOS will adopt the principle that the CPSP should, under normal conditions, finance the subsidies it pays out from the financial surpluses on imported and exported commodities that pass through this organization. If there is an exceptional shortfall of funds the Treasury would supply the CPSP, for a limited period, with sufficient funds to continue its operations.

4. Reorganization of distribution of seeds and other agriculture inputs

The quality of seed stocks has seriously deteriorated and the management of the seed credit program has suffered from the same accounting irregularities as agriculture credit accounts. SODEVA is to undertake trials aimed at expanding village seed storage capacity and disseminating knowledge of established methods of seed protection. Management of seed stocks is to be progressively transferred to village sections. The GOS will establish mechanisms to link the regional rural development agencies with the ordering and distribution of inputs. Direct delivery of inputs by manufacturers to small farmers will be introduced.

5. Overhaul of agriculture credit

An audit of cooperative accounts in the peanut basin is to be carried out and presented to the GOS. Terms of credit will be tailored to the size of the farm and the categories of equipment ordered. Loan recovery will be reinforced by restoring the link between marketing and production. The terms of reference for a study on reorganization of agriculture credit have been approved.

6. Overhaul of groundnut collection and weighing operations

The marketing of groundnuts by ONCAD in the past has led to considerable losses. The GOS has decided to make the cooperatives responsible for quantity and quality control at their level, and oil crushers responsible for losses occurring after the delivery of the product to marketing depots.

7. Encouragement of private enterprise in marketing

The State monopoly of millet distribution has been abolished; the rice monopoly has been transferred to CPSP, which will operate through private traders; and marketing of maize and sorghum will remain in the private sector.

8. Creation of village sections within cooperatives

In order to provide a sounder basis for a system of joint and multiple liabilities with respect to credit and to ensure farmer participation the GOS and the regional rural development agencies will encourage the formation of village sections within the cooperatives. Village sections will be made more effective through a functional literacy program for their representatives.

9. Reorganization of agriculture research

The GOS will continue a policy of improvement in agriculture research, but with a new emphasis on the constraints faced by small farmers through an interdisciplinary research program. The research will be organized by natural region; (a) the fleuve region for irrigation and mixed crop and livestock farming; (b) the pasture area for extensive stockraising; (c) the groundnut basin fpr intensive rainfed agriculture and the existing association of crop cultivation with livestock; and (d) Casamance for intensive stockraising and farming systems based on paddy rice.

ANNEX D

SUMMARY OF MAJOR REQUIREMENTS UNDER THE
IMF STANDBY AGREEMENT AND THE WORLD
BANK STRUCTURAL ADJUSTMENT LOAN

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SUMMARY OF MAJOR REQUIREMENTS UNDER THE IMF STANDBY AGREEMENT AND THE WORLD BANK STRUCTURAL ADJUSTMENT LOAN

A. Introduction

Since the introduction of the World Bank Structural Adjustment Loan (SAL) in late 1980 the World Bank and the IMF have been working together closely to ensure that the major requirements under these two agreements are compatible and, where possible, mutually reinforcing. The IMF standby arrangement which must be renegotiated annually has since 1981 incorporated the major outstanding requirements under the SAL. In the division of labor between these two institutions, the IMF has concentrated on the macroeconomic aspects of economic stabilization while the World Bank has assumed responsibility for monitoring agriculture and institutional reforms.

B. General Objectives

The pace of adjustment as defined in the GOS Declaration of Economic Policy in 1980 has proved to be overly ambitious in terms of the responsiveness of the Senegalese economy. Thus the objectives for stabilization have been revised downward. The GOS under the current program (approved by the IMF Executive Board in November 1982) is striving for:

- a reduction in the external current account deficit from 15% of GDP in 1982 to 12.4% in 1983; and

- a reduction in the public finance deficit from 9.4% of GDP in 1981/82 to 7% in 1982/83.

C. Public Finances

1. Requirements in the area of public finances focus on: (1) increasing government revenue; (2) reducing current expenditures; and (3) limiting credit expansion especially as regards the banking system's net claims on the Government. As a means of increasing government revenue the GOS has agreed to:

   a. increase fiscal duty on imports by 5% and improve tax collection which should increase at the same pace as GDP;

   b. increase taxes on alcoholic beverages by 30%; and

   c. increase the tax on Kola nuts from CFAF 95/Kg to CFAF 150/Kg.

2. In order to contain public expenditures the GOS has undertaken to:

   a. control recruitment so that the wage bill increases by less than 7% in 1982/83;

   b. study measures of reducing the rate of growth of public sector employment to 1% in 1983/84;

c. increase the ex-refinery prices for petroleum products by at least 14%; and

d. reduce the deficit of the Price Equalization and Stabilization Fund from CFAF 20 billion in 1981/82 to CFAF 10 billion in 1982/83.

3. Total domestic credit is to expand by no more than 14% over the year from July 1st 1982 to June 30th 1983 with growth in net government claims on the banking system limited to about 20%. Over the same period the GOS is expected to reduce its arrears by CFAF 12.6 billion (approximately $35 million).

D. External Sector

Measures required to prevent further deterioration in the balance of payments include (1) containment of growth in imports (2) an increase in the subsidy rate for nontraditional exports and (3) limits on new external public borrowing. One of the objectives behind the commitment to increase the fiscal duty on imports by a further 5% is to restrict the increase in imports to about 11% in CFAF terms. The subsidy rate on certain exports is to be increased to 15% of the f.o.b. value of exports. The subsidy is to be extended to market-garden produce, food and mechanical products and other areas where Senegal has excess production capacity.

New government and government-guaranteed external borrowing with maturities of 1-12 years is to be limited to SDR 20 million (approximately $22 million) over the period from July 1st 1982 to June 30th 1983. New borrowings with maturities of 1 to 5 years are to be limited to SDR 2 million (approximately $2.2 million) over the same period. As a means of providing short-term relief for the GOS with respect to debt service payments, a rescheduling of external public debt with maturities falling due in 1982/83 and nonguaranteed bank debt for maturities falling due in 1981/82 and 1982/83 is to be sought under the auspices of the Paris Club.

E. Actions in the Agriculture Sector

The major thrust of actions to be taken in the agriculture sector involves ways of improving the efficiency and reducing intermediate costs in the groundnut sector. A team of experts is to be set up to improve the accounting system of the Price Equalization and Stabilization Fund[1] (a major institution in the agriculture sector) and the financial control of the transactions between the Fund and other pertinent organizations.

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1 Caisse de Péréquation et de Stabilisation des Prix (CPSP)

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1. Groundnut sector: price compensation and marketing

Since the producer price for groundnuts is fixed while the export price is variable, the financial equilibrium of the sector may have to be assured through a system of levies (paid by oil crushing firms to the CPSP in the event of an export price that is above the producer price plus intermediate costs) or of subsidies (paid by the CPSP to the oil crushing firms in the event of an export price that is below the producer price plus intermediate costs). The amount of subsidy or levy is to be determined at the beginning of the marketing season and adjusted at the end of it in accordance with movements in export prices.

In the case of groundnut oil and mixed oils sold on the domestic market there might also be a need for a similar system of levies or subsidies if the domestic selling prices fixed by the government are above or below production costs. In regulating prices, the GOS is to try to avoid granting subsidies for domestic oil consumption, save for exceptional cases.

Before each crop season opens in mid-November, a contract is to be concluded between the oil producers and the CPSP to determine the amount of subsidies or levies. For exported products the levy or subsidy is to be expressed in CFAF/Kg of unshelled groundnuts and is subject to adjustment in the following September. For domestically consumed oil the levy or subsidy is to be expressed in CFAF/liter ex-factory.

The oil crushing firms are to assume responsibility for the primary marketing, processing, and export of groundnut products beginning at the start of the 1982/83 crop year. Attention is to be given to the possible savings that could be made by simplifying the marketing system through the rationalization of the collecting system, the reduction of overhead expenditures and the elimination of intermediaries.

2. Groundnut sector: seed distribution

The GOS is to announce a new seed distribution policy prior to October 1, 1982. This new policy is designed to make it possible for farmers to choose between holding back their own seeds or obtaining them from a national stockpile. In the first case, farmers are to receive a bonus of CFAF 80 per kilogram of seeds held back, calculated on a pro rata basis to the amount of groundnuts they have marketed. In the second case, farmers are to receive seeds from a national stockpile, also on a pro rata basis to the amount they have marketed. The seed stockpile is to amount to 120,000 metric tons for the coming crop year, of which at least 20,000 tons are to be seeds held back by the farmers themselves. The national stockpile is to be gradually reduced over future crop seasons and should not exceed 40,000 metric tons by 1986/87. At the same time, studies on the reorganization of the production and distribution of groundnut seeds are to be pursued with a view of avoiding the need for any subsidy in a normal year.

3. Fertilizer

Beginning November 1, 1982 fertilizers are to be sold for cash at a price averaging CFAF 50 per kilogram, but which can vary depending on the type of fertilizer. The Government will authorize the Société Industrielle des Engrais du Sénégal (SIES) (privately owned fertilizer mixing plant), within the framework of a program contact system, to make its own arrangements for fertilizer marketing. In addition, the Government undertakes gradually to reduce the amount of subsidies granted for fertilizers. It will study the possibility of reducing the amount of the annual subsidy by 25 per cent over the coming crop year.

4. SONAR

SONAR's (Société Nationale d'Approvissonnement Rural) operating budget is to be taken over by the Central Government in 1982/83 under Treasury operations. Its accounts are to be audited by the Central Accountant for the Public Agencies, ("Agent Comptable Central des Etablissements Publics"), and its expenditure commitments are to be authorized by the Controller for Financial Operations ("Contrôleur des Opérations Financières"). Since SONAR will be relieved of its responsibilities as regards the distribution of fertilizers, its staff is to be reduced. In fiscal year 1982/83 no permanent staff is to be recruited and the number of temporaries is to be reduced to 5,000 man/months, representing a decrease of about 40 per cent compared with the previous year.

5. Sugar

The prices for milk sugar are to be raised 50 per cent effective November 1, 1982. In addition, the Government is to re-examine its agreement with the Senegalese Sugar Company (Compagnie Sucrière Sénégalaise), before December 15, 1982, and is to adjust prices as necessary to eliminate any subsidy in 1982/83.

ANNEX E

ECONOMIC, TECHNICAL, AND FINANCIAL JUSTIFICATION FOR FERTILIZER IMPORTS

ANNEX E

ECONOMIC, TECHNICAL, AND FINANCIAL JUSTIFICATION FOR FERTILIZER IMPORTS

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ANNEX E
ECONOMIC, TECHNICAL, AND FINANCIAL JUSTIFICATION FOR FERTILIZER IMPORTS

EXECUTIVE SUMMARY

A. Conclusions

1. Fertilizer application in Senegal is economically viable as indicated by the favorable value cost ratios and the foreign exchange earnings and savings created by fertilizer use.

2. Fertilizer demand is clearly sufficient for the amounts proposed in the PAAD of 12,000 mt of urea, and 5,000 mt of sulfur for the fertilizer mixing plant. Demand estimates by the Ministry of Rural Development and the private sector firm responsible for distribution of the urea and the mixed fertilizer confirm this.

3. Rural Development Agencies, such as SODIFITEX (cotton) and SAED (rice), are a stable source of fertilizer demand; while in the peanut basin, SODEVA (peanuts and millet) is being replaced by a private sector marketing arrangement and demand is difficult to predict.

4. Private sector distribution of fertilizer by the private firm (SSEPC) arranged for by the Government demonstrates a willingness to move towards privatization of fertilizer distribution and marketing.

B. Background

Senegal's fertilizer consumption has dropped drastically in recent years due to four major reasons:

- The removal of credit after the dismantling of the parastatal ONCAD in late 1980.

- An increase in prices to the farmer (100% between 1982 and 1983) requested by IMF/World Bank as the first step in reduction of subsidy levels financed by the GOS.

- The absence of an organization capable of managing the various functions of a nationwide marketing system.

- The confusion in the minds of farmers as to the Government's future intentions regarding supply of inputs, fertilizer subsidies and possible resumption of credit.

Nevertheless, the need for fertilizer is substantial. The amount of nutrients extracted by crops is much higher than amounts applied to the soils with fertilizers. Thus, the present decrease in fertilizer application is contributing to a progressive decrease in soil fertility.

C. Economic Profitability

Further, The economic profitability of fertilizer use has also been clearly established: Based on IFDC curves of yield increase per unit of nutrient[1], the value cost ratios of fertilizer use for four major crops, in four different regions, using six different price hypotheses have been determined. (For details, see Tables 10, 11, and 12.) The general conclusions that can be drawn from these analyses suggest that:

- from the farmers' point of view, fertilizer is profitable on most crops except groundnuts in the drier, northern part of the country.

- from a macroeconomic view point, fertilizer is clearly a good investment, in particular, if we consider the foreign exchange earned or saved.

D. Demand

An estimate of fertilizer need nationwide, based on the most pessimistic hypotheses, calls for an annual application of 115,000 tons of compound fertilizer and 70,000 tons of urea, while this year's estimated consumption (1983-84 season) is approximately 28,000 tons of compound fertilizers and 10 - 12,000 tons of urea.

E. Eliminating the Constraints

The constraints on fertilizer consumption are, therefore, not due to a lack of economic profitability, they are institutional. This is where AID through its fertilizer import program, has an opportunity to work with the GOS to take the difficult measures needed to eliminate the institutional constraints. The important fertilizer consumption constraints to be addressed are:

- Coordination between research and farm extension services
  USAID/Senegal has assisted in establishing signed working agreements between these services and field technicians are participating in the conduct of improved field trials on farmers fields. Inclusion of fertilizer trials along the lines recommended by IFDC (i.e., phosphate rock and nutrient sulfur are to be included in the further development of this program).

- Input and Output prices
  The continued increase in farm commodity prices (60 CFAF/kg. for rice, 55 CFAF/kg. for millet and 50 CFAF/kg. for corn, announced on May 1, 1983 for the 1983-84 crop season) raise the incentive for increased production and therefore, fertilizer use. At market prices which are 20 - 40% above the official prices the input/output ratio is even more favorable than that used in the analysis of this paper. The USAID will continue to support incentive prices as a means of stimulating increased production.

1 IFDC (International Fertilizer Development Center, Mussel Shoals, Alabama) research carried out in Senegal in 1976-77.

- Credit

  Fertilizer supply has been directly linked to agriculture credit until recently in the peanut basin and continues to be in the other regions of the country. The new credit organization has not been established nor have operating procedures been drafted in sufficient detail to predict the credit impact on future levels of fertilizer use. USAID is involved in the consideration of the credit system and anticipates GOS pilot programs in 1983-84. Sound and economical lending practices are important to increasing fertilizer use and priority is being given to improving the credit system for these reasons. However, at current levels of the import program, the limited credit supply is not considered a critical factor.

- Marketing system

  By transfering the responsibility for fertilizer distribution to the private sector, the GOS has taken a major step forward in putting this industry under good management. The GOS policy is to convert all fertilizer distribution and marketing to the private sector but has not elaborated this policy in terms of either organizational structure or time frame for the rice and cotton production areas. USAID involvement with several regional development agencies (RDA's) provides a working relationship for assisting in the transfer of fertilizer marketing from the RDA to the private sector. The fertilizer marketing study proposed in this paper will provide a reference and master plan for this transfer of responsibility. The objective of this transfer will be a more responsive and economical arrangement for fertilizer supply to Senegal's farmers. In this case, the interim stage of reorganization is not seen as a critical constraint within the import and use targets of this project.

In summation, the U.S.-financed fertilizer imports in this PAAD will provide a basis for regular policy level dialogue with the Government at senior levels. It will offer an opportunity to counsel and assist the GOS in taking the difficult, but necessary, decisions needed to alleviate the above mentioned constraints.

FIGURE 1: RAINFALL SENEGAL (1960-1975)

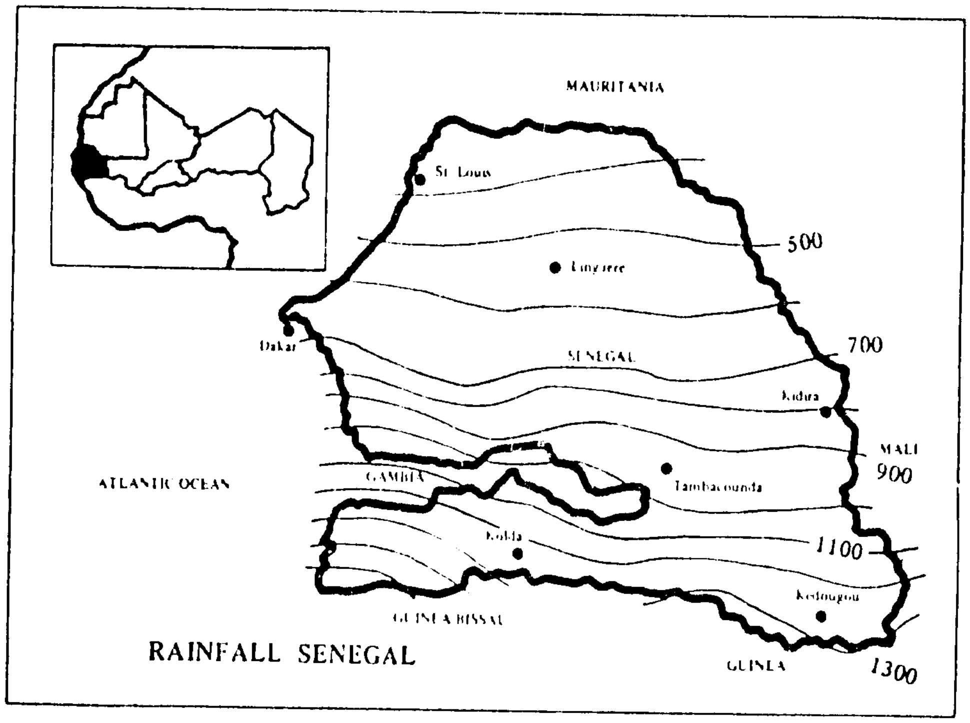
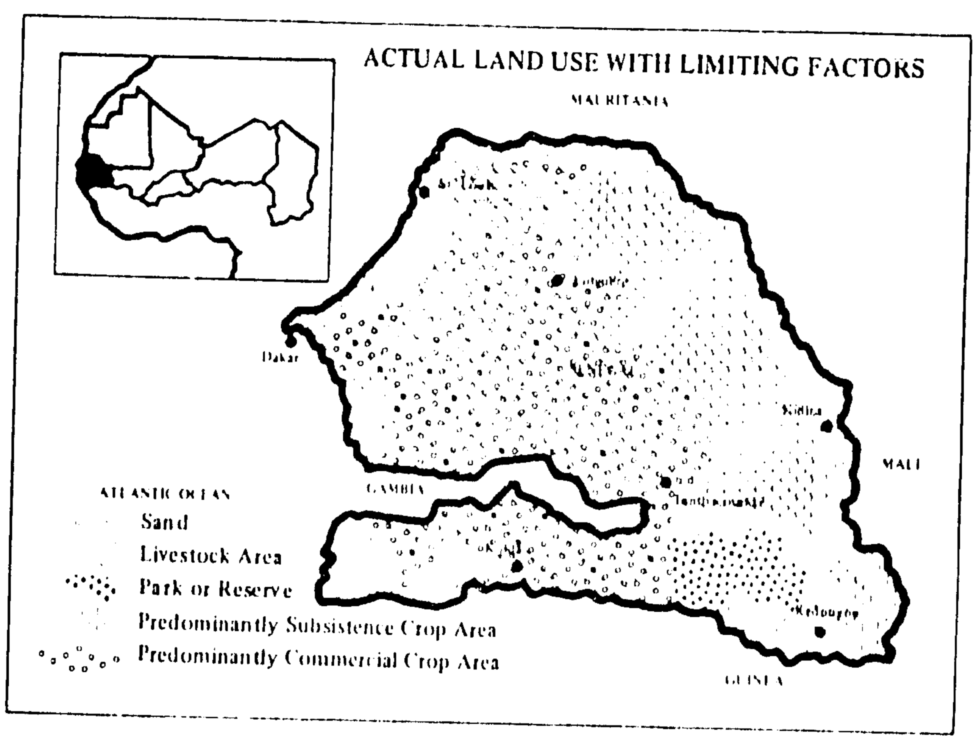


FIGURE 2: ACTUAL LAND USE WITH LIMITING FACTORS



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ANNEX E
ECONOMIC, TECHNICAL, AND FINANCIAL JUSTIFICATION FOR FERTILIZER IMPORTS

I. FERTILIZERS IN THE SENEGALESE AGRICULTURE SECTOR

A. The Agriculture Environment

Senegal is situated on the western edge of the Sudanese climatic zone. The climate varies widely in temperature and the length of the rainy season increases moving inland. Mean annual rainfall ranges from 300 mm. in the north to about 1500 mm. in the South (See Figure 1).

All main agriculture soils of Senegal are ferruginous tropical soils. These soils are predominant in the central and southern groundnut basin and middle Casamance. Dominant soils in eastern Senegal are shallow over a ferruginous crust. Deep soils suitable for cropping are found in valleys. Soils are more weathered and less course in texture in the southern region. All land use reflects a predominantly subsistence crop production pattern. That is, the extended family ("carré") cultivates a collection of fields ("exploitation") under the responsibility of the head of the family. Typically, crops are grown on 50 - 80% of the exploitation. The remaining land is cultivated by nuclear families and the women for their own benefit. (See Figure 2.)

B. The Farming System

The farming systems in Senegal are described in some detail in Chapter VIII Background Description, particularly sections B.2 and B.3 which describe the agriculture sector and the key elements of the GOS strategy to deal with agriculture sector problems. The section points out the serious problems created by irregular rainfall, the problem of soil depletion, the economic consequence of overdependence upon the peanut crop, the malfunctions of the regional development agencies and cooperatives, the future of the agriculture credit system and the problems that have been experienced in agriculture pricing. The following sections of Chapter VIII summarize the bold program which the GOS undertook and notes the specific actions in implementing the program.

In this changing setting USAID proposes that a fertilizer import program can produce several important benefits. The basic infrastructure for fertilizer production, distribution and use is in place. The farmers generally understand fertilizer use, in fact its price and supply is often mentioned in political debate. Fertilizer application is now economical and is likely to continue so under any forseeable combination of events in the near future (note Section II, "Economic Justification of Fertilizer Use", which follows). While there are a number of constraints which will hinder the use of fertilizer, USAID (working closely with the GOS) can significantly modify these and facilitate increased fertilizer use.

The fertilizer technology in Senegal was thoroughly studied in 1975/76 by the International Fertilizer Development Center. (1) Upon receiving a request from the Ministry of Rural Development for assistance in fertilizer imports

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the USAID requested an update by IFDC in 1982. (2) This analysis was further up-dated in 1983. (3) The IFDC analysis stated that the agriculture enterprises of Senegal can usefully increase fertilizer use from the 1975 levels of 92,909 metric tons. The IFDC cooperated with the GOS in fertilizer trials and demonstrated response to fertilizer use of 5-14 kg. of cereals per kg. of fertilizer nutrient. Responses varied considerably among locations and the results of only two years were reported thus one should be cautious in the use of the IFDC observation. However the results provide an indication that fertilizer is indeed beneficial and the analysis of this paper further demonstrates its economy.

In study of the implications of assistance with fertilizer use and supply USAID has noted a number of constraints, as suggested by the Mission staff, USAID technicians, consultants and other agriculture specialists. The following section reports our analysis of the nature of the most commonly mentioned critical constraints over the time frame of this project.

C. Research and Development

One of the problems has been a lack of communication and difference of approach between the development services and research organizations. At the level of fertilizer use, this is seen in the discrepancies between formulas recommended by researchers and those recommended by the Ministry of Rural Development and the extension services. The difference of opinion is between the long-term and the short-term. The national research institute's (ISRA) basic position is that in order to maintain the long-term fertility of the soil, the amount of nutrients brought to the soil should be at least equal to the amount of nutrients taken out by the plants. The Ministry of Rural Development's (MRD) view is that the amount of nutrients to be put in should be the amount necessary to maximize the financial return to fertilizer use given price constraints.

However, in recent years, under the influence of USAID, relations between the research and certain extension arms have improved significantly. An agreement was signed between SODEVA and ISRA in 1980 aimed at coordinating research findings with development needs.

D. The Role of the State

The influence of the State has been somewhat pervasive in many aspects of rural production activities. With respect to fertilizers, GOS influence is particularly important in terms of credit and price fixing for both inputs and outputs.

1. Credit

The dissolution in 1980 of the National Office for Cooperation and Assistance for Development (ONCAD, see Annex G), which was responsible for agriculture credit (mainly in the peanut basin), has meant an almost complete disappearance of rural credit which in turn has led to considerable decrease in fertilizer consumption. During the 1980/81 season, 57,400 tons of fertilizer products were sold in Senegal. The following season fertilizer consumption decreased to 39,000 tons; and during the 1982/83 season, (when fertilizers were sold on a cash basis) consumption dropped to approximately 15,000 tons.

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2. Pricing policy

Prices of both inputs (fertilizers) and outputs (cereal grains and export crops) are fixed by the GOS. The price of fertilizer have been heavily subsidized (See Table 6).

Although the GOS has fixed prices, Table 3 shows that there has been no long-term stable relationship between the ratio of fertilizer input prices and crop output prices. The ratio of peanut prices divided by fertilizer prices has varied from 1.07 to 3.46 during the period of 1965 to 1982.

This lack of consistent pricing policy is surprising given the good correlation between the price ratio and the consumption of fertilizer for groundnuts two years later (See Table 4). However, this correlation becomes less consistent after 1977 because: (1) due to the decaying credit system, farmers could take delivery of fertilizers knowing that they might possibly avoid eventual payment, and (2) in 1978/79, the GOS entered a period of financial uncertainty and was unable to fund the subsidy nor pay the supplier for fertilizer.

The fertilizer price to the farmer was increased 100% between 1982 and 1983, and the World Bank reform package projects additional reduction in the fertilizer subsidy and increase in price to the farmer. Profitability of fertilizer use under these changed conditions is analyzed below (See Hypothesis 4 pages F16 and 18).

E. Eliminating the Constraints

The constraints of fertilizer consumption are not a result of fertilizer economics at the micro and macro-level, but are institutional in nature. AID through this fertilizer import program and related activities in other country projects is able to address several of these. While major institutional reform can not be expected within a one year program the combination of resources is expected to have significant effect and facilitate increased levels of fertilizer use and more effective application. The important fertilizer consumption constraints to be addressed are:

- Coordination between research and farm extension services
  USAID/Senegal has assisted in establishing signed working agreements between these services and field technicians are participating in the conduct of improved field trials on farmers fields. Inclusion of fertilizer trials along the lines recommended by IFDC (i.e., phosphate rock and nutrient sulfur, are to be included in the further development of this program).

- Input and Output prices
  The continued increase in farm commodity prices (60 CFAF/kg. for rice, 55 CFAF/kg. for millet and 50 CFAF/kg. for corn, announced on May 1, 1983 for the 1983-84 crop season) raise the incentive for increased production and therefore fertilizer use. At market prices, which are 20 - 40% above the official prices, the input/output ratio is even more favorable than that used in the analysis of this paper. The USAID will continue to support incentive prices as a means of stimulating increased production.

- Credit

Fertilizer supply has been directly linked to agriculture credit until recently in the peanut basin and continues to be in the other regions of the country. The new credit organization has not been established nor have operating procedures been drafted in sufficient detail to predict the credit impact on future levels of fertilizer use. USAID is involved in the consideration of the credit system and anticipates GOS pilot programs in 1983-84. Sound and economical lending practices are important to increasing fertilizer use and priority is being given to improving the credit system for these reasons. However, at current levels of the import program the limited credit supply is not considered a critical factor.

- Marketing system

By transfering the responsibility for fertilizer distribution to the private sector, the GOS has taken a major step forward in putting this industry under good management. The GOS policy is to convert all fertilizer distribution and marketing to the private sector but has not elaborated this policy in terms of either organizational structure nor time frame for the rice and cotton production areas. USAID involvement with several regional development agencies (RDA's) provides a working relationship for assisting in the transfer of fertilizer marketing from the RDA's to the private sector. The fertilizer marketing study proposed in this paper will provide a reference and master plan for this transfer of responsibility. The objective of this transfer will be a more responsible and economical arrangement for fertilizer supply to Senegal's farmers. In this case also the interim stage of reorganization is not seen as a critical constraint within the import and use targets of this project.

F. The Fertilizer Sector Today

1. Fertilizer production: SIES

The Industrial Fertilizer Company of Senegal (Societé Industrielle des Engrais du Senegal - SIES) will remain the only company producing chemical fertilizers in the country until Chemical Industries of Senegal ("Industries Chimiques du Senegal" - ICS) becomes operational in 1984. Capital participation in SIES is as follows:

- SSEPC (Societe d'Engrais et de Produits Chimiques)	21.57 %
- International Finance Corporation (World Bank)	17.98 %
- Societe Kalt und Salz A.G.	10.79 %
- EMC (Entreprise Minière et Chimique)	10.04 %
- SCPA (Societe Commerciale des Potasses et de l'Azote)	4.35 %
- Societe Senegalaise des Phosphates de Thiès	8.99 %
- Compagnie Senegalaise des Phosphates de Taiba	3.59 %
- BNDS (Banque Nationale de Developpement du Sénégal)	9.89 %
- Other Senegalese Banks	4.50 %
- Others	8.30 %
	100.00 %

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EMC and SCPA, both companies of a French private group called Mines de Potasses d'Alsace (MPA) are majority shareholders of SSEPC (90%). Therefore, Mines de Potasses d'Alsace is also the major shareholder of SIES through its different participations. As will be seen below, MPA is also involved in the new ICS project.

The SIES chemical fertilizer plant has been on stream since 1968 and produces superphosphate, DAP, and mainly NPK complex fertilizers with a capacity of approximately 60,000-120,000 mt of product, depending on NPK grades.

The plant consists of four production units: sulfuric acid, phosphoric acid, superphosphate, and granular DAP/NPK.

The sulfuric and phosphoric acid plants have design capacities of 200 mtpd H_2SO_4 and 70 mtpd P_2O_5, respectively, and use sulfur and phosphate rock as raw materials.

The superphosphate plant has a design capacity of 300 mtpd and can produce either SSP by reaction between sulfuric acid and phosphate rock or TSP by reaction between phosphoric acid and phosphate rock.

The NPK granulation plant has a design capacity of 300-600 mtpd, depending on fertilizer grades, by using the following raw materials: superphosphate (SSP and/or TSP), sulfuric acid, phosphoric acid, ammonia, potassium chloride, and Phosphal (calcined aluminum phosphate). This granulation plant can also produce DAP by reaction between phosphoric acid and ammonia.

The SIES factory includes a bagging unit of 800 mtpd (24 hours). Raw materials storage capacities are 2,000 mt for ammonia, 10,000 mt for sulfur, 10,000 mt for potassium chloride, and 15,000 mt for phosphate rock. Storage capacity for bulk and bagged products is 34,000 mt.

Fertilizer production from the SIES plant increased from 34,000 mtpy in 1971/72 to 100,000 mtpy in 1976/77 then decreased sharply to the 1982/83 level of about 15,000 mtpy due to a combination of external factors affecting demand, including credit and changes in the distribution system.

a. GOS/SIES Agreement (The "Convention d'Etablissement")

Since compound fertilizer production costs are higher than the price paid by farmers, the relationship between the State and SIES has had to be formalized. The agreement defines in particular the way costs of fertilizers are computed in order for SIES to be reimbursed by the State. The fixed costs are considered to be covered on the basis of a production of 60,000 tons to which are added variable costs and a 6% margin for profit. The Agreement also states that the Government must purchase at least 30,000 tons of fertilizers from SIES each year. Therefore, SIES loses money if the consumption of compound fertilizers in Senegal is below 60,000 tons, but is guaranteed at least the payment for 30,000 tons per year.

Minor exports, between 5-10% of production, made by SIES are not taken into account in this calculation. The only export possibility at present world prices for SIES is triple super phosphate made with local

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products and sold in small lots to neighboring countries. Such exports are only possible for SIES if all fixed costs are charged against local sales with the exports covering only variable costs. It is therefore a form of export subsidy.

b. The Program Contract("Contrat Plan"):

In 1982 the World Bank asked the Government, in the context of the structural adjustment program, to sign a program contract ("contrat plan") with SIES/SSEPC. Several reasons dictated this approach:

First, the State, through ONCAD and SONAR[1] owed approximately 2.5 billion CFAF to SIES for past campaigns (which were finally reimbursed almost completely in 1982). The signature of a program contract under the aegis of the World Bank was seen as a guarantee that further undue delays on repayment would be abolished.

Second, the State had agreed in the context of the Economic Reform Plan that SONAR would be phased out of the fertilizer distribution business to be replaced by the private sector. The program contract was seen as a means of designating the responsibility of the different participants in this new approach.

This program contract was signed in January 1983. It specifies, as far as SIES is concerned, the dates at which the State is to order from SIES, the prices (based on the operative agreement), and the financial arrangements (down payments representing 30% of the 1983/84 season were to be paid in early 1983). As of April 1983, the down payments had not yet been paid to SIES, and consequently SIES decided not to honor the Government's order until payment was received.

c. Raw material supply and prices of final products

Except for phosphate rock, which is produced locally at Taiba and Thiès, all other raw materials, such as ammonia, sulfur and potassium chloride are imported.

Ammonia comes from Europe at a high freight cost. Indeed the storage capacity at the plant is limited to 2,000 tons and consequently shipments are of only 1,500 tons each. Such small shipments are difficult to obtain and cost more. This situation should change in the near future as ICS will have an additional storage capacity of 9,000 tons.

Sulfur is bought through a French broker and originates in Poland.

KCL is bought in France from the parent company of SIES, (i.e. EMC/Mines de Potasses d'Alsace).

1 SONAR - National company for supply of inputs to the rural sector.

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SIES has no long-term contracts for the supply of raw materials, and therefore could be supplied from the U.S. market.

Table 5 indicates the FOB and CIF prices paid by SIES compared with the FOB and CIF prices for the same products from U.S. markets. U.S. FOB prices are competitive or sometimes lower than international prices for sulfur, KCL and urea. However, U.S. flag rates make the cost per ton landed in Dakar (CIF) 30-35% higher than the same quality and quantity of fertilizer shipped on non-U.S. flag vessels.

Table 6 presents the level of subsidy on fertilizer prices (around 60%) for all fertilizer grades except DAP. DAP is produced with local products and carries a subsidy of less than 50%.

Table 7 compares SIES prices with international prices so as to determine if Senegal would not be better off importing compound fertilizers rather than having them mixed in the country. If we take into consideration the 15% customs tax which is paid by SIES on imported raw materials, SIES prices are equal or lower than CIF Dakar plus customs tax prices.

2. Fertilizer Marketing: SSEPC

The Senegalese Fertilizer and Chemical Products Company, a private company, is a 90% subsidiary of EMC. For the 1983/84 season, it will replace (on request from AID/IMF/World Bank) the parastatal SONAR for distribution of both compound fertilizers produced by SIES and imported fertilizers (urea, KCL).

Given the difficulty involved in setting up a network of independent distributors at the national level in one year, SSEPC will have to utilize the services of the Regional Development Agencies (RDA's) and contracts have been signed with each.

The number of sales depots per RDA is as follows:

SODEVA	96	(Peanut Basin)
SAED	38	(River Basin)
SOMIVAC	62	(Casamance)
STN	5	(Northern Coast-Market Gardening)

In addition SSEPC has 5 sales depots of its own.

It is too early to have a complete idea of how this new marketing arrangement is going to work as specifics are evolving. Since it is the RDA's personnel which are used of the sales depots, it is not yet clear how they will deal with this additional amount of work and what sales procedures will be followed.

The broad outline of a possible marketing organization for subsequent years will be presented later in this paper.

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3. Sales forecast for the campaign 1983/84

In a note dated April 1, 1983 by the Ministry of Rural Development, a forecast of fertilizer sales of 58,498 mt, based on the data furnished by the RDA's was proposed. (See Table 8)

However, this GOS note specified that the World Bank, which finances the subsidy on fertilizer, considers these figures as too large and has limited its participation to the financing of a total tonnage of 30,000 tons.

SSEPC itself has made the following sales forecasts:

Fertilizer Grade	Quantities
14.7.7	8,000 tons
6.20.10	4,000 tons
8.18.27	7,500 tons
Other NPK	3,500 tons
Total NPK	23,000 tons
Urea	10,000 tons
KCL	5,000 tons
Total	38,000 tons

Some sales are guaranteed as in the case of SAED and SODEFITEX.

SAED puts fertilizer on the irrigated perimeters; its needs are for 4,500 tons of urea and 3,000 tons of DAP. SODEFITEX sells fertilizers on a credit basis to farmers for cotton; its needs are 5,000 tons of KCL, 1,500 tons of urea and 7,500 tons of 8.18.27. For the other RDA's, consumption will be a direct function of the attitudes of the farmers, the biggest unknown being the peanut basin.

The USAID feels that the SSEPC estimates are the most accurate since SSEPC is in direct contact with its sales outlets which in turn are in daily contact with RDA's, cooperatives, farmer groups, and private buyers. It should be noted that the imports financed under this PAAD in the fall of 1983 will be used for the campaign 1984/85. Fertilizer imports must arrive in Senegal in February/March 1984 to be in time for the first rains that will begin in late May or early June 1984.

G. The Fertilizer Sector Tomorrow

1. Supply: ICS (Chemical Industries of Senegal)

SIES' "Agreement with the GOS" comes to an end in July 1983. Before that time, if all financial problems between SIES and GOS are solved, SIES assets will be incorporated into the new company: Chemical Industries of Senegal (Industries Chimiques du Senegal - ICS).

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ICS share capital is as follows:

State of Senegal	22.7%
State of Ivory Coast	9.2%
Federal State of Nigeria	9.2%
State of Cameroon	9.2%
Islamic Development Bank	9.2%
Indian Farmers Fertilizers Corp. Ltd., Southern Petro-Chemical Industries, Corp., Indian Government	18.4%
Societe Commerciale des Potasses et de l'Azote (SCPA), and (SSEPC)	9.2%
Compagnie Senegalaise des Phosphates de Taiba	6.4%
Senegalese Bank and Insurances	5.6%
Other	0.9%
TOTAL 25 Billions CFAF or about $69.4 million	100.0%

This company is, therefore, a regional joint effort from several African developing countries, and also a "south-south" effort to produce phosphoric acid and derived products to cover these developing countries own needs, in collaboration with the private sector.

The management of this company is the responsibility of the same French private group which owns SIES and SSEPC, i.e., Entreprises Miniere et Chimique (EMC).

For marketing of the production, a company called SENCHIM (50% share to EMC, 50% to ICS) has been created, and the network of SCPA (a subsidiary of EMC) will be used to sell the production in other African countries. (By contract, India will buy half of the ICS production. Exports are expected to be 212,000 tons of solid fertilizers and 200,000 tons of phosphoric acid to India.)

ICS is clearly profit oriented and will be managed as a private firm; even though a good share of the capital belongs to developing states, the marketing function is entirely in the hands of the private sector.

ICS will have a yearly production capacity of:

- 630,000 tons of sulfuric acid,
- 480,000 tons of phosphoric acid,
- 45,000 tons of triple super phosphate (TSP),
- 165,000 tons of diammonium phosphate (DAP)

and in addition, the SIES facility will remain operational.

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ICS expects to obtain very competititve prices both for raw materials, TSP, and DAP fertilizers due to economies of scale of the new manufacturing facilities.

For raw materials they intend to sign long-term contracts with suppliers in order to obtain very favorable prices. However, these long-term contracts would not cover all supply needs since ICS will purchase a certain percentage of its supplies on the spot market (it is therefore not an obstacle to importation of U.S. goods under a commodity import program).

For compound granulated fertilizers, they expect their prices to be 15% lower than present SIES convention prices for two reasons:

- economies of scale on supplies and production processes; and
- differences in the method of calculation of the cost prices. (SIES computed the fixed cost on the basis of about half of the production capacity of the factory. In ICS' case, fixed costs will be divided by the total production of ICS which is expected to be much closer to full capacity).

Urea will continue to be imported separately. The amounts needed are expected to increase substantially as more farmers follow the recommended application rates. A long-term (3-5 year) supply agreement could reduce landed costs.

It is conceivable that in the future a part of the TSP and DAP produced by ICS could be utilized on the local market for direct application. These products could be blended with nitrogen in the form of granular urea and potassium in the form of granular potassium chloride, to furnish the proper NPK nutrients recommended by research and extension.

For future years, this alternative supply scheme needs to be studied in-depth to see if it is more economical than the existing supply scheme of conventional chemical granulation now operated by SIES, and if no technical problems arise.

2. Marketing

For Senegal's internal fertilizer market, SSEPC will remain the marketing agent for the 1984-85 season, but SENCHIM may take over this function in the future (though it represents only a change in title since both companies are subsidiaries of EMC). While the future marketing system has not been seriously examined by the GOS, the general principle of assigning the marketing distribution function to the private sector has been accepted.

II. ECONOMIC JUSTIFICATION OF FERTILIZER USE IN SENEGAL

Section I has been essentially a description of the fertilizer sector in Senegal. This section deals with the economic profitability of fertilizer use.

Two view points need to be analyzed:

(a) Is fertilizer profitable from the point of view of the farmer?

(b) Is it profitable from the viewpoint of the country as a whole?

The methodology to evaluate these economic returns is straight forward: the value cost ratios generated by the use of fertilizers are calculated. The values will be the increase in yield (Y) resulting from the application of fertilizer multiplied by the price (P_p) at which the production is sold. The cost will be the number of kilos of fertilizer (F) applied multiplied by the price per kilo of this fertilizer (P_f)

Therefore

$$R = \frac{Y \times P_p}{F \times P_f}$$

P_p and P_f can vary to take into account different hypotheses. The basic information needed is the effect of fertilizer nutrients on crop yield in Senegal.

This curve is a function of the formula $Y = aF^2+bF+c$
with Y = crop yield in kilos
and F = amount of nutrient applied in kilos.

On the basis of this curve, and knowing the respective prices of nutrients and crops, it is possible to make recommendations on the amount of nutrients to apply in order to maximize the return on investment.

A. The Information Available

Studies on yield response to fertilizer have been made for more than 30 years in Senegal. The Research Institute for Oils and Oilers ("Institut de Recherche pour Les Huiles et Oleagineux - IRHO") conducted multi-rate trials for peanuts between 1951 and 1966 in the peanut basin. The Institute of Research for Tropical Agriculture (" Institut de Recherche pour l'Agriculture Tropicale - IRAT") conducted trials in the fifties on both peanuts and millet. The FAO has also conducted trials from 1961 to 1966. The data is now somewhat out of date as the soil composition has changed and seed varieties have been improved since that time.

More recently the Senegalese Institute of Agronomic Research ("Institut Senegalais de Recherche l'Agronomique - ISRA") has been (and is) conducting trials. However, to our knowledge the information is not readily available.

In 1976 and 1977 SODEVA conducted trials for both groundnut and millet in the peanut basin. This data has been analysed by the International Fertilizer Development Center (IFDC), in order to arrive at regional recommendations for fertilizer use by crop. This data is the most recent available and has been employed on this analysis. Although trials were conducted in a systematic manner, the data has been criticized for different reasons. The most important one being that for that type of study two years data is not enough, especially since these two years received less rain than the (recent) average. Consequently the impact of fertilizer has probably been underestimated. The second criticism which is probably linked to the first one is that some of the results obtained are in disagreement with previous research. IFDC recommends a very low or zero application of N on peanuts in some regions. This is criticized by the Ministry of Rural Development/SODEVA, which considers that a minimum of N is necessary at the early stages of peanut growth. However, with these reservations, the IFDC study is the most recent and best organized one available.

B. Hypotheses for the Value Cost Ratios

1. Crops and regions

Four crops are considered: peanuts, millet, rice and cotton which represent about 97% of the total area cultivated.

For millet and groundnut the IFDC data will be utilized: i.e. four regions will be considered: north basin, central basin, north Sine Saloum, south Sine Saloum. The IFDC equations for yield increase according to applied NPK are utilized in the computations.

For rice, data on dryland production (eastern Senegal) and Casamance production are considered.

Cotton is only produced in Eastern Senegal.

2. Fertilizer grades and nutrients

The recommendations proposed by GOS/extension services and IFDC will be utilized in our computations. (See Table 9.)

3. Prices

The different hypotheses taken into account are determined by different prices considered.

The first three hypotheses are made from the farmer's point of view and the last three from the Government's point of view.

Hypothesis 1 - takes into consideration the official prices of both fertilizer and output. Prices of fertilizers for the 1983/84 season to the farmers have been established by Circular 4549, dated December 14, 1982, of the Ministry of Rural Development. However, since all fertilizer grades recommended by GOS and IFDC are not on this list, estimates of prices for these grades have been made by a comparative method. Concerning crop prices, 60 CFAF/kg. price for groundnuts is used, which is the amount of money the farmers actually receive in cash. For cotton, two prices are established: first choice is 68 CFAF/kg, and second choice is 55 CFAF/kg. The average of both prices, i.e. 61.5 CFAF has been retained in the computation.

Hypothesis 2 - considers the situation towards which the Government has promised to go, i.e. a reduction of the subsidy on fertilizer prices to 25% of the real cost. The real cost paid by GOS is established according to the SIES convention prices to which must be added the average transportation and handling costs from SIES factory to farm gate (i.e. the cooperative depot). This price has been established at 21 CFAF per kilo by an IFDC Team in 1982. For this hypothesis, output prices remain fixed at existing official prices.

Hypothesis 3 - (concerns only millet)- most millet is produced for local consumption, however, in recent months millet prices have increased considerably, due to a shortage of supply following a bad crop in 1982/83. In these conditions, farmers might be motivated to produce more millet than is necessary for their own consumption for sale at the end of the dry season when prices will be at their maximum. We will therefore retain a price of millet which represents the existing market price. In Kaolack and Thies, the price of millet on the markets have varied between 62.5 and 90 CFAF/kg. In Dakar, the millet price has reached the same price as rice, i.e. 125 CFAF/kg. A rather conservative estimate of 75 CFAF/kg. will be retained with the fertilizer prices remaining at their official value.

Hypothesis 4 - takes the point of view of the community as a whole and compares the unsubsidized costs of fertilizers (i.e. SIES convention prices plus 21 CFAF/kg. for transportation and handling charges), with the unsubsidized value of the products generated by these fertilizers, i.e. the world market prices of crops, CIF Dakar for rice and millet (which are imported) and FOB for groundnuts and cotton (for export crops).

- Since there is no world market for millet, sorghum world prices have been used.

- Since there is no world market for the peanut itself but only for processed groundnuts, the figure used is derived from the quantity of groundnuts used per liter of oil.

- An exchange rate of $1 = 340 CFAF has been used. Since all calculations have been made prior to the French Franc/CFAF devaluation of March 1983, the result in the context of this hypothesis is that it underestimates the value of output as compared to the inputs and therefore underestimates (by about 5 to 10%) the resulting value cost ratios.

  Senegal has made an agreement with Thailand at the end of 1982 for the supply of broken rice at a cost per ton of $177 FOB; if we add $50 for shipment costs, we arrive at a price of 77 CFAF/kg.

- Douala FOB price for fiber cotton is 400 CFAF. 1 kg. of fiber cotton equals 3 kilos of seed cotton. Therefore the FOB price for seed cotton is around 133 CFAF.

Hypothesis 5 - looks at the foreign exchange benefit cost ratios. The import content of the fertilizer recommended is compared with the world market value of the crops. The import content for fertilizer has been determined for each formula, knowing the price at which SIES imports its fertilizer components, N and K_2O, and the price of indigenously produced P_2O_5. In addition, the equivalent of 20 CFAF per kilo of fertilizer has been added to cover fixed foreign exchange costs like expatriate salaries, equipment costs, energy, etc.

Hypothesis 6 - takes into consideration the new cost price at which ICS is going to be able to produce fertilizer at the end of 1984, i.e. 15% below SIES prices. These prices are compared with the world market value of crops as in hypothesis 4.

C. Analysis of the Results

Tables 10, 11, and 12 give a summary of the value cost ratios obtained with the different hypotheses.

1. Farmers viewpoint

For hypotheses 1, 2, and 3, which represent the farmers' point of view, the value cost ratios should at least be equal to two according to international standards (FAO, IFDC) in countries like Senegal. Otherwise the risk is too high to be taken by the farmers. In the drier areas, like the North Basin, this ratio should be equal to 2.5 or 3 to take into account the risk of drought.

At existing official prices of both inputs and outputs (hypothesis 1) the use of fertilizer is profitable for millet, rice and cotton, even if the present instructions of the GOS extension services in terms of quantities and formulas are used. However, for groundnuts one should proceed with much more care. The GOS recommendations are inadequate for the North and Central Basin, but the use of small quantities of TSP as suggested by IFDC allows for a reasonable return in these rather dry areas.

In hypothesis 2, where the prices of fertilizer have been increased significantly to limit the Government subsidy to 25%, while the output prices are maintained at official levels, the use of fertilizer remains profitable for millet, particularly if research recommendations are followed. But on peanuts, fertilizer should not be used under these price constraints.

In hypothesis 3, the use of fertilizer on millet is profitable in all areas.

2. Economic viewpoint

From an economic point of view, the value cost ratios (V/C) should be higher than 1 plus a small percentage representing the opportunity cost of capital for the country. We will consider that ratios higher than 1.1 are satisfactory.

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Hypothes 4 - is the most unfavorable one since unsubsidized fertilizer costs produced at expensive prices are compared with the presently low international market prices for crops produced in Senegal (except for cotton). It appears that, even under these unfavorable conditions, the use of fertilizer remains profitable in almost all cases. The only exception is for groundnuts in the northern part of the country when extension recommendations are applied (as in the case of hypothesis 2).

Hypothesis 5 - compares the amount of foreign exchange spent on fertilizer imports to the amount of foreign exchange earned, or saved due to this import. This criteria, given Senegal's balance of payments problems, is obviously very important. The results are satisfactory for all products in all regions of the country.

Hypothesis 6 - takes into account the reduction in cost prices obtained by ICS on NPK fertilizers. This economy is estimated at 15% of SIES present cost prices. The ratios obtained, although better than those of hypothesis 4, are not significantly different.

3. Issues

The above analysis shows that it is in the interest of both the farmers and Senegal as a whole to apply fertilizer on most of its crops and in most regions. The only limitations appear on peanuts in the drier areas of the country where, with a low rate of subsidy, it would not be profitable to use fertilizer.

The question which appears at this point is the following:

Would such limitation on fertilizer use for peanuts in some areas imply that a fertilizer program is not worth it at the country level?

Table 13 - addresses this question. This table indicates the areas in hectares cultivated by region for each type of crop (for 1980/81 growing season). On this basis, and using IFDC recommendations for NPK and urea, the need for fertilizer is computed for each region.

However, where the value cost ratio computed in hypothesis 2 (i.e. 25% subsidy only on fertilizers) is lower than 2, it is supposed that the farmers would not want to buy fertilizer.

Consequently, it is supposed that no fertilizer is applied on groundnuts, and none on millet in the Fleuve and Louga areas; no fertilizer is applied on dryland rice nor on cotton.

Even with these rather drastic assumptions, Senegal's fertilizer needs would remain about 115,000 tons of compound fertilizers and over 70,000 tons of urea.

The value cost ratios for groundnuts have been estimated very conservatively since only the value of the increase in yields for the nut have been taken into account. No yield increases for straw were included, although straw plays a very important role for cattle feeding in the peanut basin (value of straw is about 1/3 value of nut).

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It must also be underlined that, in terms of foreign exchange (earnings or savings), the use of fertilizers is very profitable.

Table 14 shows that a $4.25 million import of fertilizer would permit Senegal to earn or save at least $7.4 million in foreign exchange. This is a conservative estimate given the assumption used in the computations. In particular it is assumed that a lack of millet on the market would be filled by sorghum imports, when it is well known that an absence of millet creates an increase in rice imports. With this new assumption the earnings and savings of foreign exchange would be of nearly $9 million.

III. CONCLUSIONS

As for many sectors of activities in developing countries, the fertilizer sector in Senegal proves to be economically viable in itself, as was indicated by the value cost ratios and the foreign exchange earnings or savings created by fertilizer use; but the main difficulties lie in the organizational and institutional framework. However, in the long run, the prospects for this sector are reasonably good for 3 major reasons:

A. The GOS has taken a firm commitment to privatize the fertilizer sector and to work towards a system of true pricing.

B. The new ICS fertilizer manufacturing company which comes onstream in 1984 should be able to decrease in a significant manner the fertilizer prices.

C. Generally the farmers are realizing, because they have not used fertilizer in the past 2 years, that it is useful and needed.

USAID support to finance imports of fertilizer raw materials would help Senegal at least at 3 levels:

1. First, as a direct balance of payments relief.

2. Second, as an indirect balance of payments relief through the foreign exchange earnings and savings.

3. Finally, by the policy level sectoral changes that USAID will be, and has been, in a position to discuss with the Government which might help to accelerate the recovery of this economically strategic sector.

TABLE 1

ESTIMATED REMOVAL OF NUTRIENTS FROM SOILS OF SENEGAL 1982/83

	Production a/ (tons)	Nutrient Content (tons) N	P_2O_5	K_2O
Groundnuts	880,000	11,210 b/	5,573	13,394
Cereals	700,000	19,012	5,810	33,460
Total (1982/83)		30,222	11,383 c/	46,854

a/ Entire above ground portion removed.
b/ The one-third of total N that must come from soil.
c/ Due to fixation in the soil, about 3 times this amount must be applied for plants to take-up this amount.

Source: IFDC Calculation

Table 2

ESTIMATED NUTRIENT APPLICATION AND LOSS IN SENEGAL

Year	Product (tons)	Nutrient Application (tons) N	P_2O_5	K_2O
1975	83,899	10,966	13,462	12,997
1976	106,321	14,282	17,371	18,580
1982/83	38,000	7,120	4,100	6,085
Nutrient removal in 1982/83		30,222	11,383	46,854
Loss of nutrient in 1982/83		23,102	7,283	40,759 a/

a/ Most occurs in crop residue.
NOTE: Total Table 1 - Table 2 line for 1983/84 = Loss in 1983/84.

Source: IFDC Calculation.

TABLE 3 THE GROUNDNUT: FERTILIZER PRICE RATIOS COMPARED TO FERTILIZER USE IN SENEGAL 1965-1982

	Years																	
	65-66	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80	80-81	81-82	82-83
Peanut Price (CFAF/kg)	20.5	20.5	17.1	17.1	17.1	17.1	18.5	22.0	25.5	41.5	41.5	41.5	41.5	41.5	45.5	50	60	60
Fertilizer Farmgate Price (CFAF/Kg)	12	13	14	16	12	12	12	12	12	12	16	20	25	25	25	25	25	50
RATIO	1.71	1.58	1.22	1.07	1.42	1.42	1.54	1.83	2.12	3.46	2.59	2.07	1.66	1.66	1.82	2.00	2.40	1.20
Fertilizer Used (tons)	26100	38400	48200	25900	12800	6500	12500	23100	19900	29500	46700	57300	* 34000	* 43000	* 32000	* 28000	* 19000	

* Estimated on the basis of a use of fertilizer on peanuts representing 50% of total consumption.

TABLE 4

Groundnut: Fertilizer Price Ratio Compared to Fertilizer Use on Groundnut 1965-1982

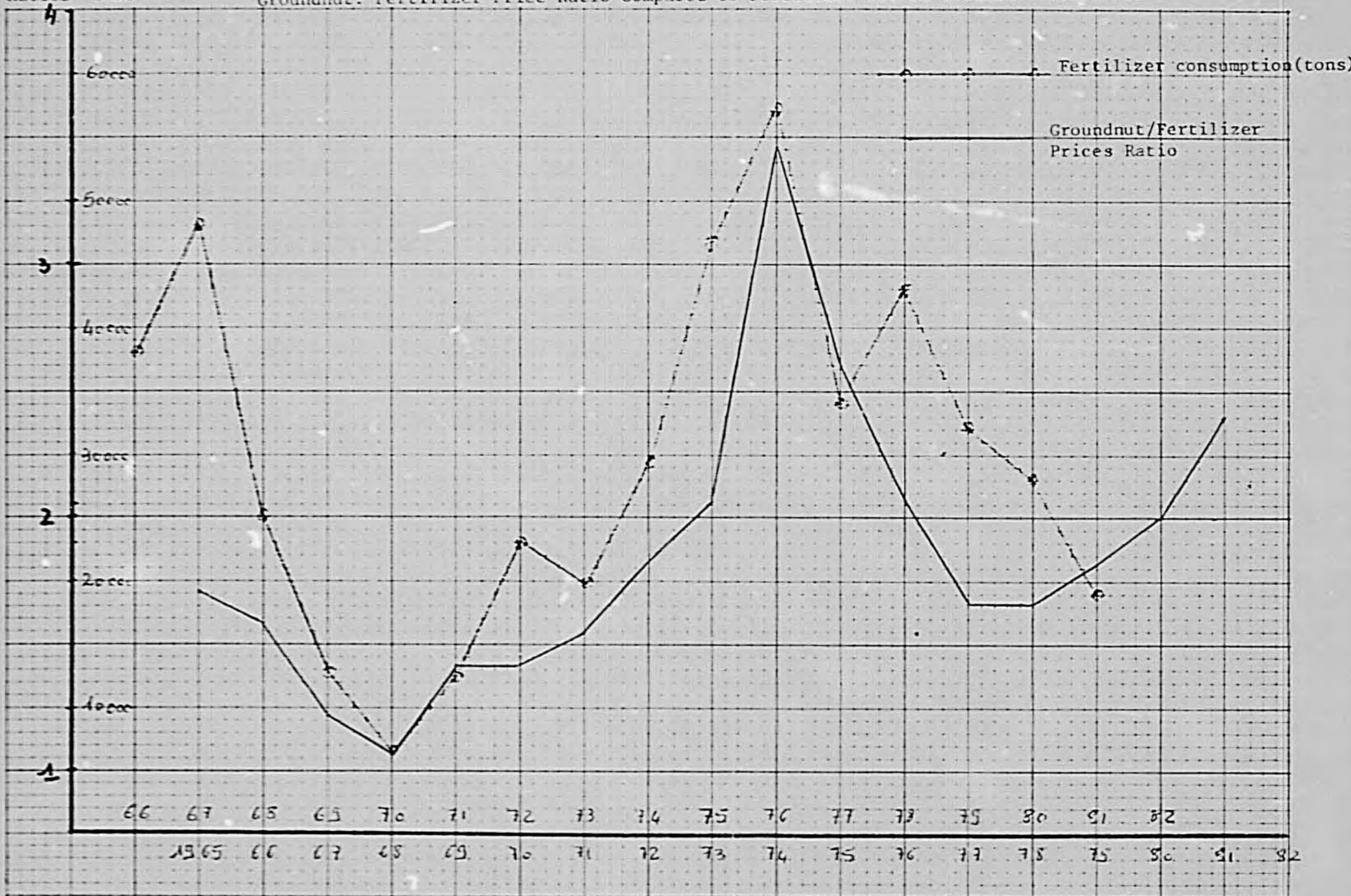

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TABLE 5

COMPARISON OF PRICES PAID BY SIES WITH US MARKET PRICES

	Prices paid by SIES in 1983 FOB	CIF Dakar	U.S. Market Prices FOB	US Flag	Non-US Flag
Ammonia	$170	$283	$140		
Sulfur	$106	$130	$105[1]	$220	$150
KCL		50,000 FCFA = 139 dollars	$ 85	$200	$130
Urea (bulk)[2]	$125	$155	$125	$240	$170

1 Secton VI E 3(e) entitled Value of Transaction uses a slightly higher FOB price of $115 for sulfur since the prices represent different time periods. The actual price will depend on the responses to the IFB's in the fall of 1983.

2 Urea is in practice imported via SSEPC. Urea prices are presented here only for comparative purposes.

Source: IFDC and SIES

TABLE 6

COMPARISON OF GOS/SIES CONTRACT ("CONVENTION") PRICES PAID BY THE FARMERS FOR 1983/84 Season

Formulas	Convention prices CFAF/kg	Convention prices plus transp. cost 25 CFAF/kg[1]	Prices paid by farmers	Subsidy In CFAF	Subsidy In %
6-20-10	88.3	113.3	45	68.3	60.3
14-7-7	94.4	119.4	45	74.4	62.3
8-18-27	109.2	134.2	52	82.2	61.3
17-46-0	120.0	145.0	56	89.0	61.4
10-10-2	88.0	113.0	45	68	60.2
0-45-0	73.5	98.5	50	48.5	49.3
46-0-0 (Urea[2])	96	121.0	45	76.0	62.8

1 Including custom duties on raw materials.

2 Urea is in practice imported by SSEPC. Urea prices are presented here only for comparative purposes.
Source: Ministry of Rural Development.

TABLE 7

COMPARISON OF GOS/SIES ("CONVENTION") PRICES WITH INTERNATIONAL PRICES FOR SIMILAR GRADES

Formulas	SIES Convention Prices $/ton[3]	FOB US PORT $/ton	CIF Dakar US Flag $/ton	CIF Dakar Non-US Flag $/ton	CIF Dakar Non-US Flag plus 15% Customs duty $/ton
6-20-10	245	185	330	245	282
14-7-7	262	165	310	225	259
8-18-27	303	210	355	270	311

3 Rate of exchange used: $1 equals 360CFAF

Source: IFDC.

TABLE 8

FERTILIZER SALES FORECAST FOR 1983/84

Fertilizer	In Stock (tons)	To be Produced By SIES (tons)	To be Imported (tons)	Total (tons)
6-20-10 Groundnut	5854	9146	---	15,000
14-7-7 Millet-Sorghum	3669	6331	---	10,000
8-18-27 Other Cereals	2,163	4,037	---	6,200
18-46-0 Rice SAED	---	2,400	---	2,400
Urea	---	---	10,000	10,000
8-18-27 +BO (Cotton)	---	7,500	---	7,500
Potassium Chloride (Cotton/cereals)	---	---	5,500	5,500
Other Formulas	1,898	---	---	1,898
Total	13,584	29,414	15,500	58,498

Source: Ministry of Rural Development

TABLE 9

FERTILIZER NUTRIENTS AND GRADES RECOMMENDED IN SENEGAL FOR FOUR CROPS--1982

A. NUTRIENTS RECOMMENDED, Kg/ha

	North Basin	Central Basin	North Sine-Saloum	South Sine-Saloum
Millet				
Recommendation by:				
- GOS/Extension	55-36-18	55-36-18	55-34.5-30	55-34.5-30
- IFDC	30-27-0	67-32-0	51-40-17	34-39-40
Groundnut				
Recommendation by:				
- GOS/Extension	6-24-12	9-34.5-30	12-46-20	12-46-20
- IFDC	0-10-0	6-19-0	0-27-24	0-40-35

Rice

- Recommendation by research for Casamance: 81-27-40.5
- Recommendation by IFDC for dry land: 54-18-27

Cotton

- Recommendation by SODEFITEX: 35-54-81

B. QUANTITIES AND GRADE RECOMMENDED, Kg/ha

	North Basin	Central Basin	North Sine-Saloum	South Sine-Saloum
Millet				
Recommendations by				
- GOS/Extension	150x(6-24-12) +100U	150x(6-24-12) +100U	150x(6-23-20) +100U	150x(6-23-20) +100U
- IFDC	56x(16-48-0) +46U	67x(16-48-0) +122U	110x(12-36-15) +82U	150x(9-26-27) +45U
Groundnut				
- GOS/Extension	100x(6-24-12)	150x(6-23-20)	200x(6-23-20)	200x(6-23-20)
- IFDC	22x(0-46-0)	40x(16-48-0)	100x(0-27-24)	148x(0-27-24)

Rice		
Recommendation by Research (Casamance)		150x(8-18-27)+150 Urea
Recommendation by IFDC	Dryland	100x(8-18-27)+100 Urea
Cotton (SODEFITEX)		300x(8-18-27)+25 Urea

TABLE 10

Value Cost Ratios for Fertilizer Use According to Different Hypotheses

MILLET	NORTH BASIN	CENTRAL BASIN	NORTH SINE-SALOUM	SOUTH SINE-SALOUM
Recommendations by GOS				
Hypothesis 1 Official Prices	2.94	3.54	3.48	3.18
Hypothesis 2 Subsidy of 25% only	1,86	2,31	2,11	1.93
Hypothesis 3 Millet Price at 75 CFAF	4.40	5.32	5.22	4.77
Hypothesis 4 Fertilizer: No Subsidy; Crops: World Market Prices	1.22	1.47	1.39	1.27
Hypothesis 5 Foreign Exchange Content	2.38	2,87	2.62	2.39
Hypothesis 6 ICS Cost Price; Crops: World Market Prices	1.35	1.63	1.54	1.41
Recommendations by IFDC				
Hypothesis 1 Official Prices	4.92	4.13	4.21	3.72
Hypothesis 2 Subsidy of 25% only	3.12	2.89	2.48	2.14
Hypothesis 3 Millet Price at 75 CFAF	7.38	6.20	6.32	5.58
Hypothesis 4 Fertilizer: No Subsidy; Crops: World Market Prices	2.06	1.81	1.64	1.47
Hypothesis 5 Foreign Exchange Content	4.26	3.15	3.21	2.81
Hypothesis 6 ICS Cost Price; Crops: World Market Prices	2.27	1.94	1.82	1.67

TABLE 11

GROUNDNUT

Value Cost Ratios for Fertilizer Use According to Several Hypotheses

GROUNDNUT	NORTH BASIN	CENTRAL BASIN	NORTH SINE-SALOUM	SOUTH SINE-SALOUM
Recommendations by GOS				
Hypothesis 1 Official Prices	1.29	1.88	2.15	2.89
Hypothesis 2 Subsidy of 25% only	0.68	0.93	1.06	1.43
Hypothesis 3 Millet Price at 75 CFAF	-	-	-	-
Hypothesis 4 Fertilizer: No Subsidy; Crops: World Market Prices	0.58	0.79	0.90	1.21
Hypothesis 5 Foreign Exchange Content	1.63	2.03	2.32	3.11
Hypothesis 6 ICS Cost Price; Crops: World Market Prices	0.68	0.93	1.06	1.42
Recommendations by IFDC				
Hypothesis 1 Official Prices	2.45	2.76	2.98	3.27
Hypothesis 2 Subsidy of 25% only	1.73	1.46	1.75	1.92
Hypothesis 3 Millet Price at 75 CFAF	-	-	-	-
Hypothesis 4 Fertilizer: No Subsidy; Crops: World Market Prices	1.47	1.24	1.47	1.62
Hypothesis 5 Foreign Exchange Content	7.06	4.04	3.98	4.37
Hypothesis 6 ICS Cost Price; Crops: World Market Prices	1.73	1.46	1.75	1.92

TABLE 12

RICE AND COTTON

Value Cost Ratios for Fertilizer use According to Several Hypotheses

RICE AND COTTON

	Rice Casamance	Rice Dryland	Cotton SODEFITEX
Hypothesis 1 Official Prices	4.71	2.02	2.19
Hypothesis 2 Subsidy of 25% only	3.10	1.33	1.20
Hypothesis 3 Millet Price at 75 CFAF	-	-	-
Hypothesis 4 Fertilizer: No Subsidy; Crops: World Market Prices	3.16	1.35	1.92
Hypothesis 5 Foreign Exchange Content	5.34	2.29	4.13
Hypothesis 6 ICS Cost Price; Crops: World Market Prices	3.45	1.48	2.24

TABLE 13

IFDC recommendations: Estimated Fertilizer Needs by Region, Based On Area Cultivated Value Cost Ratios (Hypothesis 2)

	Casamance	Djourbel	Fleuve	Louga	S. Oriental	Sine-Saloum	Thies	TOTAL SENEGAL
Millet								
Surfaces ha	104,100	145,500	86,400	155,100	56,300	410,800	156,900	1,115,100
V/C ratios	2.00	2.31	1.86	1.86	2.00	2.00	2.11	
Fertilizers tons	15,600 + 4,700 U	9,700 17,800 U	-- --	-- --	3,800 + 6,900 U	53,300 25,900U	23,500 + 7,100 U	105,900 + 62,300 U
Groundnut								
Surface ha	76,900	136,000	3,800	177,200	57,100	462,900	150,300	1,064,200
V/C Ratios	1.92	1.46	1.73	1.73	1.92	1.80	1.75	
Fertilizers tons	0	0	0	0	0	0	0	0
Rice								
Surface ha	48,700		9,700		7,000	1,700	1,700	67,100
V/C Ratios	3.10		3.10		1.37	1.33	1.33	
Fertilizers tons	7,300 + 7300 U		1,500 + 1,500 U		0	0	0	8,800 + 8,800U
Cotton								
Surface ha	14,700				10,200	5,000		29,900
V/C	1.20				1.20	1.20		
Fertilizers tons	0				0	0		0
TOTAL								
Fertilizers Tons	22,900 + 12,000 U	9,700 +17,800U	1,500 +1,500U	0	3,800 +6,900U	53,300 25,900U	23,500 +7,100U	114,700 +71,200U

TABLE 14

Computation of Foreign Exchange Gain or Savings Due to Imports of $5 Million of Fertilizer as Components

Assumptions

- Import: in Senegal of 12,000 tons of Urea in bulk and 5,000 tons of Sulfur.
- It is assumed that the increase in yield resulting from the 5,000 tons of Sulfur is equivalent to the increase in yield obtained by the same quantity of urea.
-

Cost: Urea: CIF Dakar U.S. Flag	$250 x 12,000 = 3,000,000
50 kg. bags 50 cts each =	242,000 x 0.50 = 127.000
Sulfur: CIF Dakar U.S. Flag	$225 x 5000 - 1,125,000
	$ 4.250.000

- It is assumed that Urea will be applied on Millet according to IFDC recommendations.
- The increase in yields resulting from Urea application is determined by IFDC equations.
- It will be assumed that USAID Urea will be applied in the peanut basin area and that in each of the 4 subregions equal surfaces will receive Urea according to IFDC recommendations.

	NORTH BASIN	CENTRAL BASIN	NORTH SINE-SALOUM	SOUTH SINE-SALOUM	TOTAL
IFDC Urea Recommendation for Millet	46 kg	122 kg	82 kg	45 kg	
USAID Assumed Urea Distribution by Region (tons)	2,650	7,030	4,725	2,595	17,000
N Content by Region (46% of Urea tonnage)	1,219	3,234	2,173	1,194	7,820
Increase in Yield per kg of N (IFDC Equations)	6.1	6.8	7.2	6.3	
Increase in Yield in tons	7,436	21,991	15,646	7,522	52,595

- Millet International Market Price = sorghum market price = $115 FOB + $25 shipment = $140
- Foreign exchange saved in case of sorghum import $140 x 52,595 tons = $7,360,000
- Foreign exchange saved in case of rice import $227 x 3/4 x 52,595 tons = $8,950,000 (The 3/4 ratio is the comparative nutritive content of rice and millet.)

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ANNEX E

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ANNEX F

PROCEDURES AND CRITERIA FOR USE OF THE LOCAL CURRENCY

ANNEX F

PROCEDURES AND CRITERIA FOR USE OF THE LOCAL CURRENCY

A. Introduction

The following procedures assume that the Special Account at the Central Bank has been established, and that local currency (l/c) generated by the dollar disbursed for the $4.25 million in fertilizer imports has been deposited in the account, or is in the process of being deposited.

It also assumes that the Government has met the condition precedent section, which requires the GOS to name or establish a Joint Local Currency (or counterpart) Management Committee ("Comité de Gestion").

B. Local Currency Management

The GOS has agreed to use a l/c Management Committee to approve releases for specific activities from the above mentioned local currency (or counterpart) account. The Ministry of Plan has suggested that the existing l/c Management Committee already established by the GOS for the PL 480 Title III Program be used. This committee, which is composed of representatives from the Ministries of Plan, Finance, Commerce, and USAID, was organized in its present "streamlined" form one year ago, and is working well.

USAID favors this proposal. With some modest broadening of the Title III Committee mandate, and with some minor changes in operating procedures, it could be made to handle releases from all l/c funds generated from program assistance (ESF, SDF, PL 480).

The Committee will be able to invite representatives of the Central Bank and/or Technical Ministries to assist at committee meetings (as needed) when project financing proposals from the technical ministries are received for approval.

A prerequisite for presentation of any proposal to the l/c Management Committee for consideration will be that the proposed activity have the prior approval of the technical ministry concerned.

C. Local Currency Project Approval Criteria[1]

The following criteria will be applied by the Committee to determine whether or not an activity is eligible for obligation of funds:

1. Mandatory criteria for all activities

   - The manner in which the activity will be carried out shall be described.

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1 Copies of the criteria will be made available to the GOS technical ministry to assist them in preparing proposals for submission to the Joint Management Committee.

- The approximate dates of the activity will begin and end must be described.
- The site of the activity must be identified or criteria for selecting site set forth.
- Nature of goods and services to be provided must be identified.
- Costs of goods and services identified sufficiently to enable reasonably firm cost estimate.
- Where applicable, engineering or other technical planning necessary to carry out particular activity will be identified.

2. Economic criteria that should be taken into account:

- That projected costs and returns result in benefits sufficient for the target population to become involved in the activity.
- That the technologies being introduced and tested are appropriate for the local economic systems.
- Where applicable, that the agriculture support system is adequate, including availability of inputs, extension assistance and a marketing system for both inputs and outputs.
- That the costs are reasonable in relation to the expected number of beneficiaries.
- That recurrent costs and maintenance of the activity can be provided by the village or GOS.
- That an adequate administrative/organizational structure exists through which to implement the activity, including adequate staff, operating funds, and management procedures.
- That marketing opportunities are available for production activities undertaken.
- That for any livestock related assistance, village efforts and commitment to restocking be considered.

3. Environmental criteria

Since the counterpart belongs to the host government, there is no legal requirement for an environmental assessment for the l/c activities which will be proposed under this grant. However the USAID believes that the Committee should consider this important aspect along with the other points listed above; therefore the USAID proposes to send the Committee a set of AID's environmental guidelines including the special brochure on environmental considerations relating to Rural Roads (part of ESF project).

D. Opening of the Project or Activity Account

Once a activity has been approved by the Committee, the Central Bank will be asked to open a specific account for the activity. Each approval will contain specific instructions as to withdrawal procedures.

E. Reporting Requirements

It is proposed to use the reporting procedures already in place for the Title III l/c Management Committee. These procedures provide for quarterly financial and progress reports.

F. Evaluation Plans

The Joint Annual Evaluations of the progress will be held by the Committee at a time to be determined by the Committee. In addition to the annual program evaluation, each activity will be individually evaluated upon its completion to determine how well it achieved its purpose.

G. Audit

Normal GOS audit procedures will apply, with the Joint Management Committee free to request special audits where the "circumstances" so warrant.

H. Conclusion

Given the satisfactory experience with the existing Title III l/c Management Committee, since it was streamlined last year, no major difficulties are envisioned in broading its mandate and installing the above procedures.

ANNEX G.1

AGRICULTURE CREDIT AND SAVINGS BANK SUPPORT

ANNEX G.1

AGRICULTURE CREDIT AND SAVINGS BANK SUPPORT

A. Introduction

The equivalent of $ 1.8 million in CFA francs has been earmarked for support of the future Caisse Nationale de Credit Agricole de Senegal (CNCAS) provided that the study on credit and savings in Senegal clearly demonstrates that 1) credit is a real constraint on rural development, and 2) that a good approach to reducing this bottleneck is the establishment of a national rural credit institution operating outside of the GOS and not the sole provider of credit.

1. The CNCAS project

After the dissolution of ONCAD, which was the organization charged with the management of BNDS credit to the rural sector, the Prime Minister instituted a Working Group in charge of studying the rural credit reform. Most of the studies were made by or under the guidance of the French Caisse Centrale de Coooperation Economique (CCCE), with the help of the French Credit Agricole.

In late 1982 a Summary Report ("Rapport de Synthese") was published by the Working Group which defined the general philosophy behind this new credit institution, as well as the practical approach to be followed in order to avoid repetition of the problems encountered by ONCAD in the past.

Major characteristics of CNCAS as now proposed

a. Independence from the State

This institution should be free of any influence from the Senegalese Administration, in particular as far as lending decisions are concerned. This is a fundamental point since the failure of the past credit system was mainly due to the fact that, for political reasons, reimbursement of loans was not seriously enforced.

b. Scope of CNCAS

The credit institution should, once established, be able to assist in all aspects of the rural sector: agriculture, fishing, breeding, rural handicraft, agribusiness, and all activities related to the rural environment, including trade. In addition, it should also attract savings.

c. Nature of the borrowers

Five types of borrowers are expected:

- Individuals with collateral
- Private firms
- Production Groups
- Cooperatives
- Village sections

The essential difficulty for the future CNCAS lies in making loans to small farmers who cannot provide collateral. It is proposed that the new institution, instead of lending money through cooperatives (generally 10 - 20 villages), as in the past, channel credit via village sections (village level cooperative groups). Since people know each other at the village level, and because of the interdependancy of the African extended family, it is expected that individuals will face strong pressures not to default and take the risk of being excluded from the group.

d. Types of credit

The future CNCAS should essentially lend money on a medium or long-term basis for equipment, at least during the first years of its activity. In the past, most of the defaulting problems were associated with short-term loans. However, once better repayment habits have been adopted by farmers, credit may be usefully extended to short term loans, in particular for fertilizers.

e. Decentralization and control

It is planned that local agents of CNCAS be given responsibility for granting credit in order to be in closer contact with their customers. Obviously this decentralization of the loan decision will be a function of the amount involved and implies very specific procedures and an effective control organization.

f. A progressive set up

The future credit institution will start up slowly in order to test the procedures and organization. Three areas of the country have been chosen where agencies will be installed first, before a nationwide organization is set up. A seven-year program is envisaged before credit is available nationwide.

2. The future Share Holders

The CNCAS capital has been fixed at 2,3 billion CFAF or about $6.4 million. 1.6 billion CFAF ($4.6 million) will be needed at the time of the creation of the credit institution, the remainder will be needed during the second year of the project.

The GOS intends that 50% of the capital be Senegalese though not necessarily Governmental, the rest being provided by donors and other institutions.

In a late 1982, letter to the Senegalese Banking Association, the GOS projected the following capital participation.

GOS	15%
Banque Nationale de Developpement du Senegal (BNDS)	15%
Other Senegalese Banks	15%
Private Senegalese Persons	5%
Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO)	15%
Banque Ouest Africaine de Developpement (BOAD)	15%
Caisse Centrale de Cooperation Economique (CCCE)	10%
Caisse Nationale de Credit Agricole France (CNCAF)	10%
	100%

However on March 15, 1983 a letter was sent by the Ministry of Plan to USAID asking for USAID participation in the project at 3 levels:

- by taking a 10% share in the capital of CNCAS (i.e. 160 million CFAF ($460,000));
- by furnishing soft loans to CNCAS, for its general credit activities;
- by furnishing lines of credit in support of specific activities or projects.

To substantiate this request, a detailed documentation file on the CNCAS project was furnished by the GOS, which provides full information on the statutes, internal procedures and regulations, and most important on the credit procedures.

B. <u>Conclusion</u>

If the Rural Credit and Savings study (See Annex I for details), demonstrates that credit is a vital need in Senegal, and that a nationwide organization is necessary; and if the CNCAS appears to be carefully prepared and worthwhile; then the project should be seriously considered for USAID support for two major reasons:

- This project is the result of two years of studies by different organizations and by the GOS, and takes into consideration the existing structural and human constraints of the Senegalese rural sector. In particular, the credit procedures set up are clearly aimed at reducing to a minimum the risk of default.

- This project appears technically sound. As mentioned above it has been set up with assistance from the CCCE, and the technical support of the French Credit Agricole, Both organizations have had many years of experience working in Senegal.

From discussions held with both institutions, it is clear that neither will invest one franc (or dollar) in the project if they consider that the risk of repeating previously ineffective operations is too high. In this respect, a direct participation in the capital of CNCAS would allow USAID to have a better view of the operations and therefore a better control. (We understand that there is a proposal in the FY84 AID request to Congress to give authority to PRE to make equity investments in institutions of this type).

ANNEX G.2.

STRENGTHENING VILLAGE LEVEL PRODUCER GROUPS

ANNEX G.2.

STRENGTHENING VILLAGE LEVEL PRODUCER GROUPS

A. Introduction

A principle objective of the Economic Reform Plan is to modify the current nature of Government intervention in the rural sector by decreasing the role of Government and increasing the role of the farmer in the management of his farm business activities. The Plan calls for "...encouraging farmers to accept more responsibility by providing them with extension services and training in cooperative organization, so as to enhance their capability to manage their own affairs..."

Specifically the Plan states that "Government ... will encourage the formation of village sections within the cooperatives. The purpose of these village sections will be to provide a sounder basis for the system of joint and multiple liability in the matter of credit and to insure farmer participation in the primary marketing process and in any other tasks the cooperatives may wish to undertake.... Active participation by the village sections will be made effective through a functional literacy program for their representatives."

Through the proposed local currency activity, USAID will assist the Government in establishing the village sections of the cooperatives and provide training to farmers and village leaders to enable them to effectively manage their local cooperative organizations. The $1.5 million in CFAF will be used primarily to train farmers, village leaders and extension agents for a two year period in two regions of the country- the Senegal River Basin and the Casamance. The successful implementation of this activity will enhance the farmers' management and decision-making capabilities in his private sector farm business enterprise.

AID's interest in supporting this activity is threefold:

- The activty directly encourages the development of village level private sector business activities.

- It enhances the role of the farmer in the democratic decision-making process in his local business.

- It supports the development of a solid village level base of organizations through which other Government reforms in such areas as marketing, credit and provision of agriculture supplies can be implemented.

B. The Problem

For all practical purposes, the majority of the 1,953 registered agriculture cooperatives, have been managed and controlled by Government for the past 10 to 15 years. Any semblance of member control over the local cooperatives had given way to management and policies imposed from regional and national organizations. The cooperative member found himself dealing with a cooperative organization whose records, member accounts, and loan forms were kept in a language he normally could not read and whose leaders were often not from his village and did not necessarily represent his interests. Alienation of the farmer was exacerbated by the mismanagement of the Government agriculture credit and marketing system, which resulted in greatly increased farmer debt. By 1980 the credit situation had become so untenable that most credit to the agriculture cooperatives was suspended and confidence in the cooperatives reached a new low.

C. Response to Problem

1. The village section model

To help restore confidence in and revitalize the cooperative system, the Government of Senegal has proposed in its Reform Plan to reorganize the local cooperatives around small, closely-knit village level groups based on traditional ethnic, social, or economic relationships. These basic units, known as village sections, will join together to form the local cooperative. Through these small groups the farmer will have a stronger voice in the affairs of his cooperative than he has had before. In order for this structural reorganization to be effective, the Plan calls for a program of education for the leaders and members of the village sections.

The village section will be composed of 20 to 40 farmers who freely associate with other farmers to form the sub-group of their cooperative. The village sections will elect their own leaders who in turn will represent their village section on the board of directors of their cooperative. There will be about 10 village sections in each local cooperative. Each village section will be legally recognized and may obtain loans directly from lending institutions. The loans will be extended on a group lending basis and the members of the village section will be collectively responsible for loan reimbursement.

Training at the village level will be an integral part of the activity of cooperative reorganization. The members of the village sections will receive training in functional literacy and numeracy geared to improving their management capabilities. Specifically, they will be trained in the utilization of the records and documents related to credit, farm supplies and marketing. These documents will be written in local languages.

2. The establishment of village sections

A basic program for the formation and development of village sections has been established by the Department of Cooperatives (DOC) and the Ecole Nationale d'Economic Appliqueé (ENEA). This program was based on proposals made by Guy Belloncle* in 1979 and initially tested in the cooperative of

* Guy Belloncle is a renowned expert on cooperatives in Africa and is the former Director of the Cooperative College at ENEA.

Malicounda and then extended to the other cooperatives in the Arrondissement of N'Guekhoh. The model was then successfully tested in 1980 and 1981 in Marsassoum (Casamance) and involved 49 villages and 2,326 farmers. In 1981 the model was tested in the Louga area and involved 224 villages and farmers.

ENEA has already developed packages of instructional materials for the training of extension workers, leaders of village sections and village facilitators. This proposed activity will build upon the experience noted above and provide local currency necessary to implement this program in other selected areas of the country. It should also be noted that a cooperative member education program in the Gambia has been operating successfully under conditions similar to that of Senegal for the past two years.

The assistance proposed in this document will facilitate the implementation of the village section program. The main elements of the activity are as follows:

a. Training of extension workers. Up to 500 extension agents will be trained in literacy, numeracy, nonformal and extension education techniques, group dynamics, cooperative organizational management, basic accounting and credit management.

b. Organizations at the village level. With the assistance of trained extension workers, farmers organize themselves into groups reflecting economic and social relationships and leaders are elected. As many as 2500 village sections may be formed through this program.

c. Leader training. Leaders* will be trained by extension agents in the management and administration of their village section and the cooperative. Emphasis will be placed on managing the new credit program that will be available to the village sections.

d. Village facilitators. Other leaders* in the village will be trained to teach literacy and numeracy to the members of the village sections. Member training will focus on such practical matters as understanding the individual account record of the members and doing simple arithmetic.

This activity will be implemented in two of the three geographic regions where USAID is working--the Senegal River Basin and the Casamance. The Sine Saloum region was not included as the proposed PVO Community and Small Enterprise Development Project will be working with the village sections through private voluntary organizations. In the Casamance Region, the activity will not operate in the lower Casamance where AID is already supporting an integrated agriculture development program that includes work with farmer organizations.

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* It is estimated that 6 leaders including village facilitators will be trained in each village section. Assuming that 2,400 village sections are created through this activity, up to approximately 14,400 leaders will be trained.

D. Project Impact and Indicators

The main impact of this activity will be at the village level. Farmers will receive training that will enable them to better understand the role the village section and cooperative can play in producing greater economic benefits for them. They will be able to understand their individual records and accounts in the cooperative and are less likely to be cheated in their market transactions. They will understand the functions of a cooperative and their rights and responsibilities vis-a-vis the cooperative. As some members of each village section will be trained as facilitators, an ongoing program of cooperative education and functional literacy and numeracy will be established.

The farmers and their leaders will manage, through the village sections, the disbursement and repayment of loans. They may also take on certain management responsibilities with respect to seed storage and the distribution of inputs and supplies. As the farmers receive more training and develop a stronger group identity, their village sections could come to serve as an instrument for new economic activities as well as a promoter of village self-help programs.

The local cooperatives formed from the village sections will also be affected by the activity. Member interest and participation will increase and better trained and informed leaders will emerge from the village sections to direct and control the affairs of the cooperative. Increased economic activity at the village level will also increase the volume of sales by the cooperative as well as the amount of produce marketed through the cooperative.

Until specific proposals from the Government for the implementation of this activity are presented, it is not possible to determine quantifiable measures of program impact. It is possible however to suggest some general indicators of activity impact and their magnitude. They are:

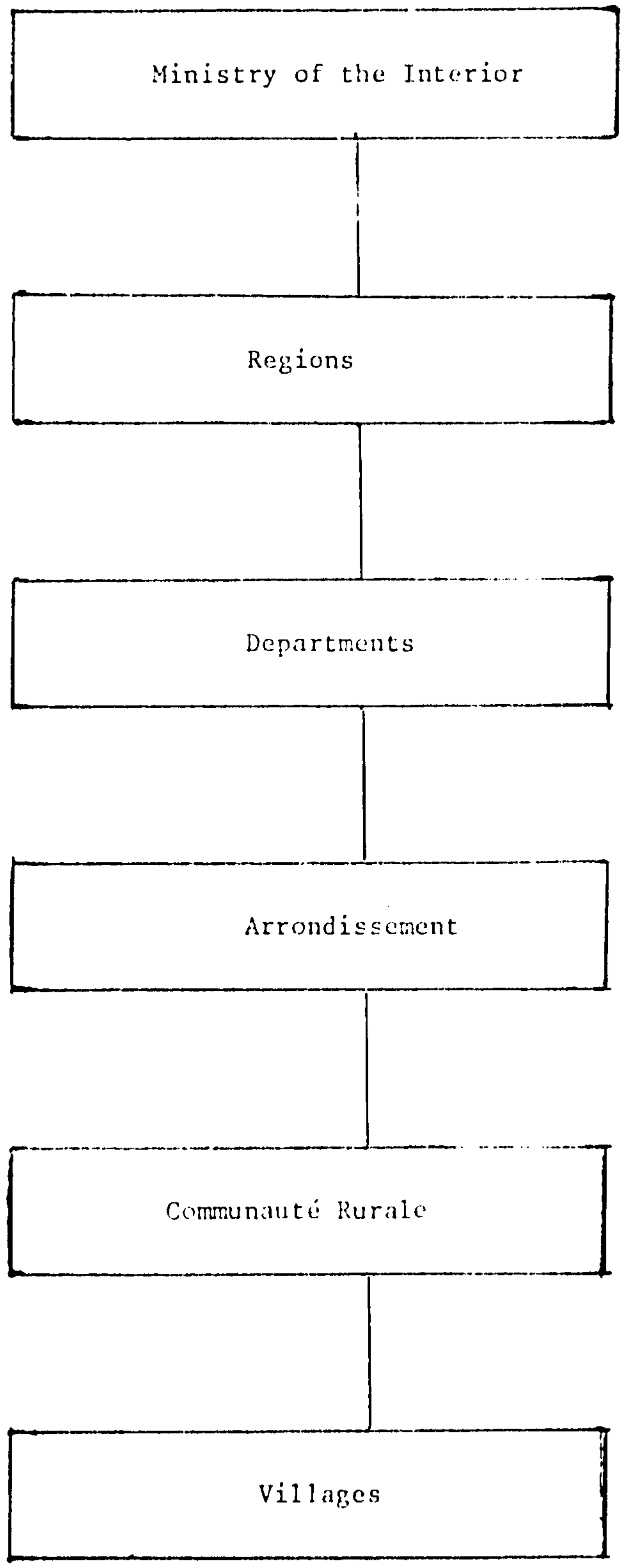
- Village sections established and leaders elected in 90 percent of all villages assisted through the project.

- 60 percent of the farmer members of the village sections participating in regular meetings of the village sections.

- Over half of the village leaders are able to understand the procedure's and use the documents and forms related to village section and cooperative activities in such transactions as credit, marketing, and inputs and supplies distribution.

- At least 30 percent of the farmers are participating regularly in the literacy and numeracy program.

GOS ADMINISTRATIVE STRUCTURE



PROGRAM ORGANIZATION

GOS/USAID JOINT LOCAL CURRENCY MANAGEMENT COMMITTEE

Representatives from Ministry of Plan, Ministry of Finance, Central Bank, and USAID

PROGRAM COORDINATION AND IMPLEMENTATION AGENCY

Department of Cooperatives

TRAINING

Ecole Nationale d'Economie Appliquée (ENEA)

PLANNING

Subcommittee of the Comité Régional de Développement (Representatives from DOC, Promotion Humaine, RDA, Cooperative Unions, etc

(Possible Planning and Implementation in Departments and Arrondissements)

Rural Communities and Local Cooperatives

Extension Agents

Village Sections and Farmers.

E. Program Coordination and Reporting

The Department of Cooperatives (DOC) is the governmental organization responsible for coordinating cooperative policies and programs with other Government agencies and cooperative organizations. It is responsible for the registration of cooperatives, cooperative promotion and education and cooperative field extension agents. The DOC will be the coordinating and implementing body for the cooperative activities to be financed through this local currency program.

The DOC will be responsible for developing proposals from each of the regions using the guidelines presented below in the section on Guidelines and Criteria for Project Selection. The proposals will be submitted by the DOC through the Ministry of Rural Development (the ministry responsible for cooperatives) to the GOS/USAID Joint Local Currency Management Committee. (See charts on following pages for program organization and GOS administrative structure). The Management Committee, composed of representatives from the Ministries of Plan, Finance, Commerce and USAID, will review the proposals to ensure that they meet the criteria discussed below. Each request will include a monitoring plan and periodic reports will be required from the DOC. At the end of the first and second year of the activity, the DOC will meet with the Committee to review each activity's progress.

F. Program Planning and Implementation

The Department of Cooperatives will be responsible for the overall implementation of the program. The planning and implementation of the training programs for the extension personnel will be done by ENEA. ENEA will also be responsible for semi-annual evaluations of extension workers to test the relevance and impact of their training programs. The DOC may wish to use the National Cooperative Training Center facilities to implement some of the training by ENEA.

The field extension workers will be drawn from several services and, depending on the region, may include cooperative extension, agriculture extension, animation, literacy and other rural development agents. It is recommended that a subcommittee of the Regional Development Committee ("Comité Regional de Developpement"), which would include representatives from each of the interested services, be involved in program planning. This planning process would also include leaders from the Rural Communities, and the one or two cooperatives found in each Rural Community. It will be the responsibility of the DOC to determine what program and administrative units at the "Arrondissement" and "Department" levels will be required for the program's implementation.

G. Guidelines and Criteria for Activity Selection

1. Guidelines

As previously noted, the Department of Cooperatives (DOC) will be the agency responsible for formulating the requests for activities and coordinating their implementation. As a pre-condition to the submission of a request to

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the GOS/USAID Joint Local Currency Management Committee the DOC will organize meetings in the three regions, preferably through the Regional Development Committee, of all extension services interested in the project, and determine the responsibilities of each in activity implementation. To avoid misunderstanding and duplication of effort among government services in the field, program responsibilities will be agreed upon in writing and submitted as a part of each activity request. All activities must be developed in concert with ENEA. The requests for program assistance will formally indicate the responsibilities of each party in the activity's execution and their agreement to accept those responsibilities.

An implementation plan showing target dates for the accomplishment of each major activity must be included in the request. This document will serve as the basis for monitoring the progress of the activity. Additionally the request will include a financial plan with a two year budget and a schedule of expenditures which will determine the amount of the periodic allotments for each activity to be drawn by the DOC.

Activities submitted for funding must be designed to achieve their objectives using only local currency. The basic program developed by the DOC and described above was designed for implementation with local currency. It is important that the local currency funds not be used in ways that will, in the long term, increase the recurrent costs to the Government. The funds should be used primarily for the training of extension workers, village leaders and facilitators and materials development. In order to achieve rapid development of the program it may be necessary, for example, to temporarily increase staff at ENEA to implement training programs or provide additional resources to DOC supervisory staff to ensure effective program implementation during the life of the project. Request for salaries and equipment should be evaluated with the recurrent cost issue in mind.

Since it is the intention of this activity to implement the village section model in different regions and with different types of groups, each regional program should receive financial support in proportion to its number of Rural Communities.

Finally, it is the intention of this activity to train village sections in the management of credit. A precondition to the implementation of this activity is the granting of the legal authority to the village sections to contract for loans directly from lending institutions.

2. Criteria

Each activity submitted by the DOC should clearly indicate the following:

At the village level

- the number of villages to be included in the activity and a timetable for the organization of the village sections and the election of the leaders.

- the number of village leaders and village facilitators to be trained and the tasks they will be able to perform once their training is completed. This may include training in such areas as literacy, numeracy, village section and cooperative management, seed storage, credit procedures and administration, etc.

At the extension level

- training objectives for the extension agents in functional literacy, numeracy, nonformal and extension education techniques, group dynamics, cooperative organization and management, credit management, etc.

- a work plan for the extension agents indicating the actions necessary to create the village sections and train the leaders and facilitators

H. Budget Estimates

The following budget estimates are illustrative. Until programs are actually designed by the Department of Cooperatives a precise calculation of costs in each region can not be determined.

Some costs associated with training can be projected with a degree of certainty. It is expected that each extension worker will receive 6-8 weeks of training over the two year activity period. Assuming ENEA carries out all of that training, the cost per extension worker will be approximately $115. If we assume there will be four extension people trained for each Rural Community and there are 120 Rural Communities in the three project regions, the ENEA training costs for 360 extension agents will be approximately $414,000.

The costs of duplicating existing educational books and materials, developing new materials and producing audio visual aids for use by the extension workers and the approximately 14,400 village leaders and facilitators is estimated to be $360,000.

Program support costs for field extension and field supervision from the DOC and field visits/evaluations by ENEA staff are more difficult to estimate. Transportation is expensive as fuel costs are high in Senegal. Based on the estimated support costs for a program drafted by the DOC to set up village sections, we estimate that the support costs for this activity will be $200,000.

These very rough estimates give us the following:

TRAINING OF 360 EXTENSION AGENTS	$414,000
EDUCATIONAL MATERIALS FOR 14,400 LEADERS AND FACILITATORS	$360,000
PROGRAM SUPPORT COSTS	$200,000
	$974,000
CONTINGENCY	$ 26,000
TOTAL	$1,000,000

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ANNEX G.3

CONTINGENCIES AND OTHER LOCAL CURRENCY USES

Some $200,000 in local currency will be set aside for unforseen expenditures or priority development activities, projects, or programs in support of the Government's Reform Plan or long-term development objectives. Since the full amount of local currency will not be available before the Fall of 1984, this flexibility, which will permit the proposal of new ideas or allow the amendment of old ones, seems necessary. Some possible illustrative uses might include field studies for water resource development and conservation, reducing crop losses from nematodes, new concepts in environmental protection, nontraditional energy development and conservation (growing trees with commercially marketable byproducts), or a marketing study for private fertilizer distribution. All new or revised activity proposals would have to meet the criteria set out in Annex J and be approved by the joint L/C Management Committee.

ANNEX H

DESCRIPTION OF TECHNICAL ASSISTANCE PROJECT:
ASSESSMENT OF THE SENEGAL AGRICULTURE SECTOR

ANNEX H

DESCRIPTION OF TECHNICAL ASSISTANCE PROJECT: ASSESSMENT OF THE SENEGAL AGRICULTURE SECTOR

A. Introduction

The Mission proposes to prepare a current assessment of the Food and Agriculture Sector in Senegal. Though numerous GOS and donor analyses have been reported with respect to elements of the rural economy and subsector contributions, a comprehensive, national assessment would aid in the analysis of tradeoffs among alternative development strategies and projects. The extensive literature available for the rural sector of Senegal will facilitate the work. Specialists working in Senegal on several USAID assisted projects will be able to provide useful references, information and professional counsel during the assessment. Therefore the schedule for the assessment is set for a rapid work sequence and close collaboration with mission and project personnel, and key Senegalese professionals in the Rural Development Ministry, Rural Development Agencies and related departments at the University of Dakar and the Senegalese Agriculture Research Institute (ISRA).

Consistent with the Missions collaborative approval with other donors the Agriculture Sector Assessment will be fully discussed with interested donors at the planning study and conclusion stages of work. Discussion with the World Bank indicates possibility of a joint activity. The Caisse Centrale pour la Cooperation Economique (CCCE) has indicated interest in making information and reports avilable. Other European donors are urging the GOS to revise its food analysis methods and are supportive of this agriculture assessment effort.

B. Objectives

1. A brief description of the agriculture sector in Senegal: the land, labor and capital resources dedicated to the sector, the principle production entreprises, the related infrastructure, and the economic contribution of the sector.

2. A review of the GOS development strategy for the rural sector. Using the statements of the current development plan as well as the Economic Reform Plan and any recent statements of the new government, the assessment will summarize the development objectives for the sector and update actions taken to implement the strategy.

3. An analysis of the constraints to achieving the development objectives. This will include an analysis of the economic, social and political significance of the objectives and the related constraints.

4. An analysis of resources required and available for sector development. This phase requires a three step analysis starting with GOS and domestic resources; second, adding in bilateral and multilateral development resources exclusive of USAID; and finally evaluating remaining unmet constraints which could be reduced significantly through the application of USAID resources.

C. Methodology

1. The Sector Assessment team would begin their work by compiling the available literature. Numerous studies have been or are being undertaken in Senegal which should provide background for this presentation. The contractor will collect, compile, evaluate and extract from these resources a brief description of the land, labor and capital resources allocated to agriculture production and rural infrastructure. The section will include information on constraints, policy, other donor activities and options for U.S. assistance which can be utilized in subsequent steps of the analysis. The USAID Documentation Center, the references compiled by the Joint Economic Unit of USAID and the Embassy, the Agriculture Economics and Planning Project of ISRA and the Agriculture Policy Project being undertaken by Princeton University in collaboration with the Ministry of Plan and Cooperation represent major resources.

2. Develop a brief description of the agriculture sector of Senegal. This presentation should describe the resources dedicated to the agriculture production enterprises and rural service infrastructure. The production enterprises should be briefly described, their capacity for expansion evaluated, the constraints enumerated and development potential estimated. Similar description should be provided for public and private rural infrastructure. This presentation should include both food crops and commercial crops. A supplemental analysis of agriculture export and import trade would complete the food supply analysis for Senegal.

The description would be illustrated by a Food and Agriculture Commodity Flow Chart showing the movement from production to consumption, the variability in flow including the uncertainty of weather, the expectations and the potential for expansion.

3. A Summary Statement of GOS Development Strategy for the Rural Sector. Based upon the current development plan and modified as necessary in light of recent statements by the President and his Cabinet, the assessment team is to provide a concise statement of GOS priorities and policy.

4. Constraint Analysis. Based upon the information previously collected and utilizing the extensive literature that treats elements of the agriculture sector, the assessment team will establish a rank order listing of constraints in development of the sector. The seriousness of constraints will be ranked in terms of economic, social and political considerations. The constraints are to be described in terms of the geographic zone of influence, the agriculture enterprises constrained, the institutional and other resources involved and the policy context which must be altered. The literature in this regard is quite extensive, including a number of program and project planning papers prepared by USAID. Project papers prepared for the Agriculture Economics and Planning Project and the Agriculture Policy Studies Project are also relevant.

5. Resource Analysis. This will be a three part analysis. The first step will be an identification of GOS and other local resources dedicated to agriculture sector development in the next five years. Plan and budget

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documents will form the basis for this analysis however the assessment team will take care in adjusting these estimates if necessary to reflect current financial and economic factors such as reduced peanut trade earnings, food import costs, market prices of commodities, and income generating capacities from alternate sources of revenue.

The second step will be analysis of multi-lateral and bilateral priorities (other than USAID) and resources available to Senegal. The annual exercise of the UNDP representative will greatly facilitate this step. Discussions with the major donors will be necessary to establish future projections of program levels and interest. The Ministry of Plan and Cooperation will be consulted in review of this stage of the analysis to provide a cross reference of the compilation.

The final step in this analysis will be a rank ordering of priorities for USAID assistance in the agriculture sector. Estimated needs and benefits in economic development will be a primary factor in this analysis, however comparative social and political impacts will be factored into the analysis. The product of this step will be a listing of interventions needed with a brief description of the technical and financial resources required for this assistance. The GOS entities and other organizations identified to receive this assistance will be specifically designated. The development objective or impacts will also be estimated for each of the interventions.

D. Plan of Work and Budget

The proposed sector assessment will be undertaken as a one-time project, the results of which are to be integrated into the future macroeconomic analysis program of the ISRA Project (Project No. 685-0223). USAID requires this agriculture sector assessment for program planning reasons much sooner than an adequate institutional capacity at ISRA can be developed, hence the necessity for additional resources. However, certain of the personnel and other resources of the macro-unit can contribute to the assessment and appropriate coordination is planned to link this project with the available institutional resources.

The extensive data and statistical research already available for Senegal will facilitate the proposed assessment. There appears to be adequate information available without further intensive surveys or extensive computer analysis. Thus a modest team of experienced personnel are proposed with facilities to compile and study available literature in preparation of the required assessment.

It is proposed that a team of three analysts under the direction of a senior economist can complete the assessment in six months of intensive research. The senior economist must be familiar with the agriculture economy of Senegal and with the methodology of sector assessment in order to meet this schedule. USAID will contract with a university or firm using the most expedient time frame feasible because of the urgency of the results for future program planning.

The urgency of the task requires careful mission management in order to follow the schedule proposed. It is believed that several U.S. institutions or firms have the resources and interest to undertake this project.

Event	Month
Approval of Project Paper	0
Finalization of RFTP and Advertisement	1
Selection of Contractor	4
Contractor in Field	6
Contractors Detailed Plan of Work	7
Review of Compiled Data	8
Review of Analytical Approach and Report Format	10
Review of Preliminary Draft	11
Final Draft Report Submitted	12
USAID Review and Approval	13
Final Report	14

Budget

Economist - Sector Analysis Director 9 months	$ 140,000
Analyst Staff 3 persons at 6 months	140,000
Travel, per diem and incidentals	50,000
Data Acquisition and Reproduction	40,000
Computer Time	40,000
Report Preparation & Printing	25,000
Incidentals	15,000
TOTAL	$ 450,000

ANNEX I

DESCRIPTION OF TECHNICAL ASSISTANCE PROJECT: CREDIT AND SAVINGS STUDY

ANNEX I

DESCRIPTION OF TECHNICAL ASSISTANCE PROJECT:
CREDIT AND SAVINGS STUDY

A. Objectives - Provide a comprehensive presentation of rural financial resources particularly the requirements and returns from credit and the quantity and terms of rural savings mobilization.

B. Introduction - The Government of Senegal has requested the assistance of USAID in establishing a rural sector credit and savings institution that would serve a broad range of rural enterprises and production groups. The preliminary outline for this program was developed by the Prime Minister's Working Group on Agriculture Credit with technical assistance provided by the French Caisse Centrale de Cooperation Economique. USAID also participated in the Working Group. The analyses developed during the preliminary phase provide the data and conceptual base upon which the GOS has developed its plans for the new, nongovernmental rural savings/credit institution, La Caisse Nationale de Credit Agricole (CNCAS).

AID's recent worldwide experience with agriculture credit and savings has identified a number of critical points which need to be examined with respect to effective development of a credit/savings program. Among these points are the precise identification of the technical packages which credit and savings can effectively support, the institutional structure that can be effectively managed with acceptable cost levels, the legal and other provisions that ensure financial success of the credit/savings enterprise, the comparative role of informal credit in rural credit supply and the capacity for mobilization of rural savings. The proceedings of the Working Group and the reference material of the French technical assistance team do not supply complete guidance on these points. Consequently, USAID proposes further study which would gather additional detail and elaborate on the role of credit and savings in the rural enterprises of Senegal.

The proposed study will provide a more precise description of the costs and benefits of providing credit in the major agriculture production enterprises, refine the estimates of the institutional costs, the facilities for effective management of funds, suggest criteria for specific loan catagories and savings plans, and generally establish the working parameters of a cost effective program. It is possible that the proposed study will suggest concentration of the credit/savings program to ensure adequate viability of the new system. This data will be of use to USAID in establishing the terms and conditions of our assistance and will assist the GOS in establishment of the operational principles and procedures of the new program. Finally, the study will be of use to other donors who are also considering participation in this program.

The history of credit in Senegal illustrates very well the problems of providing credit to small rural producers. The most serious problem in this country appears to have been the frequent change of official policy and the inadequacy of institutional resources dedicated to the credit program. The various problems combined to steadily increase the rural "debt" to the credit "system" until, in 1981 the GOS decided to fully suspend agriculture credit until the establishment of a new policy and program could be established. The new credit/savings reforms embodied in the fledgling CNCAS have been undertaken within the context of national, social, and economic reform as stated in the Economic Reform Plan and are therefore basically intended to be managed in an economically sound manner. The reform is founded upon changes in the legal structure and complete revision of the institutional facilities in order to facilitate effective credit supply. USAID has supported this reform attitude while at the same time counselling against a repeat of the errors prevalent in previous credit programs. The credit/savings study will strengthen our efforts to provide constructive assistance.

In considering any credit/savings program, one must test the economic soundness of the investment - are technical packages available to agriculture that will provide a return on the investment. The study proposes to look more closely at farm practices at several levels of technology to establish a more precise understanding of the costs and returns for various practices thereby identifying those technology packages of profit to the farmer and the associated credit requirements and benefits.

The study will provide a comprehensive and detailed analysis of financial flows in the rural sector of Senegal, including on-farm generation of financial resources as well as transactions in the rural service sector and the resource transfer to agriculture from family members involved in the urban or foreign labor market. The study will also include a review of institutional and informal arrangements for credit and savings transactions by rural families and enterprises.

Credit and savings transactions are generally considered to be private and as such are closely guarded. The objective will be to describe the broad overall structure of financial flows. Numerous studies have been or are being undertaken in Senegal that can provide elements of the planned analysis. The contractor will initiate this project by collecting, evaluating and compiling the relevant literature. The contractor will also establish professional dialogue related to USAID and other projects to assist in compilation of the literature, review of analytical methodology, review of preliminary conclusions and other professional collaboration as appropriate. The Agriculture Economics Research and Planning project being assisted by Michigan State University and the Agriculture Policy Studies being undertaken by Princeton University in collaboration with the Ministry of Plan and Cooperation are important collaborating projects for this study.

A major reference for this study is the analysis and literature compiled by the GOS Interministerial Working Group on Agricultural Credit convened by the Prime Minister. The extensive studies carried out for this Working Group provide considerable study and analysis of the current situation. USAID has participated in the Working Group and has on file the complete set of the working papers and the deliberations of the group as well as Mission and consultant analysis of aspects of the situation from alternative points of view.

C. Methodology

1. Partial budget analysis of the major rural enterprises with traditional technology and two levels of improved technology.

a. Major Crops

- millet
- peanuts
- maize
- cotton
- livestock
- fisheries
- gardening

b. Regional Interests

- Casamance
- Dryland Zone
- Senegal River Valley

c. Supplemental Analysis

- cash and-in-kind transactions
- labor transactions
- evaluation of subsidy provided by RDA through input and marketing services

2. Analysis of foreign exchange flows to rural areas through banks and the postal system. Analysis of money flows from urban to rural areas through family and seasonal linkages.

3. Analysis of Rural Investments

- mosques
- housing and building improvements
- implements, animals, and other equipment
- land improvement such as wells, dikes, land leveling, orchards or wind breaks, tec.

4. Analysis of Social Expenditures

- weddings, etc.
- clothing
- electronic equipment

5. Survey of local informal credit and savings arrangements including terms, conditions, and supply in respect to short, medium or long-term transactions. This analysis will include interest rates and other charges, an analysis of risks taken, collection rates, costs of business, etc. The costs of loan collection and the farmers costs in loan application are to be included in the calculations. The increase in savings accounts, security of funds and ease of withdrawal for personal or production needs will be determined.

6. Analysis of institutional credit terms, conditions and supply in respect to short, medium and long-term borrowing. This analysis will include costs of interest and other charges (including application time and travel for loan application), estimates of collection rate and costs, estimation of risks taken by lender and borrower, role of crop insurance in the lending program and other features proposed for the new credit program for Senegal. In preparation of this annex, a representative of the AID/Private Enterprise Bureau prepared a list of recommendations and a sample Scope of Work which detailed the issues to be addressed regarding the new credit/savings institution. This very thorough issues list will be taken into consideration in the preparation of the General Terms of Reference for this study.

7. Schematic presentation of net financial flows in the rural sector, including earnings from rural production, cash flows in investment, subsidy and labor exchanges, social and productive expenditures, etc.

8. An analysis of the role of credit and savings and the implications of selected changes with respect to both factors in relation to farm production enterprises. This step of the analysis will include a projection of the financial viability of the credit institution including the rate of return on investment in funds or the subsidy required to maintain the institution under fixed interest or other charges and costs.

9. An analysis of the rural service sector credit requirements for the supply and service of farm inputs and the provision of markets. Enterprises of interest would include;

- fertilizer supply at retail and in distribution levels of the supply network.
- farm implement manufacture, distribution and servicing in small scale and medium enterprises.
- livestock operations in mixed farming enterprises - draft animals, cattle fattening, poultry, dairy.
- improved seed production and distribution.
- supply and service of pump sets including supply of fuel and lubricants.
- rice and millet mills - supply and service as well as commercial operation in small and medium scale.
- fishing boats and fish dryers.
- wells for fruit and vegetable production.
- village transport as a commercial service.

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These analyses should include:

- a brief description of a typical unit - its service function
- costs for commodities and inputs at wholesale
- costs of doing business
- prices for services and retail sales
- return from the enterprise
- estimate of credit requirement and savings generation from the enterprise

D. Plan of Work and Budget

The proposed study will be undertaken by reference to existing literature, studies, project analysis and official statistics with the objective of compiling an overview of the status of rural credit and savings transactions. The researcher may provide certain elements of the financial transactions based upon brief field work, interviews and desk analysis. If elements of the above outline cannot be fully described within the available time frame, the researcher will be expected to develop prototype description and analysis in order to complete the sub-sector presentation.

A principle investigator working in association with two researchers is expected to complete the analysis in four-six months. The investigator must be someone familiar with Senegal, with the literature on economics for West Africa, particularly the areas of agriculture production analysis and rural services operations, and with the skills of research planning and direction well developed for the financial and economic analysis involved in this study. It is believed that several U.S. institutions or firms have the interest and resources to be responsive. The complete project would require approximately one year.

1. Calendar

Project Action	Month
Approval of Project Paper	0
Finalization of RFTP and Advertisement	1
Selection of Contractor	2 1/2
Contractor in Field	4
Contractors Detailed Plan of Work	5
Review of Compiled Analytical Data and Report Format	1
Review of Preliminary Draft	8
Final Draft Report Submitted	9
USAID Review and Approval	10
Final Report Distributed	11

Budget

Economist - Financial/Economist 6 months		75,000
Analysts Staff 2 persons - 5 months		100,000
Travel, Per Diem, Incidentals		35,000
Data Acquisition and Reproduction		30,000
Computer Time		30,000
Report Preparation and Printing		30,000
	TOTAL	$ 300,000

ANNEX

PROCEDURES AND CRITERIA FOR USE OF THE LOCAL CURRENCY

ANNEX

PROCEDURES AND CRITERIA FOR USE OF THE LOCAL CURRENCY

A. Introduction

The following procedures assume that the Special Account at the Central Bank has been established, and that local currency (l/c) generated by the dollar disbursed for the $4.25 million in fertilizer imports has been deposited in the account, or is in the process of being deposited.

It also assumes that the Government has met the condition precedent section, which requires the GOS to name or establish a Joint Local Currency (or counterpart) Management Committee ("Comité de Gestion").

B. Local Currency Management

The GOS has agreed to use a l/c Management Committee to approve releases for specific activities from the above mentioned local currency (or counterpart) account. The Ministry of Plan has suggested that the existing l/c Management Committee already established by the GOS for the PL 480 Title III Program be used. This committee, which is composed of representatives from the Ministries of Plan, Finance, Commerce, and USAID, was organized in its present "streamlined" form one year ago, and is working well.

USAID favors this proposal. With some modest broadening of the Title III Committee mandate, and with some minor changes in operating procedures, it could be made to handle releases from all l/c funds generated from program assistance (ESF, SDF, PL 480).

The Committee will be able to invite representatives of the Central Bank and/or Technical Ministries to assist at committee meetings (as needed) when project financing proposals from the technical ministries are received for approval.

A prerequisite for presentation of any proposal to the l/c Management Committee for consideration will be that the proposed activity have the prior approval of the technical ministry concerned.

C. Local Currency Project Approval Criteria[1]

The following criteria will be applied by the Committee to determine whether or not an activity is eligible for obligation of funds:

1. Mandatory criteria for all activities

   - The manner in which the activity will be carried out shall be described.

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1 Copies of the criteria will be made available to the GOS technical ministry to assist them in preparing proposals for submission to the Joint Management Committee.

- The approximate dates of the activity will begin and end must be described.

- The site of the activity must be identified or criteria for selecting site set forth.

- Nature of goods and services to be provided must be identified.

- Costs of goods and services identified sufficiently to enable reasonably firm cost estimate.

- Where applicable, engineering or other technical planning necessary to carry out particular activity will be identified.

2. Economic criteria that should be taken into account:

    - That projected costs and returns result in benefits sufficient for the target population to become involved in the activity.

    - That the technologies being introduced and tested are appropriate for the local economic systems.

    - Where applicable, that the agriculture support system is adequate, including availability of inputs, extension assistance and a marketing system for both inputs and outputs.

    - That the costs are reasonable in relation to the expected number of beneficiaries.

    - That recurrent costs and maintenance of the activity can be provided by the village or GOS.

    - That an adequate administrative/organizational structure exists through which to implement the activity, including adequate staff, operating funds, and management procedures.

    - That marketing opportunities are available for production activities undertaken.

    - That for any livestock related assistance, village efforts and commitment to restocking be considered.

3. Environmental criteria

Since the counterpart belongs to the host government, there is no legal requirement for an environmental assessment for the l/c activities which will be proposed under this grant. However the USAID believes that the Committee should consider this important aspect along with the other points listed above; therefore the USAID proposes to send the Committee a set of AID's environmental guidelines including the special brochure on environmental considerations relating to Rural Roads (part of ESF project).

D. Opening of the Project or Activity Account

Once a activity has been approved by the Committee, the Central Bank will be asked to open a specific account for the activity. Each approval will contain specific instructions as to withdrawal procedures.

E. Reporting Requirements

It is proposed to use the reporting procedures already in place for the Title III l/c Management Committee. These procedures provide for quarterly financial and progress reports.

F. Evaluation Plans

The Joint Annual Evaluations of the progress will be held by the Committee at a time to be determined by the Committee. In addition to the annual program evaluation, each activity will be individually evaluated upon its completion to determine how well it achieved its purpose.

G. Audit

Normal GOS audit procedures will apply, with the Joint Management Committee free to request special audits where the "circumstances" so warrant.

H. Conclusion

Given the satisfactory experience with the existing Title III l/c Management Committee, since it was streamlined last year, no major difficulties are envisioned in broading its mandate and installing the above procedures.

ANNEX J

Initial Environmental Examination

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INITIAL ENVIRONMENTAL EXAMINATION

Project Country:	Senegal
Project Title:	CIP (Ag. Sector) Standard Financing
Funding:	5.0 Million Dollars
Period of Funding:	FY 1983-1984
IEE Prepared by:	Joy W. Lucke, USAID/Senegal
Reviewed by:	Peter Freemen, USAID/Senegal
Environmental Action Recommended:	Negative Determination. No further environmental analyses required.
Concurrence:	David Shear David Shear, Director, USAID/Senegal
Date:	May 16, 1983

Bureau Environmental Officer's Recommendation:

Approve: ____________________

Disapprove: ____________________

Date: ____________________

Assistant Administrator's Decision:

Approve: ____________________

Disapprove: ____________________

Date: ____________________

Clearance: RLA ______

I. Examination of Nature, Scope and Magnitude of Environmental Impacts

A. Description of the Project

The project proposes to provide a commodity import grant of $5.0 million to the Government of Senegal (GOS) from Sahel Development Funds on standard AID terms. The primary purpose of the grant is to provide balance of payments assistance by financing fertilizer imports required by the agriculture sector.

No pesticides will be imported under the proposed project.

Some dollars from this grant will be used to finance an agriculture sector assessment and a credit and savings program study; local currency generated from the CIP will be used to promote cooperative reform measures, to stimulate the private fertilizer distribution system and to reduce fertilizer subsidies.

B. Identification and Evaluation of Environmental Impacts
(See Page 3, Annex L)

II. Recommended Environment Action

Negative determination. No further environmental analyses necessary.

IMPACT IDENTIFICATION AND EVALUATION FORM

Impact Areas and Sub-areas 1/	Impact Identification and Evaluation 2/
A. LAND USE	
1. Changing the character of the land through:	
a. Increasing the population	N
b. Extracting natural resources	N
c. Land clearing	N
d. Changing soil character	M
2. Altering natural defenses	N
3. Foreclosing important uses	N
4. Jeopardizing man or his works	N
5. Other factors	
B. WATER QUALITY	
1. Physical state of water	N
2. Chemical and biological states	N
3. Ecological balance	L
4. Other factors	

1/ See Explanatory Notes for this form.

2/ Use the following symbols:
N - No environmental impact
L - Little environmental impact
M - Moderate environmental impact
H - High environmental impact
U - Unknown environmental impact

IMPACT IDENTIFICATION AND EVALUATION FORM

C. ATMOSPHERIC

1. Air additives -- N
2. Air pollution -- N
3. Noise pollution -------------------------------------- N
4. Other factors

______________________________ ______

______________________________ ______

D. NATURAL RESOURCES

1. Diversion, altered use of water ------------------ N
2. Irreversible, inefficient commitments ----------- N
3. Other factors

______________________________ ______

______________________________ ______

E. CULTURAL

1. Altering physical symbols ------------------------ N
2. Dilution of cultural traditions ------------------ N
3. Other factors

______________________________ ______

______________________________ ______

F. SOCIOECONOMIC

1. Changes in economic/employment patterns ---------- N
2. Changes in population ---------------------------- N
3. Changes in cultural patterns --------------------- N
4. Other factors

______________________________ ______

______________________________ ______

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IMPACT IDENTIFICATION AND EVALUATION FORM

G. HEALTH

1. Changing a natural environment ------------------- N
2. Eliminating an ecosystem element ----------------- N
3. Other factors

H. GENERAL

1. International impacts ----------------------------- N
2. Controversial impacts ----------------------------- N
3. Larger program impacts ---------------------------- N
4. Other factors

I. OTHER POSSIBLE IMPACTS (not listed above)

Discussion A.1.d. Changing Soil Character

Soil acidification can result from extended and excessive use of fertilizers in sandy loam soils, according to research carried out in Senegal and other Sahelian nations. Liming and the incorporation of organic matter into the soil can correct and/or prevent this condition. Senegal has abundant sources of lime, in limestone outcrops near the coast. Also the acidification possibility and needed preventive measures are well known and practiced by Senegalese agronomists and extension agents. Therefore, it is not judged that this possible alteration of soil will inadvertently or predictably take place as a consequence of the project activity.

ANNEX K

MACROECONOMIC JUSTIFICATION

A. The Current Economic Crisis (1978 to the Present)

The combined impact of adverse external factors and inappropriate government policies led to the emergence of a serious economic crisis in 1978 which continues to persist despite concerted efforts on the part of the GOS to take corrective action. An examination of annual movements in selected macroeconomic indicators reveals a slow but steady increase in the rate of consumption as a percentage of GDP (see Annex L - Table 1) to a peak of 100.1% in 1981. Despite successful efforts to step up the investment level since the mid-seventies, the low productivity of capital has meant that increased public investment has not been reflected by increased economic activity. Thus, the gap between aggregate demand and aggregate supply (known as the resource gap) has widened consistently. The sections below deal with: the principle causes of the economic crisis and the balance of payments and public finance situations followed by a description of the corrective measures taken by the GOS and the external support for these measures; and a prognosis regarding the prospects for economic recovery.

1. Principle causes of the emergence of the crisis

The causes of the emergence of the crisis were several. First, drought severely affected three out of four harvests in the years 1977/78 to 1980/81, combined with comparatively poor world market prices for peanuts and phosphates, Senegal's leading exports. Second, despite the sharp fall in production and in national revenues, the Government attempted to preserve the purchasing power of the population. Farmers debts were forgiven in 1978; the public wage bill was raised by 36 percent in 1979; price increases in key imports such as rice and sugar were absorbed by government subsidies.

Thus, while real GDP per capita fell by 18 percent between 1977 and 1981, real consumption was permitted to continue at approximately the same levels, with the results that Senegal's current account deficit rose from 3.6 percent of GDP in 1977 to 18 percent of GDP in 1981. Although the Government continued large external borrowings, which began during the 1974 commodity boom, Senegal's balance of payments deficit increased from half of one percent of GDP in 1977 to 6.5 percent of GDP in 1981. Meanwhile, Senegal's outstanding external debt made a spectacular rise over the decade, from less than 15 percent of GDP at the end of 1972 to about 60 percent of GDP by the end of 1981.

Finally, poor management in the public sector, including the parastatals, further contributed to Senegal's economic and fiscal crisis. ONCAD, which held the monopoly on the provision of inputs to farmers, accumulated a debt of more than $267 million (CFAF 90 billion). The Stabilization Fund (CPSP) and the central administration also accumulated important deficits. By June, 1981 the total internal arrears of the Central Government and parastatals (including ONCAD) amounted to $500 million (CFAF 150 billion) or $67 million (CFAF 20 billion) more than total government revenues in the preceding year.

2. Underlying factors explaining the persistence of the crisis

The persistence of the crisis despite more favorable weather and larger export earnings from peanut products in 1982 and 1983 suggests that certain structural factors such as over-dependence on too few exports, reliance on imports to satisfy current consumption needs, declining prices for peanut oil as acceptable and relatively inexpensive substitutes emerge, the continued low return on investment and high labor costs in the modern sector.

On the export side, Senegal continues to be dependent on three exports (peanut products, phosphates, and refined petroleum products) which together account for slightly over one-half of total export earnings (See Annex L - Table 9). Senegal has been unable to improve substantially its export earning capacity through the further development of these products. Exports of refined petroleum products generate only limited foreign exchange since all crude oil requirements must be imported. With respect to phosphates, Senegal's total share of the world market is relatively small at only 1.5% due to strong competition from other international suppliers. The emergence of alternative vegetable oils on the world market (e.g. soybean and sunflower seed) together with the rise in output of peanut oil have caused a decline in the price which is only 54% of the 1978 level. As a result export earnings as a percentage of GDP have declined steadily from about 36% in 1975 to 28% in 1982 (See Annex L - Table 1).

Second, with respect to imports, the volume and composition are such that import dependency has tended to increase without an offsetting increase in domestic productive capacity (See Annex L - Table 8). For example, the share of imports for food and other consumer items, which have little, if any, impact on the future productive potential of the economy, has increased at the expense of imports of capital equipment and intermediate goods. One of the reasons is that Senegal has become increasingly dependent on food imports to satisfy domestic requirements. A combination of factors, such as difficulties with the marketing system for domestically produced cereals, a past Government policy of subsidizing food imports, a taste preference for imported cereals (e.g. rice and wheat), and stagnating domestic rice production, account for this trend. The cost and the volume of oil imports have increased dramatically, placing heavy demands on scarce resources. The oil bill rose from \$76 million in 1976 to \$240 million in 1982, representing an average annual increase of 35%. Recent decreases in world oil prices are not expected to have a significant impact on the cost of oil imports due to the continued weakness of the CFA franc against the U.S. dollar.

As a result of the fall in prices of major exports and the simultaneous increase in prices of major imports, Senegal has experienced a considerable deterioration in its terms of trade since 1975. (See Annex L - Table 12.) Whereas the terms of trade of non-oil developing countries as a group improved markedly in 1977 and continue to remain above their 1975 level, the terms of trade for Senegal have fluctuated over the same period, primarily in a negative direction, and have remained consistently below their 1975 level.

3. The present balance of payments situation

a. The current account

Most recent developments in the balance of payments situation differ slightly from the structural trends that have explained the general inability of the Senegalese economy to pull out of the crisis over the last five years. Since 1981, Senegal's trade balance has improved somewhat in response to the recovery of export earnings derived from the groundnut sector and this despite a continued drop in world prices. More favorable rainfall and higher producer prices have worked to increase the volume of groundnuts marketed from a historic low of 68,000 tons in 1980/81 to an estimated 890,000 tons in 1982/83. Imports have increased in nominal CFAF terms over the 1981-1983 period but in real terms have remained at about the same level, demonstrating a slow-down in the volume of imports due to the combined impact of inflation and the depreciation of the CFAF against the U.S. dollar. (See Annex - Table 6). Nevertheless, the share (in value terms) of current consumption goods such as food and petroleum products in total imports continues to remain high at about 50%.

An increasingly important item in the current account is interest payments on debt which will have grown (taking into account projections for 1984) at an annual average rate of 17% over the period 1980-1984. [illegible] disturbing is that this growth has occurred despite two successful Paris Club debt reschedulings in October 1981 and November 1982 and assuming another debt rescheduling at the end of 1983. Although debt rescheduling has relieved considerable pressure on Senegal's debt service for the 1981-1983 period, it has serious implications for the debt service burden in subsequent years, since debt is not forgiven but payments are simply delayed. At the heart of Senegal's debt problem, which remained manageable through 1977, was the necessity to borrow on relatively hard terms during the poor harvest years of 1978, 1980 and 1981 to maintain essential food imports and a flow of raw materials and spare parts for industry. Thus, external debt outstanding as a percentage of GDP jumped from 21% in 1977 to 26% in 1978, and is currently projected to be about 60% of GDP. (See Annex - Tables 13 and 14.)

The GOS also resorted to commercial credit to finance part of the investments under the Fifth Development Plan (1977-1981) as the flow of concessional resources for this purpose proved to be lower than expected. Senegal is now confronted by a debt situation which is barely sustainable. Debt service as a percentage of exports of goods and services is projected to reach 27% in 1983,[1] while an 18% debt service ratio is generally considered to be an upper limit. Given the present circumstances, it is clear that Senegal is not in a position to consider external borrowing to finance its balance of payments deficit and that even loans on less than commercial terms (e.g., suppliers' credit) must be kept to a minimum.

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1 Assumes a 1983 debt rescheduling and 34% without another rescheduling.

b. The capital account

A main feature of the capital account since 1980 is the declining trend of net capital inflows to compensate for the trade deficit. Thus, net capital inflows have declined from $297.4 million in 1980 to $186.5 million in 1983. It is expected that the capital account will level off in 1983 and 1984 at about $190 million. The decrease in net capital inflows is the result of a number of factors. First, net public sector inflows which become a significant feature of the capital account for the first time in 1980 (with $208 million) began to drop off in 1982. This reflects Senegal's efforts to limit public sector borrowing, as well as a decline in official concessional loans. Second, Stabex[1] flows from the EEC, designed to offset decreases in export earnings as a result of external factors such as drought or an abrupt fall in world prices for major export commodities, declined from $80 million in 1980 and $42 million in 1981, to nothing in 1982 and 1983. The loss of access to Stabex compensation is explained by the fact that, although the world prices for groundnut products have continued to fail, the volume of exports has increased considerably, and with it, export earnings. Finally, net private sector inflows have also decreased since 1980, from $89.4 million to $52.8 million in 1983; however, a slight increase is projected for 1984.

c. Impact of the balance of payments on reserves

A short-lived improvement in Senegal's balance of payments during the mid-1970s permitted reserves to grow significantly but by the end of 1980 Senegal's share of reserves had fallen to a bare minimum of $7.6 million, or about three days' imports. In 1981 the situation improved marginally and the Central Bank's foreign assets rose to $8.6 million. Preliminary figures for the first half of 1982 show no significant change in this situation. Clearly, Senegal cannot rely on its reserves to finance a balance of payments deficit.

d. Implications of Senegal's membership in the West African Monetary Union on the balance of payments

Senegal's membership in the West African Monetary Union (WAMU) and this union's agreement with France have special implications for the conduct of monetary policy and the balance of payments. On the positive side, member states pool their foreign exchange earnings and reserves in a common central bank, the BCEAO (Banque Centrale des Etats de l'Afrique de l'Ouest). Thus, although a member's foreign exchange payments may be greater than its reserves plus foreign exchange receipts, it may draw on the excess reserves of other member states to finance its payments. More importantly, France guarantees the full convertibility of the CFAF against the French Franc at a fixed rate of 1 CFAF equals 0.02 FF. Therefore, as long as the WAMU members possess CFAF they may obtain foreign exchange through France's exchange market in Paris. In practice, the guarantee is ensured through an operations account with the French Treasury which provides overdraft facilities to the BCEAO.

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1 A special financing facility set up by the EEC to protect less developed countries from wide fluctuations in the prices of their exports.

There are, however, a number of mechanisms used to limit domestic credit expansion within WAMU which, in effect, through the limitation on CFAF availability, place a ceiling on the BCEAO's access to overdraft facilities on the operations account. First, whenever the average amount of the BCEAO's net foreign assets falls short of 20% of its liabilities for three consecutive months, the BCEAO must reduce its rediscount ceilings. Second, regardless of the Central Bank's net foreign asset position, the BCEAO must give its approval for any request for a bank loan in Senegal which exceeds approximately $206,000. During 1978 through 1980, despite these mechanisms and a deteriorating net external position, the BCEAO experienced difficulty in limiting credit expansion. (See Annex L - Table 15.) This was due mainly because private banks were raising resources for lending from foreign sources to supplement financing backed by domestic deposits, rediscounts, and net money market operations to meet the increased demand for credit. As a result, Senegal's foreign liabilities included for the first time in 1978 an overdraft on the operations account of $18.2 million, which increased in 1979 to $84.6 million, and again in 1980 to $148.6 million. Since 1980, however, Senegal's access to additional overdraft facilities has been limited. As the net foreign assets of the Central Bank became increasingly negative the rate of growth of domestic liquidity was brought under control.

Interest costs on the overdraft facility, which vary according to the discount rate of the French Central Bank and include finance charges (e.g. currently estimated to be about 15%), have also been a deterring factor to further recourse to the operations account.

Furthermore, since 1980, Senegal has, in the context of various stabilization agreements with the IMF, placed serious limits on both domestic credit expansion and recourse to new external borrowing. The net result of these factors is that Senegal's CFAF availability which would allow it to obtain additional foreign exchange through the operations account and thus to finance its balance of payments deficit, has been severely constrained. Thus in 1982, due to a combination of the limits on credit expansion, high interest costs on the overdraft facility and substantial central bank deposits Senegal made no additional drawings on the operations account.

In 1983 have been a number of new developments which would tend to discourage significant additional drawings on the operations account. First, France is currently experiencing difficulties in maintaining an acceptable level of reserves due to the weakness of the French Franc against other major currencies over the last 18 months. Thus, Franc zone countries are being encouraged to limit and where possible to reduce their overdrafts with the French treasury. Second, as a result of a slack world market for oil exports and recent price decreases, the reserves of the two major oil exporters in the Franc zone (Cameroon and Gabon) have dwindled and are no longer sufficient to cover other countries' overdrafts which means that the direct pressure on France to use its reserves to back the CFAF has actually increased. This situation arises at an inopportune time for Senegal since current projections indicate that financing, particularly from friendly Arab countries, is expected to decline significantly in 1983.

e. Financing of the balance of payments gap

Senegal depends heavily on net transfers (ODA grants), official loans (public capital inflows) and central bank financing in the form of IMF drawings, an overdraft on the operations account and central bank deposits by friendly countries to finance its balance of payments gap. In 1982, the current account deficit of $305.8 million was financed by $145.4 million in net public sector capital inflows including exceptional balance of payments assistance and $160.4 million in central bank financing principally from Kuwait ($110 million central bank deposit) and the IMF ($48.4 million in drawings in the context of the 1981/82 standby agreement).

Sources of financing for this year's current account deficit projected to be $354.2 million (See Annex L - Table 6) are at present uncertain. The GOS is hoping for the following:

Projected current account deficit:	$	354.2	million
- IMF drawings (assuming a 1983/84 Standby)	$	23.1	million
- Arab exceptional BOP support	$	12.0	million
- France exceptional BOP support	$	60.5	million
- Other net official capital inflows	$	138.7	million
- TOTAL	$	234.3	million
Unfinanced current account deficit:	$	119.9	million
- Proposed AID non-project assistance of which:	$	17.25	million
- Title III	$	(7.0 million)	
- ESF	$	(5.0 million)	
- SDF[1]	$	(4.25 million)	
Current account deficit after proposed AID contribution:	$	101.6 million	

While the above breakdown is still tentative, it is also clear that for 1983 there is a definite need for balance of payments support. Furthermore, a U.S. contribution of $16.25 million ($ 7million Title III, $5 million ESF and $4.25 million SDF) would make a significant contribution to the balance of payments representing 14% of the as yet unfinanced portion of the current

1 $0.75 out of the $5.0 million of SDF is for two technical assistance studies and is not considered in this case as balance of payments support.

account deficit. The outlook for 1984 is expected to be even more critical, since net flows from the IMF, an important source of balance of payments financing especially in 1982, are projected to be negative, even with a new standby agreement, due to the considerable amount of repurchases required as a result of previous IMF drawings. Arab sources, which have been relatively important in recent years, are expected to diminish if oil revenues continue to decline.

4. The present public finance situation

The impact of the current economic crisis is clearly reflected in the financial position of the GOS. (See Annex L - Table 16.) Since 1977/78 and particularly since 1980/81, the government has run a deficit on both its current and capital operations. From 1980/81 through to 1982/83, the deficit on current operations was about 4.9% of GDP and it is expected to remain at about the same level in 1983/84. The overall deficit as a percentage of GDP (on a disbursements basis which includes changes in government arrears) has varied between 8.7% and 9.8% over the last three fiscal years and is expected to be about 9.2% of GDP in 1983/84.

a. Current operations budget

On the revenue side, the GOS has not been able to increase receipts substantially over the 1980/81 - 1982/83 period and this despite compliance with IMF recommendations for new tax measures. There appears to be very little scope for increasing government receipts through the introduction of additional taxes since Senegal is already characterized by a relatively high ratio of tax revenue to GDP (estimated at 21% in 1981/82). The ratio of taxes to GDP is slightly above the average for other countries participating in the West African Monetary Union (WAMU) and about 25% above the average for lower income African oil importing countries. On imported items there are three taxes: a basic customs duty of 15%, a fiscal duty of an average 40%, and a value added tax at an ordinary rate of 20%. The direct tax system taxes each category of income separately and then follows up with a surtax of overall income. Thus, the prospects for future increases in revenue depend almost entirely on more efficient tax collection and administration, not on increased rates.

With respect to expenditures, the largest item continues to be public sector wages and salaries. A recent IMF study shows that the level of the wage bill in Senegal is about 28% higher than would be expected in a country of Senegal's size and income. Senegal's civil service was estimated in January 1982 at 61,000, compared to 68,600 in Ivory Coast, a country with a population about 50% larger and a GDP more than three times that of Senegal. There are, however, a certain number of political factors, including the lack of private sector opportunities for the employment of the educated, which have and will continue to apply severe pressure on the government to act as an employer of last resort. Thus, the problem of containing and reducing public sector employment must be treated in the context of employment generation efforts in other sectors. Nevertheless, the GOS since 1980/81 has been successful in limiting the real growth of current expenditures on wages and salaries which in local currency terms, have increased on average at about the same pace as inflation.

Since 1982, the GOS appears to be stabilizing the level of expenditures for supplies at about $200 million with a real decrease currently being projected for fiscal year 1983/84. However, one item which will be assuming progressively more importance in the current expenditures outlook is interest on public debt. Debt service payments on government debt will be high due to the contractual debt managed by the Autonomous Sinking Fund (CAA), and the need to pay off short-term arrears, the debts of the now defunct parastatal ONCAD, and the exceptional aid received in the form of special treasury loans. Government arrears are estimated at about $118 million (approx. CFAF 40 billion) and the amount of ONCAD's debt assumed by the government at about $267 million (approx. CFAF 90 billion).

Another big drain on the current expenditure side is the Price Equalization and Stabilization Fund (CPSP). The role of this fund since the GOS has decontrolled most of the subsidies on consumer goods is primarily to stabilize revenue to farmers from major export crops such as groundnuts and cotton. This stabilization function is viewed as being of particular importance due to the relatively unfavorable recent world price developments for groundnut products. Producer prices for groundnut products were increased by 40% in 1981 and those for cotton by 13%. The object of this increase was to spur agriculture production of export crops as a means of improving export earnings, which has indeed occurred. However, given the fact that world prices are currently below domestic producer prices plus transformation costs, the GOS through the CPSP is paying a subsidy of about 30% to farmers. The estimated deficit of the CPSP groundnut account for the 1981/82 fiscal year is about $33.6 million (CFAF 10.5 billion) and for 1982/83 is expected to be about $66.3 million (CFAF 24 billion). Thus, increased groundnut production which has contributed substantially to the improvement of the trade balance, has an opposite effect on the government's balance of current operations. The GOS is currently seeking solutions for the financing of this significant deficit.

b. Implications of the current operations budget for recurrent costs

The GOS's difficulties with respect to the current operations budget suggest that there will be serious constraints on Senegal's ability to finance the operating and maintenance costs of its infrastructure and investments. Since 1981 a considerable amount of additional aid from donors has been sought to finance recurrent costs and local counterpart contributions to development projects. The shifting composition of investments included under the Sixth Plan (see Annex L-Table 4) may bring some relief in the growth of demand for recurrent expenditure due to a relative decrease in social sector and rural development investment targets and an increase in the proportion of investment allocated to directly productive sectors. Nevertheless, recurrent cost minimization is likely to be an important criteria for project selection until the public finance situation has improved.

c. Capital budget

The situation with respect to the capital budget has been largely influenced by problems concerning the current operations budget.

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Senegal has experienced increasing difficulties in generating budgetary savings to finance capital expenditure. Thus public savings before debt service declined from approximately $7.2 million on average for the period from 1976/77 to 1979/80 to minus $35 million in 1980/81. The trend with respect to investable surplus has been even more pronounced and became negative beginning in 1977/78. The result has been that despite debt rescheduling the GOS has been unable to contribute to the investment budget through public savings in recent years. Serious doubts can be raised about the GOS's ability to mobilize the resources required to cover its contribution to the proposed investment under the Sixth Development Plan which has been estimated at about $150 million or 11% of the total for the period 1981-85 (see Annex .-Summary Table 4A). In recognition of the relative infeasibility of investment targets, the Sixth Plan is currently being revised downward and will give priority to 19 major investment projects. In 1983/84 the Government expects to limit the deficit on the capital budget through increased efforts to mobilize external capital grants and a 17% cut in capital expenditures.

B. Corrective Measures

In December 1979 the GOS, recognizing the necessity to move from ad hoc corrective measures to a comprehensive program for economic reform and stabilization, launched its medium-term Economic and Financial Reform Program. This program has provided the basis for IMF and World Bank support to economic policy reform with the IMF concentrating on measures to rectify the balance of payments and public finance deficits and the World Bank on agricultural policy. The following section presents corrective measures introduced directly by the GOS and in connection with support from the IMF and the World Bank including an assessment of GOS performance in actually applying these corrective measures.

1. The GOS Economic and Financial Reform Program

The Economic and Financial Reform Plan ("Plan de Redressement") has three broad objectives: 1) to stabilize the economy through a reduction in the balance of payments gap, 2) to stimulate growth and, 3) to reduce urban-rural income inequality. It was expected that the first two or three years (1980-1983) would be focused on stabilization and that in the subsequent years the economy would assume a steadier growth path. (For a summary of this program see Annex D).

To rectify the public finance situation the GOS has undertaken to (1) maintain the rate of growth of current expenditures below that of current revenue (2) progressively reduce the share of outlays on personnel (3) reduce the role of public enterprises in the economy and improve their financial manangement. According to recent figures on government operations the GOS has in fact made some progress with respect to all three of the above. Growth in current revenue has been on average marginally above growth in current expenditures (0.8% and 0.2% respectively). The share of outlays on personnel has decreased from 56% in 1980/81 to 48% in 1982/83. The GOS has signed six program contracts with public enterprises to strengthen their efficiency and to limit the government's financial responsibility to those entities.

As a means of preventing further deterioration in the balance of payments the GOS Reform Plan calls for: 1) the introduction of a more restrictive credit policy through increases in interest rates and the use of a system of advance authorizations for credit requests exceeding about $206,000 2) the adoption of new foreign trade policy through the progressive introduction of an increase in import duties and a selective export subsidy to encourage sectors that offer real export possibilities and 3) concerted efforts to limit service on external public debt to 15% of export earnings. Consistent with these objectives, interest rates were increased in 1982 by an average 2%. The system of advance authorizations for credit has been introduced as well as a new foreign trade policy. Debt service payments have exceeded the 15% of export earnings; however, the GOS has made efforts to reduce debt service by conforming with IMF ceilings on new external borrowing and negotiating two successful debt reschedulings in 1981 and 1982.

With respect to prices and wages the reform plan commits the GOS to: 1) the progressive decontrol of prices 2) the fixing of producer prices at the highest possible level compatible with the anticipated export price and 3) maintenance of wage level increases within the limits of the projected growth in GDP and domestic consumption. Since 1980, the GOS has made impressive strides towards the elimination of subsidies even on sensitive food products. Prices were raised by 25% for bread and sugar, 31% for rice, 39% for groundnut oil, 42% for wheat flour and 59% for gasoline. At present, subsidies remain for some agriculture inputs such as groundnut seed and fertilizer, and to the producer price for groundnuts and tariffs on certain public services. Wage increases have been kept to a minimum of about 5% in the public sector for 1982 and 1983 and have increased in April of this year for the first time since January 1981 in the private sector. The producer price for groundnuts, which has been traditionally below the export price is now subsidized since domestic costs are currently above world prices. This is due both to the fact that the GOS increased the price perhaps too sharply in 1981 and to an unexpected deterioration in the world price since 1981.

In the context of the Sixth Development Plan the GOS has set a number of investment targets: (1) the maintenance of total private and public investment at about 17% of GDP and public investment alone at 10% of GDP (2) the allocation of 55% of investment to directly productive sectors (as compared to 47% in the Fifth Plan) and (3) an increase in the contribution of public savings from 15% of public investment to 25% over the 1981-85 period. In 1981 and 1982 investment has been estimated at about 20% of GDP and according to the proposed composition of the Sixth Development Plan 57% of total investment is to be allocated to the primary and secondary sectors. As for the contribution of public savings to finance public investment the 15%-25% target appears to be overly-ambitious in view of the GOS's current budgetary difficulties.

Given the importance of the agriculture sector in determining the good health of the overall economic situation, the GOS reform program outlines a number of measures with respect to: (1) the use of incentive pricing (2) the reorganization of regional and national rural development institutions (3) the reorganization of the Price Equalization and

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Stabilization Fund (4) reorganization of the seeds and other agriculture inputs (5) overhaul of agriculture credit (6) overhaul of groundnut collection and weighing operations (7) encouragement of the private sector in marketing (8) creation of village sections within cooperatives and (9) reorganization of agriculture research. Especially important are reforms dealing with the reorganization of regional rural development agencies, the reform of Senegal's system for supplying the farmer with fertilizer and seed, the reform of rural credit and the strengthening of farmers' organizations such as village sections and cooperatives. This comprehensive program for structural reform in the agriculture sector is designed to: (1) stimulate production of food crops to decrease import dependency (2) increase and diversify agriculture production (3) encourage farmers to accept more responsibility by providing them with extension services and training in cooperative organization and (4) increase incomes of farm families.

For the period 1980 to 1982 the GOS has introduced a number of measures to promote structural reform in accordance with the above program. Producer prices for export crops and domestically produced cereals were increased across the board in 1981.[1] Consumer prices of imported food products now tend to reflect import costs. ONCAD, the parastatal responsible for providing inputs, credit, and for marketing groundnut production up to 1980 was dissolved and arrangements have been made for settling this institution's liabilities vis-a-vis its suppliers and the banks. The responsibility for groundnut marketing has been transferred to the cooperatives which deliver their production directly to the oil crushers. Program contracts between the GOS and three of the rural development agencies (SAED, SODEFITEX, SODEVA) have been signed, a study of the financial management of the CPSP has been made, a policy of encouraging farmers to store their own seed was attempted but abandoned during the 1982-83 growing season, and procedures for the overhaul of groundnut collection and weighing operations have been implemented. Measures have also been taken to promote the role of private transporters in the marketing of agriculture production.

Despite the above achievements there are a variety of areas in the agriculture sector where change has proved to be difficult. The first concerns the role and future of SONAR, a temporary agency created following the dissolution of ONCAD to supply farmers with inputs such as seed and fertilizer. While the GOS has expressed acceptance of the principle that this agency should be temporary, it has serious reservations regarding the timing of the phasing-out process, particularly in view of the critical unemployment situation in Senegal.

Secondly, the GOS has recently suspended its new policy of encouraging individuals to hold back part of their harvest to serve as seeds for the growing season due to technical difficulties with seed preservation and the release of funds for this purpose as well as to unfavorable reactions from the farmers themselves. These farmers, who are accustomed to wide fluctuations in their production from one year to the next, were hesitant about opting in favor of conserving their own seed stocks since they believed that this would permanently deny them access to government seed stocks in the future. Concern has been expressed with respect to the implications of this policy for the quality of future seed stocks.

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1 In April 1983 producer prices for rice, maize and millet were increased an additional 10 - 20%.

Thirdly, there are differences of opinion on the relationship and respective roles of cooperatives versus village sections. The reform program calls for a strengthening of the village sections and their role with respect to seed management and other functions. However, the cooperatives have been the most important organizations in the past and it is only normal that greater emphasis on village sections has provoked a certain amount of opposition from those groups with vested interests in the former system. Fourthly, the combined impact of the new policy of cash sales for fertilizers, and a progressive phasing-out of fertilizer subsidies has had serious implications for fertilizer use during last year's growing season and these are likely to continue this year. (See Annex E on the "Economic, Technical, Financial Justification for Fertilizer Imports".) The introduction of a consistent and feasible policy on fertilizer sales could contribute substantially to the resolution of problems in this area. Finally, the reorganization of rural development agencies has proceeded more slowly than originally expected despite the signature of program contracts. Problems associated with staffing, and administrative and financial management have proved to be quite stubborn and efficiency has suffered. These difficulties are reflected in performance with respect to the World Bank's Structural Adjustment Loan .

Although important measures have been taken to promote structural change in the agriculture sector, reform has been more elusive than anticipated. Institutional arrangements have demonstrated remarkable inertia and Senegalese farmers, who have been accustomed to extensive government participation, appear cautious about assuming the risk involved in farming in the Sahel region without significant government support. The newly appointed Minister for Rural Development has asked for a 6 month reflection period before presenting a comprehensive program for pursuing structural reform in the agriculture sector.

2. IMF support for economic stabilization

IMF support for economic stabilization in Senegal began shortly after the formal adoption by the GOS of its Economic and Financial Reform Program. In August 1980, an Extended Fund Facility (EFF) was approved covering three fiscal years from July 1980 to June 1983 for the amount of SDR 184.8 million (approximately $207 million). Performance under the first year of the program, however, fell short of expectations, partially due to the drought but also because a number of measures specified in the program were not applied. The current account deficit in 1980 exceeded the program target by about $30 million as a result of larger than projected imports. The overall balance of payments deficit, however, was more in line with targets due to larger than expected capital inflows. The ceiling on total domestic credit was exceeded in the last quarter of 1980 by about 5%, and during the first half of 1981 the ceiling on the cumulative deficit of the central government was exceeded by a considerable margin with a deficit of about $4.3 million instead of a projected surplus of about $1.4 million. The ceiling on new foreign borrowing, which was observed through November 1980, was slightly exceeded in December.

In view of the difficulties experienced during the EFF it was decided that the approach under a standby arrangement would be more adapted to the specific constraints faced by the GOS. Hence, in September 1981, a standby was approved covering the period from July 1981 to June 1982 and allowing for drawings of SDR 63 million, or about $7[illegible] million by the GOS. Performance under the 1981/82 program was significantly better and the deteriorating economic situation was reversed somewhat through a combination of good weather conditions, sizable external assistance and strong adjustment measures. All quarterly performance criteria were satisfied.

A new standby agreement was approved in November 1982 covering the Senegalese fiscal year from July 1982 through to June 1983. However, the program got off to an unfortunate start and during a December IMF review mission it was found that ceilings for credit expansion (total domestic credit and net government claims on the banking sector) had been exceeded, although only marginally, according to both September 30th and December 31st performance criteria. Thus, since December the GOS has been unable to draw on IMF resources. Factors explaining excessive credit expansion are both external and internal. First, contrary to the underlying assumption of the new stabilization program of a 17% firming of the prices of groundnut products, the world price of groundnut oil has fallen in constant prices to its lowest level in the past ten years. Second, the interest payments on outstanding debt reflecting a downward rigidity in world interest rate proved to be higher than anticipated. These two factors alone represent a GOS revenue shortfall of about $50 million, or 2.2% of GDP. On the other hand, the GOS has also been slow in introducing adjustment measures, particularly immediately prior to national elections, which were held on February 27, 1983. Nevertheless, some important steps to check demands on public resources and to increase government revenue have been made: (1) prices for milk sugar were increased by 50% in November 1982, (2) the fiscal duty on imports was increased by 5%, (3) the export subsidy on nontraditional exports has been raised from 10% to 15% and the list of eligible products has been extended, and (4) proposals for increased taxes on alcoholic beverages and kola nuts will be submitted to the newly-elected National Assembly in April 1983. (For a summary of major requirements under the IMF standby, see Annex D.)

A number of important agriculture reforms outlined in the previous section on the GOS recovery program are also in the process of being implemented under the standby with the IMF. A contract is being negotiated to increase the role of oil crushing firms in the marketing of groundnuts and to encourage them to minimize costs (signature expected shortly). A contract has been signed with the domestic fertilizer producer to assume direct responsibility for fertilizer distribution, and the price of fertilizer has been doubled, reducing the subsdidy to about 60%.

Under the 1982/83 stabilization program the GOS has been authorized to use only 12.5% of its drawings. Following an IMF mission in January 1983, it was decided that despite the resource shortfall of about $50 million due to high interest rates and the relatively low prices for groundnut, the GOS would maintain the original objectives of the program as set in November. In order to do so, however, it would be necessary for the GOS to mobilize major new balance of payments assistance of about $50 million on grant terms. Since the GOS has been unable to mobilize this exceptional aid, it was decided in May that the IMF and GOS would begin negotiating a new agreement covering the period from July 1, 1983 to June 30, 1984. The new program is to be based on the introduction of concrete measures to correct, in particular, the critical public finance situation. (See Section C.3 on Public Finances.)

3. World Bank support for economic reform

In late 1980, the World Bank approved a $60 million Structural Adjustment Loan (SAL) to Senegal. The loan, designed to support the GOS Economic and Financial Reform Program, concentrated on four areas of structural adjustment: fiscal and monetary; prices and incentives; investment programs; and institutions and policies in the agriculture sector. Since the SAL was introduced, the World Bank and the IMF have been working together closely to ensure that the major requirements of the SAL and the EFF, subsequently turned standby, are compatible and, where possible, mutually reinforcing. The release of SAL funds is in principle conditional on the GOS meeting standby terms. The IMF standby arrangement, which must be renegotiated annually, incorporates the major outstanding requirements under the SAL. In the division of labor between these two institutions, the IMF has concentrated on the macroeconomic aspects of stabilization, while the World Bank has assumed responsibility for monitoring agriculture and institution reforms.

Counterpart funds have been deposited in a special account and are being used to cover the development expenditures of the parapublic sector and to improve the efficiency of a number of key rural development agencies. The World Bank has to date only approved GOS program contracts with SAED and SODEFITEX.

As a result of the slower than expected progress in implementing agriculture reforms (See Section B2), the World Bank has not yet disbursed the second tranche of the SAL (equivalent to about $16 million). The original terms of the loan set the deadline for release at December 31, 1981, but this was subsequently extended to June 30, 1983. The final decision as to whether to release the second tranche before the expiration date will be made in the course of the month of May. Implementation difficulties can be linked to the nature of SAL conditionality which has been relatively complex, involving a number of different institutions and reforms in a variety of different areas, such as seed stock maintenance, the distribution and pricing for fertilizers, the reorganization of RDAs, and the future of the parastatal SONAR. As a result, progress in one area has been penalized by inadequate performance in other areas.

Based on experience with the SAL, the World Bank is considering the continuation of support for economic reforms, but in a more limited context. Through a combination of technical assistance to draw up rehabilitation programs for key public enterprises, and subsequent lines of credit to these enterprises to provide working capital and foreign exchange for necessary imports, the World Bank aims to encourage additional streamlining of the parapublic sector. A healthier parapublic sector would also have important implications for GOS public finances, since aggregate net income for this sector is currently negative. Few companies can auto finance any portion of their new investments and parapublic companies have generated only a small percentage (11%) of total government tax receipts. Twenty-nine of the sixty-eight parapublic companies have experienced operating deficits in each of the last five years, with aggregate operating losses in FY81 totalling $13 billion CFAF. Direct Government subsidies in FY81 were $12.6 billion CFAF, equal to 10% of the Government oprerating budget (excluding debt service) and 20% of the public sector deficit in that year.

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The World Bank is proposing a new technical assistance project, estimated at $10 million, to finance the formulation of rehabilitation programs for OPT (postal and telecommunication), SOTRAC (urban bus company), and SENELEC (power company), followed probably by OHLM (urban housing) and SICAP (urban housing) Dakar-Marine, SONADIS (distribution) and SONEES (water supply). It is expected that this project will be approved in the middle of 1983. A subsequent project is envisaged to provide financial support for enterprises demonstrating progress in implementing their rehabilitation programs, with disbursements made at six-month intervals, conditional upon enterprise performance in areas such as production efficiency, maintenance, billing recovery, investment execution etc. The World Bank is currently planning on channelling to the parapublic sector as much as $50 million over a three-year period beginning most probably in early 1985.

C. Other Donor Assistance

Since the beginning of the economic crisis in 1978, Senegal has benefited from considerable donor support for its efforts to redress the economy. Aid donors fall basically into three major groups: OECD donors, Arab donors, and multilateral donors. (See Annex L - Table 19.) The latest figures available are for 1981. They would seem to indicate that the largest donor group of concessional assistance consists of the OECD countries providing $301.4 million out of $524.2 million (or 58%), then Arab donors providing $152.5 million or 29%, and last, multilateral donors providing $70.3 million or 14%, of the total. Project and technical assistance account for 70% of official development assistance (ODA) extended in 1981 and nonproject aid for 30%.

Senegal also received in 1981 $150.4 million in loans at somewhat under market rates but above highly concessional ODA terms. The major donor group is comprised of the multilateral donors with the World Bank's loans accounting for about one-third of this type of financial flow. France, principally through the Caisse Centrale de Coopération Economique (CCCE) extended about 25% of these loans made on somewhat harder terms. (See Annex L - Table 20.) The program component of this category of assistance accounts for about 40% of the total and the project aid and technical assistance components for about 60%. These figures would seem to imply that at least some donors tend to provide program financing at less than a 25% grant element. However, due to Senegal's debt structure, the GOS will find it increasingly difficult to take on new commitments at these terms.

Senegal's major donor has traditionally been, and continues to be, France, who contributed $188.5 million, or about 28% of total official flows in 1981. (See Annex L - Table 21.) France provides a sizable amount of its aid as technical assistance, which represented 38% of its total program in Senegal in 1981. The World Bank share in new commitments varies from year to year, but in 1981 it was the second largest donor, providing $99.7 million, or about 15% of total official flows. A major component of the program in 1981 was the Structural Adjustment Loan. Kuwait, the EEC, and Saudi Arabia extended somewhat over $60 million each in 1981. While the EEC and Saudi Arabia provided sizeable program assistance, Kuwait's assistance was committed to the OMVS project. U.S. assistance which is totally on grant terms to Senegal has been increasing rapidly since 1978, and the U.S. was the sixth largest donor in 1981, with $35.6 million in new commitments. (See Annex L - Table 18.) Food aid and assistance to the agriculture sector were prominent features of the program. After the U.S, the African Development Bank and Germany extended about $30 million each in 1981.

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In addition to official flows, Senegal also benefited from increased Central Bank financing as a result of drawings on IMF resources of $62.6 million under a standby arrangement and the Compensatory Financing Facility. (See Annex L - Table 22.)

Preliminary figures for 1982 appear to indicate a decrease in new aid commitments to Senegal of about 25%, with a substantial fall-off in program assistance and loans in general. This may be due to a number of factors:

- Export earnings increased substantially in 1982, making Senegal ineligible for compensatory financing through the IMF and the EEC.

- Many of the program commitments (e.g. SAL) made in 1981 were intended to be disbursed over a two-year period.

- As arrangements for moving ahead with OMVS were finalized, donors, and in particular the Arab donors, directed new funding to OMVS rather than in the form of balance of payments support.

It is expected that Senegal will continue to enjoy relatively high levels of external support; however, future levels, especially from Arab donors, may be affected if world oil prices continue to fall. Given current economic difficulties in industrialized countries, it would not appear likely that OECD donors could compensate for a gap in the event of a decline in Arab flows.

D. Prospects For Economic Recovery

Prospects for economic recovery will depend heavily on GOS political will and determination to proceed energetically with its medium-term program for economic and financial reform. This program, together with the Sixth Development Plan for the period 1981 through 1985, provides a sound basis for Senegal's economic recovery. The policy reforms prescribed have been discussed widely and have emerged from a dialogue between the GOS and its major donors, particularly the IMF and the World Bank. Through the promotion of structural change, Senegal should be able to progressively re-establish financial equilibrium while stimulating economic growth.

A slowdown in the consumption rate of households and the public sector should, with the assistance of a policy of maintaining positive real interest rates, stimulate domestic savings as a percentage of GDP, which have declined steadily since 1975. The impact of investment on economic growth is expected to be enhanced through an increase in the rate of investment, and more importantly, through a redirection of investment to directly productive sectors, and in particular, agriculture. Measures are being taken to expand exports by: (1) increasing productivity and reducing costs in the groundnut sector, (2) stimulating growth in the fishing sector through modernization of Senegal's fleet, motorization of traditional fishing boats and expansion of fish processing and marketing capacity, (3) emphasizing exports, of products where Senegal has some potential comparative advantage, like market garden produce, phosphate fertilizers, cotton textiles, cement, and agriculture machinery. Equally important are efforts to limit growth in imports through: (1) the promotion of domestic food crop production, based on a policy of increased producer prices for food crops and of improved marketing and distribution arrangements, (2) the recovery of the livestock sector, (3) progressive price increases for imported food, such as rice and wheat, and (4) price increases to limit consumption of imported oil and the development of alternative energy sources such as solar and eolian power, peat and if possible exploitation of domestic oil resources.

Medium-term projections for the pattern of economic growth were made through 1985 in the context of the Sixth Development Plan. (See Annex - Tables 2 and 2A.) These projections imply a nominal rate of growth of 12.7% per annum and a real growth rate of 2.6% (in CFAF terms). Prospects for the primary sector, at least through 1985, assume only 1.1% annual real growth, with the fishing sector expected to contribute about 60% of this projected increase. Agriculture and forestry are likely to stagnate over the next three years

The secondary sector is assumed to grow more quickly than any other sector of the economy at a real annual rate of 4% between 1982 and 1985. Major contributors are expected to be: construction (32% of total growth), manufacturing (33%), and energy (21%). These results would be consistent with the projected sectoral breakdown of investments under the Sixth Development Plan, which provides for 34% of total investments to be directed to the secondary sector. The GOS also expects that recent changes in the investment code and other measures to promote private sector involvement will also begin to bear fruit during this period.

The tertiary sector is traditionally the largest component of Senegal's GDP, accounting for slightly over one-third. Commerce is the principal contributor with just under 60% of GDP in this sector derived from this activity. Although the rate of growth of the tertiary activities is expected to decrease slightly, this sector will most probably grow at a real annual rate of about 3% through 1985. Tourism is also assumed to account for a significant part of this real growth. About 22% of investments under the Sixth Plan are to be channelled to the tertiary sector, primarily for transport and telecommunications projects (approximately $235 million).

Personal services, which include both domestic services and public sector salaries, are projected to grow only slightly, at 1.7% per annum in real terms between 1982 and 1985. This trend would be a departure from earlier years and reflects GOS intentions to limit public sector hiring, as well as to maintain wage increases at levels compatible with projected growth in GDP and domestic consumption.

In view of the relatively low growth prospects through 1985, and the GOS experience with its Economic and Financial Recovery Plan since 1980, it is clear that: (1) economic stabilization is likely to take considerably more time than originally anticipated, (2) stabilization remains the most urgent task facing Senegal today, and (3) given the necessary pace of adjustment, substantial external assistance is both warranted and required over the next three to four years.

Senegal's past record with respect to economic policy reform is a good one. Subsidies on consumer goods have been practically eliminated as part of an overall policy of maintaining true economic pricing. The GOS has moved to reduce the parapublic sector through the liquidation of over twenty companies, through the transfer of four companies to private ownership, and through the promotion of private sector participation in the form of joint ventures. The government's withdrawal from manufacturing activity is particularly pronounced, with only four of an estimated 300 companies currently state-owned. A new foreign trade policy has been adopted to limit import growth and to promote exports through a system of fiscal levies on imports, and subsidies for nontraditional exports. Producer prices have been increased substantially, and major reforms designed to increase productivity and reduce costs in the groundnut sector have been introduced.

Senegal is currently experiencing some difficulties with respect to the implementation of its standby agreement with the IMF; following President Diouf's election to a full term of his own, the GOS has publicly reaffirmed its commitment to economic reform. To a large extent, the failure to meet performance criteria in December can be directly linked to an unexpected deterioration in world prices for groundnut products and continued high interest costs on outstanding debt, exemplifying the economy's vulnerability to external shocks. It should also be recognized that it is extremely difficult, and in some cases it would be self-destructive, for a government to remain insensitive to election politics and continue to introduce highly unpopular economic austerity measures immediately prior to national elections. Now that President Abdou Diouf has been democratically elected with the impressive majority of 84%, it is expected that his new government will act quickly to increase the pace of policy reform in conformity with Senegal's previous achievements.

The donor community, particularly through increased nonproject assistance, has assisted Senegal in its process of emphasizing policy reform and more efficient economic management. Given current economic conditions, many donors have expressed the view that the development impact and economic returns to nonproject aid are considerably more promising than for many investment activities. The tightness of the GOS budgetary situation is expected to remain for several years, which has serious implications for the availability of recurrent cost financing. Thus, since 1980 the World Bank, France and to a lesser extent Canada, Germany and the U.S., have been extending more significant amounts of nonproject assistance. An $18 million U.S. contribution for FY 1983 is not only essential to Senegal's balance of payments position but would also enhance the U.S. ability to participate more effectively in ensuring Senegal's economic future through support for the restructuring of the economy.

ANNEX L

STATISTICAL TABLES

ANNEX L : STATISTICAL TABLES

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TABLE 1

SENEGAL: SELECTED MACROECONOMIC INDICATORS
(1975-1982)

	1975	1976	1977	1978	1979	1980	1981	1982
Real GDP Growth Rate in %	7.5	9.1	- 2.9	- 3.9	10.1	- 1.5	- 2.4	9.8
Domestic Savings as % of GDP	12.3	8.4	8.7	3.7	4.2	1.4	- 0.1	3.0
Consumption as % of GDP	87.7	91.6	91.3	96.3	95.8	98.6	100.1	97.0
of which: public consumption	14.7	15.6	16.1	18.4	19.1	21.2	21.4	19.7
Investment as % of GDP	17.8	16.5	17.5	17.4	18.6	17.2	20.6	20.0
Imports of Goods and Services as % of GDP	41.9	44.3	52.0	44.0	49.0	41.6	47.2	45.9
Exports of Goods and Services as % of GDP	36.4	36.3	43.2	30.3	34.5	25.8	26.4	28.0
Deficit of Trade in Goods and Services as % of GDP	5.5	8.0	8.8	13.7	14.5	15.8	20.8	17.9
Population in Millions	4.98	5.11	5.25	5.40	5.55	5.70	5.86	6.03
Real GDP/Capita Growth Rate in %	4.7	6.1	- 5.3	- 6.6	7.1	- 4.1	- 5.0	6.6

Source: GOS Department of Statistics. Ministry of the Economy and Finance

TABLE 2

SENEGAL: PROJECTED GROSS DOMESTIC PRODUCT BY TYPE OF ACTIVITY
(1982-1985)
(In Billions of CFAF)

Economic Activity	In Current Prices				In Constant 1977 Prices			
	1982	1983	1984	1985	1982	1983	1984	1985
A. PRIMARY	183.2	194.4	200.6	202.9	125.7	126.5	128.1	129.8
Agriculture	104.6	109.1	108.8	104.2	66.6	66.6	66.6	66.6
Livestock	44.3	47.1	51.0	55.2	35.0	34.0	35.0	36.0
Fishing	21.4	24.2	26.2	28.3	15.0	16.3	16.9	17.6
Forestry	12.9	14.0	14.6	15.2	9.1	9.6	9.6	9.6
B. SECONDARY	202.1	235.6	269.5	299.7	109.5	114.1	119.0	122.8
Mining	16.0	20.0	20.8	21.8	9.1	9.5	9.5	9.6
Groundnut Processing(1)	0.6	8.6	10.3	12.2	12.2	13.4	13.4	13.4
Energy	14.6	15.0	23.4	27.5	10.6	11.6	12.8	13.4
Construction	44.0	52.1	59.3	66.8	23.9	25.8	26.8	28.2
Other Industries	126.9	139.9	155.7	171.4	53.7	54.3	56.5	58.2
C. TERTIARY	308.7	362.4	412.3	468.9	217.9	224.8	233.1	237.3
Transport & Communications	57.2	67.1	76.3	86.8	40.4	41.6	43.1	43.9
Commerce	178.1	209.1	237.9	270.6	125.7	129.7	134.5	136.9
Other Services	73.4	86.2	98.1	111.5	51.8	53.5	55.5	56.5
D. PERSONAL SERVICES (2)	129.6	139.7	150.9	162.9	89.2	91.0	92.4	93.8
E. GDP	823.6	932.1	1033.3	1134.4	540.0	556.4	572.6	583.7

Source: GOS Department of Statistics, Ministry of Economy and the Finance

(1) The low value added figures for groundnut processing in current prices are explained by the fact that domestic producer prices are above world prices for groundnut products.

(2) Includes public sector salaries

TABLE 2A

SENEGAL: PROJECTED GROSS DOMESTIC PRODUCT BY TYPE OF ACTIVITY

(1982-1985)

(Summary in millions of U.S. Dollars)

	In Current Prices				In Constant Prices			
	1982	1983	1984	1985	1982	1983	1984	1985
A. PRIMARY	544.0	540.0	527.9	533.9	373.2	351.4	337.1	341.6
B. SECONDARY	600.0	654.4	709.2	788.7	325.1	316.9	313.2	323.2
C. TERTIARY	916.6	1,006.7	1,085.0	1,233.9	647.0	624.4	613.4	624.5
D. PERSONAL SERVICES	384.8	388.0	397.1	428.7	264.8	252.8	243.2	246.8
E. GDP	2,445.4	2,589.1	2,719.2	2,985.2	1,610.1	1,545.5	1 506.9	1,536.1
MEMORANDUM ITEM:								
CFAF/$	336.8	360.0	380.0	380.0	336.8	360.0	380.0	380.0

TABLE 3

SENEGAL: EVOLUTION OF VALUE ADDED IN THE PRIMARY SECTOR

(Billions of CFAF)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980 estimated
Cereals	8,9	12,3	9,1	14,1	28,2	23,5	23,0	18	36,9	25,1
Groundnut	9,0	19,5	10,2	16,4	35,9	52,3	43,1	15,5	37,1	28,0
Cotton, tobacco	2,5	3,1	3,0	3,4	4,1	5,3	6,0	5,9	6,4	6,0
Tubers	0,4	0,6	0,7	1,1	1,9	1,5	1,5	1,8	1,6	1,5
Fruits, vegetables	3,3	3,0	3,2	3,5	4,3	4,0	2,7	2,7	3,3	3,1
AGRICULTURE	24,1	38,6	26,2	38,5	74,4	86,5	77,0	43,0	85,3	63,7
Livestock	13,7	14,1	15,1	19,9	25,6	32,5	37,7	38,2	41,8	42,3
Fishing	8,9	10,8	13,8	15,8	16,8	18	19,7	22,4	17	27,5
Forestry	4,8	5,8	6,3	7,4	7,8	8,4	9,9	9,5	10,9	10,7
PRIMARY	51,5	69,2	61,4	81,6	124,6	145,8	143,7	113,1	155,0	142,2
% Agric in primary sector	47	56	43	47	60	60	54	38	54	43
GDP	216,1	240,7	243,1	299,4	359,2	402,8	419,9	403,7	468,2	450,7
% Agric in GDP	11	16	11	13	21	21	18	11	18	14,2
% Primary in GDP	24	29	25	27	35	36	34	28	33	32
CFAF/$	261.2	256.3	235.4	222.2	224.3	248.5	235.3	209.0	201.0	225.8

Source: GOS Sixth Development Plan, Ministry of Planning and Cooperation

TABLE 4

SENEGAL: PROPOSED INVESTMENT FOR SIXTH DEVELOPMENT PLAN
(1981 - 1985)

(In millions of CFAF) (1)

SECTORS	TOTAL COST	PROGRAMMED EXPENDITURES 81-82	82-83	83-84	84-85	DOMESTIC FINANCING Amount Cost	% of Total	EXTERNAL FINANCING Amount Cost	% of Total
A. PRIMARY	106,652	28,398	30,198	25,794	21,762	20,554	19.3	86,098	80.7
Agriculture	55,169	16,371	14,874	12,431	11,493	12,672	23.0	42,496	77.0
Livestock	10,977	2,262	3,310	2,745	2,660	1,402	12.8	9,575	87.2
Fishing	11,414	3,012	3,543	2,799	2,060	2,000	17.5	9,414	82.5
Forestry	10,665	2,540	3,330	2,666	2,129	2,325	21.8	8,340	78.2
Water Management	18,427	4,713	5,141	5,153	3,420	2,155	11.7	16,273	88.3
B. SECONDARY	151,851	45,387	51,881	39,312	15,271	33,662	22.2	118,189	77.8
Energy	25,044	6,010	6,207	6,406	6,421	9,206	36.8	15,838	63.2
Industry, Mining	123,562	38,735	44,892	31,972	7,963	23,175	18.7	100,387	81.3
Handicrafts	3,245	642	782	934	887	1,281	39.5	1,964	60.5
C. TERTIARY	99,281	28,021	29,304	21,019	20,937	11,563	11.6	87,718	88.4
Commerce	2,000	519	397	560	524	700	35.0	1,300	65.0
Tourism	12,396	4,241	2,709	3,306	2,140	3,640	29.4	8,756	70.6
Transp. & Telecom.	84,885	23,261	26,193	17,153	18,273	7,223	8.5	77,662	91.5
D. SOCIAL SECTORS	89,620	20,563	24,935	22,729	21,393	32,706	36.5	56,914	63.5
Urbanisation	15,673	3,211	5,091	4,441	2,930	3,091	19.7	12,582	80.3
Housing	16,000	2,055	3,115	4,241	6,589	8,200	51.2	7,800	48.8
Health	7,715	1,270	2,519	2,327	1,599	3,126	40.5	4,589	59.5
Education	22,900	8,042	7,276	4,540	3,042	7,814	34.1	15,086	65.9
Research	10,000	3,099	2,884	2,300	1,717	1,394	13.9	8,606	86.1
Other	17,332	2,886	4,050	4,880	5,516	9,081	52.4	8,251	47.6
E. TOTAL or AVERAGE	447,404	122,869	136,318	108,854	79,363	98,485	22.0	348,919	78.0

Source: GOS Sixth Development Plan, Ministry of Planning and Cooperation

(1) CFAF/$ exchange rate is 312.1 for 1981/82, 361.9 for 1982/83 and 370.0 for 1983/84.

TABLE 4A

SENEGAL: PROPOSED INVESTMENT FOR SIXTH DEVELOPMENT PLAN
(1981-1985)
(Summary in Millions of U.S. Dollars)(1)

	TOTAL COST (1981-1985)	DOMESTIC FINANCING (2)		EXTERNAL FINANCING	
		Amount	% of Total	Amount	% of Total
A. PRIMARY	292.2	56.3	19.3	235.9	80.7
B. SECONDARY	416.0	92.2	22.2	323.8	77.8
C. TERTIARY	272.0	31.7	11.6	240.3	88.4
D. SOCIAL SERVICES	245.5	89.6	36.5	155.9	63.5
E. TOTAL OR AVERAGE	1,225.7	269.8	22.0	955.9	78.0

Source: GOS Sixth Development Plan, Ministry of Planning and Cooperation.

(1) Average CFAF/$ exchange rate used for period from 1981-1985 is 365 CFAF=$1.00.
(2) Domestic financing from public sources is expected to be about 56% of the total and from private sources aboout 44%.

TABLE 5

SENEGAL: REAL PRODUCER PRICES AND WORLD COMMODITY PRICES FOR SELECTED COMMODITIES 1975-1981

(1975 = 100)

	1975	1976	1977	1978	1979	1980	1981	1982 estimated	1983 projected
Groundnuts									
World Price	100.0	100.0	90.4	109.4	139.9	113.1	111.7	80.7	80.7
World Price Adjusted (1)	100.0	99.4	83.3	89.3	98.6	70.7	72.0	52.7	53.8
Domestic Producer Price	100.0	100.0	100.0	100.0	100.0	109.6	120.5	120.5	120.5
Real Domestic Producer Price (2)	100.0	99.0	88.5	86.2	78.1	78.8	82.0	74.4	70.9
Cotton									
World Price	100.0	100.0	166.1	157.6	142.4	146.1	169.3	169.0	165.0
World Price Adjusted	100.0	99.4	153.0	128.7	100.4	91.3	109.2	110.4	110.0
Domestic Producer Price	100.0	104.2	104.2	104.2	117.0	127.7	144.7	149.0	149.0
Real Domestic Producer Price	100.0	103.2	92.2	89.8	91.4	91.9	98.4	92.0	87.6
Rice									
World Price	100.0	70.8	73.7	105.7	90.5	112.7	132.1	113.8	112.2
World Price Adjusted	100.0	70.1	67.6	85.9	63.7	70.4	85.8	74.4	74.8
Domestic Producer Price	100.0	100.0	100.0	100.0	100.0	100.0	124.1	124.1	144.6
Real Domestic Producer Price	100.0	99.0	88.5	86.2	78.1	71.9	84.4	76.6	85.0

Sources: For World and producer prices IFS and GOS Ministry of the Economy and Finance
For consumer price and export unit value indexes: International Financial Statistics

(1) World prices for commodities are deflated by the index of export unit values of industrial countries.
(2) Producer prices deflated by the Consumer Price Index.

TABLE 6
SENEGAL: BALANCE OF PAYMENTS 1980-1984
(In Millions of U.S. Dollars)

	1980	1981	1982	1983 (1) estimated	1984 (1) projected
A. Trade Balance	-474.8	-454.1	-360.2	-334.7	-351.4
Exports fob	536.5	409.5	476.5	509.7	521.0
of which: Groundnut pdts.	(83.2)	(3.2)	(131.5)	(148.3)	(171.0)
Imports fob	-1011.3	-863.6	-836.7	-844.4	-872.4
B. Net Services	-120.5	-125.3	- 72.4	-155.3	-145.0
of which: Interest on Debt	(- 63.3)	(- 61.0)	(- 55.5)	(-105.3)	(-107.9)
C. Transfers	178.0	145.1	126.8	135.8	136.6
D. Current Account Balance (A + B + C)	-417.3	-434.3	-305.8	-354.2	-359.8
E. Capital Account Balance	297.4	273.8	186.5	194.7	195.8
Public Sector (net)	208.0	207.7	147.3	141.9	137.9
of which: Debt Amortization	(-120.0)	(-100.9)	(-105.1)	(- 95.3)	(- 84.2)
Private Sector (net)	89.4	66.1	39.2	52.8	57.9
C. Overall Balance of Payments (2) (D + E)	-119.9	-155.5	-119.3	-159.5	-164.0
D. Current Account Deficit as % of GDP	14.7 %	18.1 %	12.5 %	13.7 %	13.2 %
E. Overall Deficit as % of GDP	4.2 %	6.5 %	4.5 %	6.2 %	6.1 %
Memorandum Item: Exchange Rate (CFAF/$)	225.8	287.4	336.8	360.0	380.0

Sources: Senegalese Ministry of the Economy and Finance. IMF projections for 1983, and Ministry of the Economy and Finance projections for 1984.

(1) These figures assume that there will be another successful Paris Club debt rescheduling in late 1983.

(2) The difference between overall balance of payments and the sum of the current and capital account balance is made up of SDR allocations.

TABLE 7

SENEGAL: INTEREST RATES AND INFLATION
(1975-1982)
(In percent per annum)

	1975	1976	1977	1978	1979	1980	1981	1982	1983
Normal Discount Rate	8.0	8.0	8.0	8.0	8.0	10.5	10.5	12.5	10.5
Preferential Discount Rate	5.5	5.5	5.5	5.5	5.5	8.5	8.5	10.0	8.5
Minimum Time Deposit Rate (12 months)	6.40	6.50	6.50	6.50	6.50	8.33	8.33	9.25	8.33
Maximum Lending Rate	12.0	12.0	12.0	12.0	12.0	15.5	15.5	17.5	15.5
Inflation Rate	24.8	6.8	9.1	5.9	8.5	8.4	8.0	15.0	8.0

Sources: BCEAO and International Financial Statistics.

TABLE 8

SENEGAL: MAJOR IMPORTS 1977-1980

PRODUCTS	VOLUME (METRIC TONS) 1977	1978	1979	1980	VALUE (MILLIONS OF CFAF) 1977	1978	1979	1980
Milk products; eggs, honey	17,058	14,564	13,544	12,875	3,796	3,164	3,169	3,967
Fruits and vegetables	41,976	45,617	51,172	42,703	3,497	3,202	3,783	3,644
Wheat	95,963	142,354	122,860	97,156	4,609	2,855	5,377	4,966
Corn	13,781	12,027	9,384	23,232	582	283	339	811
Rice	248,018	238,996	351,860	302,536	11,263	12,610	14,796	18,102
Kola nuts	9,564	8,350	10,707	7,954	820	573	590	611
Sugar	61,619	55,647	53,322	34,186	5,553	3,708	3,351	5,369
Canned fruits and vegetables	9,817	8,403	11,383	5,424	1,771	1,482	2,874	1,091
Fats and oils	15,294	23,123	16,706	36,836	1,822	2,993	2,355	5,150
Beverages	14,145	12,736	12,891	9,076	1,400	1,321	1,739	1,228
Tobacco	2,905	3,090	2,912	2,514	1,709	2,065	1,816	2,115
Petroleum pdts	814,559	921,771	911,273	949,388	23,380	23,881	32,644	58,228
Pharmaceuticals	1,359	2,054	1,712	1,840	2,833	3,280	4,733	5,232
Industrial Chemicals	17,878	11,255	21,297	10,966	4,545	3,641	4,428	3,944
Wood and Wood products	42,037	34,478	41,138	39,902	2,137	1,701	2,225	2,262
Cardboard	29,652	21,965	16,090	19,254	5,984	4,449	5,274	5,109
Cotton Cloth	2,761	2,365	3,889	1,798	3,346	2,501	2,512	2,071
Printed cotton cloth	141	71	131	30	249	190	310	98
Clothing	4,109	2,289	3,460	2,948	2,444	1,624	2,434	2,039
Common Metals	59,917	44,172	42,591	33,241	6,529	4,940	5,081	4,005
Machines (1)	18,978	27,273	30,650	27,884	24,279	24,815	27,110	28,138
Electric Appliances	5,645	5,043	7,788	4,727	8,400	9,684	8,336	9,571
Cars and Buses	7,177	17,594	5,334	4,024	6,220	6,631	7,093	5,945
Trucks	6,781	4,024	2,094	1,508	6,405	3,951	2,239	1,561
Spare parts (auto)	3,568	2,955	3,268	2,053	3,804	3,273	3,561	3,484
Others	289,996	283,468	255,654	189,884	50,170	41,497	49,810	43,495
TOTAL	1,834,698	1,945,684	2,003,110	1,863,939	187,547	170,314	197,979	222,256
Memorandum Item CFAF/$					235.3	209.0	201.0	225.8

Source: GOS Department of Statistics Ministry of the Economy and Finance

(1) Machinery for agriculture and food processing.

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TABLE 9

SENEGAL: MAJOR EXPORTS 1977-1980

PRODUCTS	VOLUME (METRIC TONS) 1977	1978	1979	1980	VALUE (MILLIONS OF CFAF) 1977	1978	1979	1980
1. Groundnut pdts.	661,217	219,133	401,195	175,379	75,509	23,539	42,254	17,571
- non grilled groundnuts	81,633	5,459	10,247	2,728	10,411	795	1,970	465
- unprocessed oil	192,334	52,736	120,565	62,580	40,206	13,033	27,046	11,324
- refined oil	34,996	12,807	15,069	11,203	8,295	3,425	3,772	1,585
- groundnut cake	352,254	148,131	255,314	98,868	16,597	6,286	12,466	4,197
2. Non-Groundnut Products	2,519,267	2,353,571	2,389,005	2,285,563	58,150	57,358	61,370	69,055
- fresh vegetables	12,853	7,698	4,466	11,985	1,244	743	722	871
- flour	6,086	21,007	8,390	3	460	1,598	1	(x)
- gum arabic	746	562	2,359	484	195	139	124	126
- fresh fish	37,562	32,843	36,886	49,295	4,614	5,690	6,288	7,157
- seafood	6,849	6,880	6,721	6,531	4,035	5,351	6,079	6,437
- preserved fish	16,816	13,223	11,695	11,557	7,807	6,622	6,352	7,310
- salt	111,219	128,115	111,891	125,440	2,419	3,134	2,576	3,172
- cement	24,195	3,409	5,978	3,548	283	48	120	74
- phosphates	1,861,344	1,739,649	1,817,642	1,483,272	14,971	13,713	15,564	16,465
- refined petroleum products	331,996	324,145	258,255	425,585	12,772	13,639	14,344	18,924
- phosphate fertilizers	90,543	62,941	113,462	160,115	1,294	673	2,834	4,316
- leather and skins	741	958	1,256	1,114	402	514	732	616
- cotton in bulk	12,588	10,505	9,345	5,827	4,876	3,415	2,943	2,168
- cotton textiles	896	626	221	218	1,580	1,400	585	517
- shoes	1,368	453	438	589	1,123	655	658	902
3. Other Products	126,804	126,906	69,477	99,214	19,336	14,386	11,682	14,141
TOTAL	3,303,828	2,698,053	2,859,677	2,560,156	152,920	95,259	113,858	100,767
Memorandum Item CFAF/$					235.3	209.0	201.0	225.8

Source: GOS Department of Statistics Ministry of the Economy and Finance

TABLE 10

SENEGAL: PRINCIPAL TRADING PARTNERS

(1978-1980)
(In Millions of U.S. Dollars)

IMPORTS FROM:

1978			1979			1980		
COUNTRY	IMPORTS	% of TOTAL	COUNTRY	IMPORTS	% of TOTAL	COUNTRY	IMPORTS	% of TOTAL
FRANCE	319.6	39.2	FRANCE	376.8	38.3	FRANCE	331.9	33.7
U.S.A.	63.1	7.8	IRAQ	63.6	6.5	NIGERIA	72.4	7.4
IRAQ	38.0	4.6	THAILAND	55.2	5.6	THAILAND	59.2	6.0
GERMANY	37.8	4.6	U.S.A.	46.5	4.7	IRAQ	57.6	5.9
ITALY	33.0	4.0	ITALY	44.7	4.6	UNITED KINGDOM	52.9	5.4
IVORY COAST	28.9	3.6	GERMANY	43.5	4.4	U.S.A.	42.6	4.3
UNITED KINGDOM	28.5	3.5	NIGERIA	34.6	3.5	GERMANY	33.1	3.4
ALGERIA	27.6	3.4	IVORY COAST	32.2	3.3	ALGERIA	31.6	3.2
PAKISTAN	22.8	2.8	UNITED KINGDOM	32.1	3.3	ITALY	30.6	3.1
NIGERIA	22.6	2.8	ALGERIA	28.8	2.9	IVORY COAST	28.0	2.8
NETHERLANDS	18.9	2.3	SPAIN	23.7	2.4	NETHERLANDS	26.1	2.7
BRAZIL	15.6	1.9	NETHERLANDS	22.3	2.3	CHINA	18.2	1.8
SPAIN	15.2	1.9	LUXEMBURG	20.0	2.0	NORWAY	17.8	1.8
LUXEMBURG	14.3	1.8	PAKISTAN	18.8	1.9	LUXEMBURG	15.0	1.5
UNITED ARAB EMIR.	12.5	1.6	CHINA	18.0	1.8	SPAIN	14.0	1.4
THAILAND	11.3	1.4	BRAZIL	16.9	1.7	PAKISTAN	13.6	1.4
JAPAN	10.9	1.3	CANADA	13.5	1.4	SAUDI ARABIA	11.5	1.2
BURMA	6.8	0.8	JAPAN	12.6	1.3	JAPAN	11.0	1.1
SWITZERLAND	5.9	0.7	UNITED ARAB EMIR.	7.7	0.7	CANADA	7.2	0.7
CANADA	5.1	0.6	SWITZERLAND	7.0	0.7	SWITZERLAND	5.8	0.6
TOP 20 COUNTRIES	738.4	90.6		918.5	93.3		880.2	89.4
ALL COUNTRIES	815.0	100.0		985.0	100.0		984.3	100.0

Source: Foreign Trade Statistics of Senegal (1978-80). Department of Statistics. Ministry of the Economy and Finance.

TABLE 11

SENEGAL: PRINCIPAL TRADING PARTNERS

(1978-1980)

(In Millions of U.S. Dollars)

EXPORTS TO:

1978			1979			1980		
COUNTRY	EXPORTS	% of TOTAL	COUNTRY	EXPORTS	% of TOTAL	COUNTRY	EXPORTS	% of TOTAL
FRANCE	190.0	41.7	FRANCE	252.2	44.5	FRANCE	142.9	32.0
IVORY COAST	30.7	6.8	UNITED KINGDOM	40.6	7.2	IVORY COAST	33.6	7.5
UNITED KINGDOM	26.2	5.7	ITALY	26.4	4.7	MAURITANIA	26.4	5.9
MALI	25.7	5.6	IVORY COAST	25.2	4.5	MALI	26.2	5.9
MAURITANIA	14.5	3.2	MALI	23.0	4.1	UNITED KINGDOM	25.2	5.7
GREECE	11.5	2.5	MAURITANIA	22.6	4.0	GUINEA-BISSAU	14.6	3.3
NIGERIA	10.0	2.2	GERMANY	12.0	2.1	GERMANY	11.2	2.5
GERMANY	9.6	2.1	GREECE	9.5	1.7	GREECE	10.4	2.3
JAPAN	8.7	1.9	PORTUGAL	8.7	1.5	JAPAN	10.2	2.3
CAMEROON	8.0	1.8	IRELAND	8.5	1.5	ITALY	8.6	2.0
TAIWAN	6.0	1.3	JAPAN	8.3	1.5	PORTUGAL	7.0	1.6
ITALY	5.9	1.3	LUXEMBURG	6.6	1.2	NIGERIA	6.3	1.4
FINLAND	5.8	1.3	CHINA	6.4	1.1	GAMBIA	5.3	1.2
SWITZERLAND	5.3	1.2	NIGERIA	5.7	1.0	NIGER	4.2	0.9
NETHERLANDS	5.2	1.1	NETHERLANDS	4.9	0.9	IRELAND	3.6	0.8
GAMBIA	4.1	0.9	GAMBIA	3.5	0.6	DENMARK	2.8	0.6
BENIN	3.5	0.8	SPAIN	3.3	0.6	SPAIN	2.5	0.6
PORTUGAL	3.4	0.7	POLAND	3.3	0.5	LUXEMBURG	2.2	0.5
CONGO	3.2	0.7	RUMANIA	2.9	0.5	U.S.S.R.	.1	0.5
GABON	3.2	0.7	NIGER	2.7	0.4	GABON	1.9	0.3
TOP 20 COUNTRIES	380.7	83.5		476.3	84.1		347.2	77.8
ALL COUNTRIES	455.8	100.0		566.4	100.0		446.3	100.0

Source: Foreign Trade Statistics of Senegal (1978-80). Department of Statistics. Ministry of the Economy and Finance.

TABLE 12

SENEGAL: TERMS OF TRADE (1975-1981)

(1975 = 100)

	1975	1976	1977	1978	1979	1980	1981	1982 estimated	1983 projected
Export Unit Prices	100.0	88.38	96.15	112.91	121.10	138.49	187.08	176.15	185.87
Import Unit Prices	100.0	101.70	111.75	123.71	143.73	183.97	227.08	252.23	281.69
Terms of Trade	100.0	86.90	86.04	91.27	84.26	75.28	82.38	69.84	65.98
Annual % Change in Terms of Trade	-	-13.1	-0.1	6.1	-7.7	-5.5	14.3	-15.2	-5.5
Memorandum Item:									
All Non-Oil LDC's Terms of Trade	100.0	100.0	112.7	108.1	107.9	103.2	101.5		

Sources: IMF and World Bank estimates for 1982 and 1983.

1-2

TABLE 13

SENEGAL: EVOLUTION OF EXTERNAL DEBT
(1971 and 1975-80)

	1971	1975	1976	1977	1978	1979	1980
External Debt Outstanding (1) in Millions of U.S. Dollars	122	297	352	429	614	798	1094.5
Debt Service Payments as % of Exports of Goods and Services	4.9	5.7	6.1	6.5	13.8	14.5	24.2
External Debt Outstanding as % of GDP (1)	14.0	16.4	19.0	21.0	25.9	27.6	38.4 (2)

Source: World Bank, External Debt Tables

(1) Disbursed only - medium and long-term public and publicly guaranteed debt.

(2) The large increase in this ratio from 1979 to 1980 is due in part to the appreciation of the U.S. dollar against the CFA franc.

TABLE 14
SENEGAL: EXTERNAL PUBLIC DEBT
(1980-1983)
(In millions of U.S. Dollars)

	1980	1981	1982 projected (1)	1983 projected (2)
Outstanding Disbursed (end of period)	1,360.9	1,412.8	1,514.3	1,614.9
Medium and Long-term Debt	1,094.5	1,046.4	1,088.9	1,104.0
Short-term Debt, Central Bank	266.4	366.4	425.4	510.9
Interest Due	63.3	61.0	55.5	107.9
Medium and Long-term Debt	55.4	41.2	34.5	83.3
Short-term, Central Bank (net) (3)	7.9	19.8	21.0	24.6
of which, IMF	(3.5)	(7.7)	(13.3)	(9.5)
Amortization	120.0	100.9	105.1	84.2
Medium and Long-term Debt	111.5	92.2	89.3	73.0
Repurchases from the IMF	8.5	8.7	15.8	11.2
Debt Service as % of Exports of Goods and Services	22.6	25.6	23.1	27.1
External Debt Outstanding as % of GDP	47.7	58.9	61.8	62.3

Sources: GOS Ministry of the Economy and Finance; BCEAO; External Debt System of the World Bank; IMF estimates and projections.

(1) Including effects of 1981 and 1982 debt rescheduling.

(2) Assuming a successful official debt rescheduling (Paris Club) at end of 1983.

(3) Charges on use of IMF resources, interest on borrowing from the Operations Account.

TABLE 15
SENEGAL: MONETARY SURVEY
(1975-1981)
(as a percent of GDP)

	1975	1976	1977	1978	1979	1980	1981	1982
Net Foreign Assets(1)	-4.1	-3.8	-4.2	-8.7	-13.6	-16.3	-17.6	-19.3
Net Domestic Credit	26.8	29.8	33.6	43.1	43.1	45.7	55.0	55.4
- Net Credit to the Government	(0.5)	(3.0)	(3.4)	(3.2)	(3.2)	(4.5)	(7.5)	(11.7)
- Credit to the Private Sector	(26.3)	(26.8)	(30.2)	(39.9)	(39.9)	(41.2)	(47.6)	(43.7)
Other Items (net)	-1.4	-1.3	-2.4	-2.3	-1.8	-1.8	-5.9	-4.2
Domestic Liquidity (2)	21.2	24.7	27.1	32.1	27.7	27.6	31.4	31.8

Source: International Financial Statistics, IMF

(1) This includes foreign long-term liabilities but excludes allocation of SDRs.
(2) Money and quasi-money.

TABLE 16

SENEGAL: GOVERNMENT FINANCIAL OPERATIONS

(Millions of U.S. Dollars)

	1980/81 (1)	1981/82 (1)	1982/83 (1) estimated (2)	1983/84 (1) projected (2)
A. Current Operations				
1. Government Revenues and Grants for Current Expenditures	489.1	497.3	506.3	506.8
2. Current Expenditures of which:	-544.0	-527.8	-523.0	-570.0
- wages and salaries	(-305.1)	(-269.5)	(-261.2)	(-279.5
- interest on public debt	(- 42.9)	(- 54.5)	(- 75.2)	(- 98.6)
- supplies, transfers and other	(-196.0)	(-203.8)	(-186.6)	(-191.9)
3. Other Current Public Expenditure (net) of which:	- 70 5	- 50.3	- 93.6	- 69.7
- Special accounts other than CAA	(- 21.4)	(12.5)	(- 24.7)	(- 15.7)
- CPSP	(- 90.4)	(- 35.9)	(- 68.9)	(- 54.0)
4. Balance of Current Operations	-125.4	- 80.8	-110.3	-132.9
B. Capital Operations				
1. Capital Grants	29.2	18.6	31.6	27.0
2. Capital Expenditure of which:	-215.5	- 86.2	-110.8	-108.1
- budget	(- 83.0)	(- 7.4)	(- 20.1)	(- 27.0)
- extra-budgetary	(-132.5)	(- 78.8)	(- 90.7)	(- 81.1)
3. Total Capital Expenditure (net)	-186.3	- 67.6	- 79.2	- 81.1
C. Overall Deficit on Commitments Basis	-311.7	-148.4	-189.4	-214.0
D. Changes in Payments Arrears (reduction (-))	64.3	- 62.8	- 36.2	- 27.0
E. Overall Deficit on Disbursements Basis	-247.4	-211.2	-225.6	-241.0
F. Current Operations Deficit as % GDP	4.8 %	3.3 %	4.8 %	5.0 %
G. Overall Deficit (disbs. basis) as % GDP	9.5 %	8.7 %	9.8 %	9.2 %
MEMORANDUM ITEM: Exchange Rate (CFAF/$)	256.6	312.1	348.4	370.0

Source: Senegalese Ministry of the Economy and Finance, IMF estimates for 1982/83 and Ministry of the Economy and Finance projections for 1983/84.

(1) This period relates to the Senegalese Fiscal Year which is from July 1st to June 30th.

(2) The figures assume that there will be another successful Paris Club debt rescheduling in late 1983.

TABLE 17

SENEGAL: PERFORMANCE UNDER THE 1981/82 IMF STANDBY AGREEMENT

(In billions of CFAF; end of period)

	SEPT. '81		DEC. '81		MARCH '82		JUNE '82	
	Ceiling	Actual	Ceiling	Actual	Ceiling	Actual	Ceiling	Actual
Total Domestic Credit of the Banking System	348.5	335.3	381.6	379.7	406.6	403.1	415.3	410.2
Net Bank Credit to the Government	47.5	38.7	61.1	51.8	68.8	54.7	86.7	81.1
Govt. Payments Arrears: Minimum Reduction from June 30, 1981	-	-	-	-	4.0	7.9	12.0	16.4
Treasury Net Financing of Correspondents; Minimum Amount Available from June 30, 1981	-	-	-	-	-	-	18.5	18.7
New External Loans Contracted or Guaranteed by the Government:								
1-12 yrs maturity	6.5	0	6.5	4.1	8.9	6.8	9.5	7.6
1-5 yrs maturity	1.0	0	1.0	0	1.6	0.4	1.7	0.4
Memorandum Item:								
CFAF/$	278.4	278.4	287.4	287.4	312.1	312.1	341.5	341.5

Source: IMF

TABLE 18

SENEGAL: U.S. OVERSEAS LOANS AND GRANTS' OBLIGATIONS AND AUTHORIZATIONS
(U.S. Fiscal Years - $ Millions of Dollars)
Commitments

PROGRAM	1979	1980 (Commitments)	1981	1982	1983 (Requested)	TOTAL
Development Assistance						
1. Sahel Development Program	12,140	10,000	14,800	16,500	18,000	71,440
2. Regional Program						
- River Basin Development (1)						
OMVS	998	2,650	1,314	-	4,900	9,862
OMVG	-	-	-	5,512	800	6,312
- Food Crop Protection (Senegal only)	459	588	481	798	425	2,751
- Other Regional	521	352	1,582	803	1,525	4,783
Sub Total Regional	1,978	3,590	3,377	7,113	7,650	
Economic Support Fund	-	-	-	-	5,000	5,000
Total DA and ESF	14,118	13,590	18,177	23,613	30,650	
PL 480						
Title II (2)	5,487	6,565	9,146	3,670	4,286	29,154
Title III	-	7,000	7,000	7,000	8,000	29,000
Sub Total PL 480	5,487	13,565	16,146	10,670	12,286	
Grand Total DA, ESF, PL 480	19,605	27,155	34,323	34,283	42,936	158,302

(1) Totals represent entire RBDO program.

(2) Excludes ocean transportation and World Food Program but includes emergency food and transport of medicines.

TABLE 19

SENEGAL: AID COMMITMENTS (OFFICIAL DEVELOPMENT ASSISTANCE)

(Millions of U.S. Dollars)

(Calendar Year 1981)

DONOR GROUP	PROJECT AID AND TECHNICAL ASSISTANCE		NON-PROJECT AID		TOTAL INDIVIDUAL DONORS	TOTAL BY DONOR GROUPS
	Amount	%	Amount	%		
OECD Donors:						
Belgium	5.5	100	0	0	5.5	
Canada	14.4	85	2.5	15	16.9	
EEC	23.6	45	29.4	55	53.0	
France	135.6	90	15.8	10	151.4	
Germany	26.0	90	3.0	10	29.0	
Japan	2.3	58	1.7	42	4.0	
U.S.	17.0	48	18.6	52	35.6	
Other	4.9	82	1.1	18	6.0	
						301.4
Arab Donors:						
Iraq	0	0	2.6	100	2.6	
Islamic Dev. Bank	2.7	100	0	0	2.7	
Kuwait	69.3	100	0	0	69.3	
OPEC Fund	14.0	100	0	0	14.0	
Saudi Arabia	13.9	22	50.0	78	63.9	
						152.5
Multilateral Donors:						
African Dev. Bank	12.9	100	0	0	12.9	
UN Agencies	10.3	100	0	0	10.3	
World Bank	17.1	36	30.0	64	47.1	
						70.3
GRAND TOTAL	369.5		154.7			524.2

Sources: OECD and Senegalese Ministry of the Economy and Finance.

TABLE 20

SENEGAL: AID COMMITMENTS (OTHER OFFICIAL FLOWS)

(Millions of U.S. Dollars)

(Calendar Year 1981)

DONOR GROUP	PROJECT AID AND TECHNICAL ASSISTANCE		NON-PROJECT AID		TOTAL INDIVIDUAL DONORS	TOTAL BY DONOR GROUPS
	Amount	%	Amount	%		
OECD Donors:						
Canada	0	0	0.7	100	0.7	
EEC	12.9	100	0	0	12.9	
France	18.9	51	18.2	49	37.1	
						50.7
Arab Donors:						
BADEA	10.0	100	0	0	10.0	
						10.0
Multilateral Donors:						
African Dev. Bank	17.4	100	0	0	17.4	
West African Dev. Bank	4.7	100	0	0	4.7	
World Bank	25.8	49	26.8	51	52.6	
						74.7
Other Donors:						
Argentina	0	0	15.0	100	15.0	
						15.0
GRAND TOTAL	89.7	-	60.7	-		150.4

Sources: Senegalese Ministry of the Economy and Finance.

TABLE 21
SENEGAL: MAJOR AID DONORS(1)
(Calendar Year 1981)

Commitments

DONOR	AMOUNT IN MILLIONS OF U.S. DOLLARS	MAJOR TYPES OF AID AS A % OF EACH DONOR'S TOTAL PROGRAM	
France	188.5	Technical Assistance	38%
		Industrial Development	15%
		Infrastructure	12%
World Bank	99.7	Structural Adjustment	57%
		Industrial Development	28%
		Forestry	9%
Kuwait	69.3	OMVS	100%
EEC	65.9	Stabex	31%
		Industrial Development	23%
		Infrastructure	20%
Saudi Arabia	63.9	Balance of Payments Support	78%
		Infrastructure	22%
United States	35.6	Food Aid	52%
		Agriculture	43%
African Dev. Bank	30.3	Industrial Development	57%
		Infrastructure	43%
Germany	29.0	Technical Assistance	26%
		Infrastructure	22%
		Agriculture	22%
		Industrial Development	17%

Source: OECD and Senegalese Ministry of the Economy and Finance.
(1) Official Development Assistance and Other Official Flows.

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TABLE 22

SENEGAL: SELECTED CENTRAL BANK FINANCING

(Millions of U.S. Dollars)

(Calendar Year 1981)

SOURCE	AVAILABILITY	DRAWINGS
IMF	108.8	62.6
Total of which:		
Standby	63.0	16.8
Compensatory Financing Facility	44.9	44.9
Other	0.9	0.9

Sources: BCEAO (West African Central Bank) and IMF.

TABLE 23

DEFINITIONS FOR TABLES ON AID COMMITMENTS

Official Development Assistance is grants or loans:

- undertaken by the official sector;
- with promotion of economic development and welfare as main objectives;
- at concessional financial terms (if a loan, it must have a grant element of at least 25%)

Other Official Flows are official transactions at close to commercial terms (e.g., with a grant element of below 25%). Examples are export credits, bilateral portfolio, and direct investment.

Grant Element reflects the financial terms of a transaction: interest rates, maturity, and grace period. It is a measure of the concessionality (i.e., softness) of a loan. The extent of the benefit depends on the difference between the actual interest rate and the market rate and the length of time the funds are available to the borrower.

Non-Project Aid is comprised of balance of payments/budgetary support, commodity import programs, program loans and grants and food aid. Excluded from this definition is assistance to specifically defined projects or technical cooperation activities.

ANNEX M

SUMMARY DESCRIPTION OF MAJOR GOS RURAL DEVELOPMENT AGENCIES

This annex provides a brief introduction to the major Senegalese rural development agencies used throughout the text.

SODEVA
(Peanut Basin)

The Agriculture Development and Extension Agency, SODEVA, was established in 1968 by Government as a "mixed enterprise" to take over and expand the agricultural extension and development work of SATEC, a French technical assistance agency, in the Groundnut Basin of Senegal covering the regions of Sine Saloum, Thies, Diourbel, and Louga.

SODEVA covers the broad peanut basin in the center of the country. Its main functions are to a) improve agriculture production at the smallholder level, b) extend technical practices aimed at increasing peanut yields and promoting corn, millet and sorghum cultivation in the peanut basin and c) integrate livestock and agriculture development.

SODEVA has received funds for specific projects from a number of donors, including USAID's Senegal Cereals Production I and II projects (685-0235) and FIDA. The World Bank is holding up its Sine-Saloum Agriculture Development project with SODEVA pending resolution of outstanding agriculture policy issues including credit, coops and seeds. A program contract has been negotiated and concluded between the GOS and SODEVA, but not yet agreed upon by the World Bank. Until negotiations are finalized further World Bank funding is unlikely.

SODEFITEX
(Eastern Senegal)

SODEFITEX was established in 1974 to take over the activities of the Compagnie Francaise pour le développement des Fibres Textiles (CFDT). SODEFITEX is a "mixed" company with a capital of CFAF 750 million, and owned 80 percent by Government, 6 percent by the CPSP, and 14 percent by CFDT.

SODEFITEX is responsible primarily for direct marketing and ginning of cotton, supplying production inputs, providing extension services to farmers for all crops in the major cotton-producing areas (including the development of irrigated rice production) and cereals marketing. Its program contract, signed in September 1981, eliminated a number of its former functions. Its basic operations are sound, based on a continuing implementation of its program contract.

The agency is run mainly in Eastern Senegal, Upper Casamance, and to some extent the Sine Saloum Region. SODEFITEX, has its headquarters in Dakar and employs a permanent staff of about 450, most of them in the four regional offices (two in Eastern Senegal and two in Casamance). The Technical Department is located in Eastern Senegal, and the Training Department in Sine-Saloum.

SAED
(Senegal River Basin)

SAED was set up as a public enterprise in 1965 to develop agricultural production, mainly through promotion of irrigation in the Senegal River Valley, and to provide extension services, water control, land cultivation, credit and marketing services to farmers in the region. SAED has a capital of CFAF 2,365 million, and is entirely owned by the State. Its activities have been financed through the budget and by external donors.

A program contract was concluded between SAED and the GOS in September 1981 which has limited its mandate somewhat. Execution to date has resulted in significant operational improvements according to a first-year evaluation report, but decentralization in management and reduction in staff levels called for in the contract are still to be carried out. Continued adherence to the goals of the program contract will determine the overall success of the reform of this agency.

SOMIVAC
(Casamance)

SOMIVAC was created in July 1976 as a public enterprise. It was established to promote rural development in the Casamance by a) undertaking investment programs to improve cereal, cash crop and vegetable production, as well as integrate livestock and crop production, b) maintaining GOS-financed irrigation perimeters, c) coordinating all rural development projects in the region, d) processing and marketing agricultural products and e) providing extension services and training to farmers and cooperatives. The World Bank, French and Chinese have terminated their assistance projects in the Casamance, leaving the USAID Integrated Rural Development project (685-0205). While talks leading to a program contract have been initiated, further negotiations are required to reach final agreement. As a newer and smaller Agency than either SODEVA or SAED, SOMIVAC appears to have less need for reform and some improvements may come about on an incremental basis. However the continued lack of a program contract represents a delay in policy reform.

ONCAD
(No longer operational)

The Office National de Coopération et d'Assistance au Développement (ONCAD) was a public enterprise established in 1966 to take over assistance to and supervision of cooperatives from regional farmers' organizations. In 1967/68, ONCAD was given the responsibility for procuring farm inputs for cooperatives, and purchasing groundnuts from them for sale to OCAS (Office de Commercialisation Agricole du Sénégal); OCAS in turn was responsible for exports or sale of groundnuts to the crushing mills, and also for rice imports and marketing. In 1971, Government dissolved OCAS, and ONCAD took over its activities.

With time, ONCAD's responsibilities were expanded to include the marketing of all agricultural products except cotton, and the handling, storage and distribution of groundnut seeds to farmers. In August 1980, however, owing to increasing criticism of ONCAD's performance, the Government decided to dissolve the agency. Marketing of groundnuts is now organized by the crushing mill companies. Rice imports and marketing are being carried out by the Stabilization Fund, and millet marketing by licensed private wholesalers.

SONAR

In August 1980, the GOS decided to establish SONAR, a national company for supply of inputs (such as seed and fertilizer) to the rural sector. SONAR is intended to be a transitional agency temporarily created following the dissolution of ONCAD. SONAR has not been very active to date. However, the Government recently charged SONAR with the distribution of seeds, mainly in the peanut basin. Steps were taken in 1982 to have the distribution of fertilizer handled under a contract with a private sector firm, SSEPC (Senegal Fertilizer and Chemical Products Company). It is the Government's intention to dissolve SONAR as soon as an alternate system for seed storage and distribution has been established.

SODESP

SODESP was established in June, 1975 as a public enterprise. Its mandate is to promote livestock production, assume the rational exploitation of pasture resources, and assist herding populations of the sylvo-pastoral area of northern Senegal.

It was specifically created to manage a livestock project financed by the European Development Fund. Its activities subsequently were expanded into a second zone of the pastoral area by the USAID project SODESP Livestock Development.

SODESP interventions are based on an integrated plan of stratification of livestock production functions in different ecological zones.

It is one of the younger RDA's, and in terms of staff remains the smallest, and the only one specialized in livestock production.

ANNEX N

STATUTORY CHECKLIST

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ANNEX N

STATUTORY CHECKLIST

I - COUNTRY CHECKLIST

A. GENERAL CRITERIA FOR COUNTRY

1. FAA Sec. 481. Has it been determined that the government of the recipient country has failed to take adequate steps to prevent narcotics drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully?	No.
2. FAA Sec. 620(b). If assistance is to a governement, has the Secretary of State determined that it is not controlled by the international Communist movement?	Yes
3. FAA Sec. 620(c). If assistance is to a governement, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) debt is not denied or contested by such government?	No.
4. FAA Sec. 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to obligations toward such citizens or entities?	No.

A. 5. FAA Sec. 620(f); App. Sec. 108. Is recipient country a Communist country? Will assistance be provided to the Democratic Republic of Vietnam (North Vietnam), South Vietnam, Cambodia, or Laos? — No. No.

6. FAA Sec. 620(i). Is recipient country in any way involved in (a) subversion of, or military aggression against, the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or agression? — No.

7. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction, by mob action, of U.S. property? — No.

8. FAA Sec. 620(l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, inconvertibility or confiscation, has the AID Administrator within the past year considered denying assistance to such government for this reason? — No.

9. FAA Sec. 620(o); Fishermen's Protective Act, Sec. 5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters. — Senegal has taken no such action.

a. has any deduction required by Fishermen's Protective Act been made?

b. has complete denial of assistance been considered by AID Administrator?

10. FAA Sec. 620(q); App. Sec. 504. (a) Is the recipient country in default on interest or principal of any AID loan to that country? (b) Is country more than one year in default on interest or principal on U.S. loan made pursuant to program for which funds appropriated under Approp. Act. unless debt was earlier disputed, or appropriate steps taken to cure default? — a. No. No.

A. 11. FAA Sec. 620(s). What percentage of country budget is for military expenditures? How much of foreign exchange resources spent on military equipment? How much spent for the purchase of sophisticated weapons systems? (Consideration of these points is to be coordinated with the Bureau for Program and Policy Coordination, Regional Coordinators and Military Assistance Staff (PPC/RC).)

8 percent of the GOS budget for 1982-83 is for military expenditures. Most new military equipment has been a gift from other donors. No sophisticated weapons systems have been purchased.

12. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?

No.

13. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget?

Current.

14. FAA Sec. 620A. Has the country granted sanctuary from prosecution to any individual or group which has committed an act of international terrorism?

No.

15. FAA Sec. 659. If (a) military base is located in recipient country, and was constructed or is being maintained or operated with funds furnished by the United States, and (b) U.S. personnel carry out military operations from such base, has the President determined that the government of recipient country has authorized regular access to U.S. correspondents to such base?

There are no U.S. military facilities in Senegal.

16. FAA Sec. 666. Does the country object, on basis of race, religion, national origin any employee of the U.S. there to carry out economic development program under FAA?

No.

A. 17. FAA Sec. 669. Has the country delivered or received nuclear reprocessing or enrichment equipment, materials or technology, without specified arrangements on safeguards, etc.? — No.

18. FAA Sec. 670. Has the country delivered or received nuclear reprocessing, equipment, material or technology? Is the country not a "nuclear-weapon state" as defined in Article IX(3) of the Nuclear Non-Proliferation Treaty and on which detonates a nuclear explosive device? — No. No.

19. FAA Sec. 901. Has the country denied its citizens the right or opportunity to emigrate? — No.

B. FUNDING CRITERIA FOR COUNTRY

1. FAA Sec. 502B. Has the Department of State made findings which indicate that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, is program in accordance with policy of this Section? — No.

2. FAA Sec. 531. Is the Assistance to be furnished to a friendly country, organization, or body eligible to receive assistance? — Yes.

3. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? — Yes.

4. FY79 App. Act Sec. 113. Will assistance be provided for the purpose of aiding directly the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? — No.

II- NONPROJECT ASSISTANCE CHECKLIST

A. GENERAL CRITERIA FOR NONPROJECT ASSISTANCE

1. App. Unnumbered; FAA Sec. 653(b)

(a) Describe how committees on Appropriations of Senate and House have been or will be notified concerning the nonproject assistance;	Proposed CIP/Grant was included in the FY 1982 Congressional Presentation Normal Congressional Notification procedures will be followed.
(b) Is assistance within (Operational Year Budget) country or international organization allocation reported to the Congress (or not more than $1 million over that figure plus 10%)?	Yes.
2. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonab' . expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?	No further legislation is required.
3. FAA Sec. 209, 619. Is assistance more efficiently and effectively given through regional or multilateral organizations? If so why is assistance not so given? Information and conclusion whether assistance will encourage regional development programs. If assistance is for newly independent country, is it furnished through multilateral organizations or in accordance with multilateral plans to the maximum extent appropriate?	No. Program will not encourage regional development programs. Senegal is not a newly independent country.

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A. 4. FAA Sec. 601(a);(and Sec. 201(f) for development loans). Information and conclusions whether assistance will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.

This is a grant. Program will increase the flow of international trade by providing the necessary foreign exchange for importation of goods. This program assistance is earmarked for the Senegalese private sector and will tend to foster private initiative and competition through the proposed sub-projects. Development and use of agricultural cooperatives will be encouraged as well as the technical efficiency of commerce and agriculture.

5. FAA Sec. 601(b). Information and conclusion on how assistance will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

The commodities financed by the program will contribute to a revitalization of the Senegalese economy. This, plus the requirement that U.S. manufactured commodities be procured with grant proceeds and the resulting increased familiarity with U.S. products should lead to further trade with the U.S.

6. FAA Sec. 612(b); Sec. 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the United States are utilized to meet the cost of contractual and other services.

Program provides foreign exchange assistance for commodity imports. The local currency generated is to be programmed into sub-projects.

7. FAA Sec. 612(d). Does the United States own excess foreign currency and, if so, what arrangements have been made for its release?

At present Senegal is not a country in which the U.S. owns excess foreign currency.

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B. FUNDING CRITERIA FOR NONPROJECT ASSISTANCE

1. FAA Sec. 531. How will this assistance support promote economic or political stability? Is the country among the 12 countries in which Supporting Assistance may be provided in this fiscal year?	The program will provide commodities necessary to the increased production of food and agricultural exports and thus contribute to the revitalization of the Senegalese economy, a key factor in future economic and political stability. Senegal is one of the countries eligible for assistance from Economic Support Funds.

7 5 7

III - STANDARD ITEM CHECKLIST

A. PROCUREMENT

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of goods and services financed?	Yes, AID Regulation 1 procedures will apply.
2. FAA Sec. 604(a). Will all commodity procurement financed be from the United States except as otherwise determined by the President or under delegation from him?	Yes.
3. FAA Sec. 604(b). Will all commodities in bulk be purchased at prices no higher than the market price prevailing in the United States at time of purchase?	Yes, AID Regulation 1 procedures will apply.
4. FAA Sec. 604(c). Will all agricultural commodities available for disposition under the Agricultural Trade Development & Assistance Act of 1954, as amended, be procured in the United States unless they are not available in the United States in sufficient quantities to supply emergency requirements of recipients?	Yes.
5. FAA Sec. 604(d). If the cooperating country discriminates against U.S. marine insurance companies, will agreement require that marine insurance be placed in the United States on commodities financed?	Yes.
A. 6. FAA Sec. 604(e). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity?	There will be no offshore procurement of agricultural commodities.

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7. FAA Sec. 604(f). Are there arrangements whereby a supplier will not receive payment under the commodity import program unless he/she has certified to such information as the Agency by regulation has prescribed?	Yes, using AID Regulation I procedures.
8. FAA Sec. 608(a). Will U.S. Government excess personal property be utilized wherever practicable in lieu of the procurement of new items?	No, not under the terms of private sector CIP.
9. FAA Sec. 603. (a) Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at lease 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.	No, provided that U.S. flag vessels are available and sufficient to carry cargo at the time when shipping services are required.
10. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished to the fullest extent practicable as goods and professional and other services from private enterprise on a contract basis? If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?	Yes. Facilities of other Federal Agencies will not be utilized.
10. International Air Transport. Fair Competitive Practices Act, 1974 If air transportation of persons or property is financed on grant basis, will provision be made that U.S.-flag carriers will be utilized to the extent such service is available?	Yes.

i. FY 79 App. Act Sec. 105. Does the contract for procurement contain a provision authorizing the termination of such contract for the convenience of the United States? — Yes.

B. Construction — No construction will be financed by this Grant.

C. OTHER RESTRICTIONS

1. FAA Sec. 620(h). Do arrangements preclude promoting or assisting the foreign aid projects or activities of Communist-Bloc countries, contrary to the best interests of the United States? — Yes.

2. FAA Sec. 636(i). Is financing prohibited from use, without waiver, for purchase, long-term lease, exchange, or guaranty of sale of motor vehicle manufactured outside the United States? — Yes.

3. Will arrangement preclude use of financing:

a. FAA Sec. 114. to pay for performance of abortions or involuntary sterilizations or to motivate or coerce persons to practice abortions? to pay for performance of involuntary sterilizations as method of family planning or to coerce or provide any financial incentive to any person to practice sterilizations? — Yes. Yes.

b. FAA Sec. 620(g). to compensate owners for expropriated nationalized property? — Yes.

c. FAA Sec. 660. to finance police training or other law enforcement assistance, except for narcotics programs? — Yes.

d. FAA Sec. 662. for CIA activities? — Yes.

e. App. Sec. 103. to pay pensions, etc., for military personnel? — Yes.

f. App. Sec. 106. to pay U.N. assessments?	Yes
g. App. Sec. 107. to carry out provisions of FAA Sections 209(d) and 251(h)? (transfer to multilateral organization for lending).	Yes.
h. FY 79 App. Act Sec. 112. To finance the export of nuclear equipment, fuel, or technology or to train foreign nations in nuclear fields?	Yes.
i. FY 79 App. Act Sec. 601. To be used for publicity or propaganda purposes within U.S. not authorized by Congress?	Yes

ANNEX O

121D Certification and Determination

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VZCZCDRB *
PP RUEHC
DE RUTADS #9798 136 **
ZNR UUUUU ZZH
P 161120Z MAY 83
FM AMEMBASSY DAKAR
TO SECSTATE WASHDC 0863
BT
UNCLAS DAKAR 09798

CLASS: UNCLASSIFIED
CHRGE: AID /11/83
APPRV: DIR:DSHEAR
DRFTD: PCO:DFRANKLIN:OC
CLEAR: 1.PDO:JSCHLESINGER
2.PRM:SEEA
DISTR: AID AMB DCM
CHRON

AIDAC

INFO ROSEMARIE DEPP

E.O. 12356:N/A
SUBJECT: SDF (AGRICULTURE DEVELOPMENT ASSISTANCE)
(685-0249) 121 D CERTIFICATION.

1. USAID DIRECTOR HEREBY CERTIFIES SUBJECT PROJECT AS FOLLOWS:

I CERTIFY THAT LOCAL COST FINANCING ON THE SDF (AGRICULTURE DEVELOPMENT ASSISTANCE) PROGRAM (STANDARD FINANCING) NO. 685-0249 WILL NOT BE RELEASED DIRECTLY TO THE COOPERATING COUNTRY.

ALL SUCH DISBURSEMENTS WILL BE MADE DIRECTLY BY USAID/SENEGAL SHOULD ANY BECOME NECESSARY.

2. PLEASE PROVIDE NECESSARY 121 D DETERMINATION.
DEJARNETTE
BT
#9798

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UNITED STATES GOVERNMENT

memorandum

DATE: May 16, 1983

REPLY TO ATTN OF: David Shear, Director
USAID/Senegal

SUBJECT: SDF (Agriculture Development Assistance) Program (685-0249) 121 D Certification.

TO: A. R. Love, Assistant Administrator
Bureau of Africa

I certify that local cost financing on the SDF (Agriculture Development Assistance) Program (Standard Financing) N°. 685-0249 will not be released directly to the cooperating country.

All such disbursements will be made directly by USAID/Senegal should any become necessary.

Approve:________________

Disapprove:______________

OPTIONAL FORM NO. 10
(REV. 1-80)
GSA FPMR (41 CFR) 101-11.6
5010-114
GPO : 1981 O - 341-526 (6304)

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ANNEX P

PAIP Approval Telegram

UNCLASSIFIED

VV TAA484ESC910
PP RUTADS
DE RUEHC #0289/01 0420748
ZNR UUUUU ZZH
P R 110526Z FEB 83
FM SECSTATE WASHDC
TO RUTADS/AMEMBASSY DAKAR PRIORITY 0000
INFO RUEHAB/AMEMBASSY ABIDJAN 2981
BT
UNCLAS SECTION 01 OF 02 STATE 040289

11 FEB 83
TOR: 0954
CN: 05845
ACTION: AID
INFO: AMB
CHRON

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E.O. 12356: N/A
TAGS:
SUBJECT: SENEGAL - ESF (685-0262)

REF: DAKAR 10907

1. SUMMARY ECPR REVIEW OF SUBJECT PAIP HELD FEBRUARY...

2. 1983, AND WAS CHAIRED BY DAA/AFR FOR COASTAL AND WEST AFRICA. PAIP APPROVED; MISSION MAY PREPARE PAAD WITH FOLLOWING CAVEATS:

--A. LIFE OF ACTIVITY FUNDING SHOULD BE ONLY DOLS 5.0 MILLION AVAILABLE THIS FISCAL YEAR.

--B. USES OF FOREIGN EXCHANGE FOR COMMODITY IMPORT, PROBABLY FERTILIZER, APPROVED; HOWEVER, PAAD SHOULD JUSTIFY IMPORTATION OF FERTILIZER, AS OPPOSED TO OTHER COMMODITIES, BY PREPARING NECESSARY TECHNICAL AND ECONOMIC ANALYSES. IF ANALYSES DO NOT SUPPORT PRELIMINARY PLAN TO IMPORT SINGLE COMMODITY, I.E., FERTILIZER, MISSION MAY PROPOSE USING AID COMMODITY ELIGIBILITY LIST (SEE HB 15, APPENDIX B).

--C. USE OF LOCAL CURRENCY GENERATIONS FOR ESTABLISHMENT OF GRAIN RESERVE NOT APPROVED. MISSION SHOULD IDENTIFY OTHER USES OF LOCAL CURRENCY WHICH WOULD SUPPORT BROADER NEGOTIATIONS REGARDING POLICY OBJECTIVES, THROUGH USE IN CURRENTLY APPROVED MISSION SUPPORTED ACTIVITIES OR RURAL ACCESS ROADS, CURRENTLY PROPOSED FOR SUPPORT UNDER AGRICULTURE DECENTRALIZATION AND CREDIT (685-0249). ACTIVITIES IN LAND MANAGEMENT AND REGENERATION MAY BE CONSIDERED IN RELATION TO RECOMMENDATIONS RESULTING FROM ENVIRONMENTAL REVIEW.

3. PAAD TO BE SUBMITTED TO AID/W FOR REVIEW. EXPECT DOCUMENT TO BE REVIEWED PRIOR FINAL PREPARATION OF AGRICULTURE DECENTRALIZATION AND CREDIT (685-0249). THIS WILL BE HELPFUL IN REVIEWING AGRICULTURE DECENTRALIZATION AND CREDIT IN CONTEXT OF OVERAL PROGRAM OBJECTIVES.

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Sec Cop
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RAISED AND SUGGESTIONS MADE TO BE CONSIDERED IN PREPARATION OF PAAD.

--A. MISSION SHOULD RELATE ESF PROPOSAL TO ENTIRE REFORM PACKAGE TO BE SUBJECT OF NEGOTIATION WITH THE GOVERNMENT OF SENEGAL (GOS). NEGOTIATIONS SHOULD NOT BE COMPARTMENTALIZED BY ASSISTANCE INSTRUMENT. THUS, MISSION SHOULD CONTINUE TO PRESS FOR REDUCTION AND EVENTUAL ELIMINATION OF FERTILIZER SUBSIDY WHILE FULLY REALIZING THAT OBJECTIVES OF ORIGINALLY PROPOSED ESF PACKAGE WILL NOT BE ATTAINABLE IN THE ONE [illegible] LIFE OF THE APPROVED GRANT PROPOSAL. AS PART OF THIS EFFORT, PAAD SHOULD INDICATE REFORMS AND LEVEL OF ACHIEVEMENT TO BE ATTRIBUTED TO REDUCED ESF ONE YEAR DOLS 5.3 MILLION PROGRAM. PAAD POLICY OBJECTIVES (1) OF INCREASING FERTILIZER COSTS PAID BY USERS FROM 1[illegible] PERCENT TO 75 PERCENT AND (2) TRANSFERRAL OF FERTILIZER DISTRIBUTION SYSTEM TO PRIVATE FIRMS AND ELIMINATING THE GOVERNMENT DISTRIBUTOR THAT SHOULD BE CONSIDERED WITHIN THE WIDER CONTEXT AND ARE POLICY OBJECTIVES THAT SHOULD BE PURSUED ACCORDINGLY. THE LINKAGE TO THE OVERALL IMF/WORLD BANK SPONSORED REFORM PLAN ARE TO BE CONSIDERED AND DISCUSSED.

--B. IN CONSIDERING USE OF FOREIGN EXCHANGE FOR FERTILIZER IMPORTS, PAAD ANALYSIS SHOULD DETERMINE BOTH THE ECONOMIC AND FINANCIAL RATE OF RETURN FROM INCREASED FERTILIZER APPLICATIONS. FOR EXAMPLE, WHAT ARE AVERAGE YIELD INCREASES RESULTING FROM FERTILIZER APPLICATION?

WHAT IS THE COST-BENEFIT RELATIONSHIP OF FERTILIZER AND INCREASED YIELDS? HOW DOES THIS AFFECT FARMERS' MOTIVATION TO PURCHASE FERTILIZER AT INCREASED COSTS? SECONDLY, THE PAAD SHOULD INCLUDE AN INSTITUTIONAL ANALYSIS OF THE FERTILIZER MARKET AND FERTILIZER MIXING PLANT. SPECIFICALLY, THE CHARACTERISTICS OF THE PRIVATE SECTOR IN THE FERTILIZER MANUFACTURE AND DISTRIBUTION SYSTEM SHOULD BE CLARIFIED AS THE PRIVATE SECTOR IS A CRITICAL ASPECT OF THE POLICY ISSUES RAISED. CAUSES OF THE UNDERUTILIZATION OF THE PLANT SHOULD BE IDENTIFIED. E.G. IS THE PROBLEM LACK OF IMPORTED MATERIALS OR IS THERE A LACK OF EFFECTIVE DEMAND? IS THE FACTORY VIABLE ONLY IF PROTECTED BY IMPORT LICENSING OR TARIFFS? IS IN-COUNTRY MIXING OF FERTILIZERS ECONOMICALLY VIABLE? IS IT AN OPERATION WHICH SHOULD BE SUPPORTED? WILL THE FERTILIZER COMPANY BE WILLING TO SHIFT ITS SOURCES OF SUPPLY? WHAT IS THE COST DIFFERENTIAL BETWEEN U.S. SOURCES OF SUPPLY AND CURRENT SOURCES?

--C. FINAL SELECTION OF USE OF FOREIGN EXCHANGE SHOULD USE, AMONG ANY OTHERS MISSION IDENTIFIES, CRITERIA OF
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PROVIDING EXPEDITIOUS BALANCE OF PAYMENTS RELIEF.

--D. HOW WILL THE HIGHER U.S. SHIPPING COSTS AFFECT PRICE OF FERTILIZER AND HOW DOES THIS RELATE TO CURRENT SUBSIDY AND OBJECTIVE OF REDUCING SUBSIDY THROUGH ASSISTANCE?

--E. MISSION SHOULD CONSIDER PROGRAMMING OF LOCAL CURRENCY GENERATIONS FOR ONE OR TWO DISCRETE ACTIVITIES WHERE BENEFITS CAN BE EASILY IDENTIFIED, ARE VISIBLE AND FUNDS CAN BE RAPIDLY PROGRAMMED AND DISBURSED THUS ALLOWING THE MISSION AND GOS TO NEGOTIATE IN EARNEST WITHIN THE WIDER CONTEXT OF THE ENTIRE REFORM PROGRAM. ACTIVITIES TO BE IDENTIFIED IN THE PAAD AND APPROVAL SOUGHT THROUGH AUTHORIZATION ACTION TO UTILIZE LOCAL CURRENCY GENERATIONS FOR SPECIFIED ACTIVITIES. BENEFICIARY IMPACT SHOULD BE ANALYZED AND CONSIDERED IN SELECTING USES OF LOCAL CURRENCY GENERATIONS.

--F. PAAD MUST INCLUDE ENVIRONMENTAL REVIEW. THOUGH A CATEGORICAL EXCLUSION MAY BE APPROPRIATE, THOUGHT SHOULD BE GIVEN TO THE GENERAL EFFECTS OF FERTILIZER ON DEGRADED SOIL (E.G., GROUNDNUT BASIN SOIL DEGRADATION).

4. ISSUES PAPERS AND QUESTIONS RAISED BY REVIEWING OFFICERS WITH RESPECT TO ESTABLISHMENT OF GRAIN RESERVE BEING POUCHED FOR MISSION CONSIDERATION.

5. AWAIT MISSION REQUEST FOR ANY ASSISTACE REQUIRED IN PREPARING PAAD. SHULTZ
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ANNEX Q

AID/W Go-Ahead Option Telegram

VV TAA781ESC698
PP RUTADS
DE RUEHC #7886/01 0620824
ZNR UUUUU ZZH
P R 230628Z MAR 83
FM SECSTATE WASHDC
~~TO RUTADS/AMEMBASSY DAKAR PRIORITY 5727~~
INFO RUEIAB/AMEMBASSY ABIDJAN 3288
BT
UNCLAS SECTION 01 OF 04 STATE 057886

C & R

[illegible] -3 [illegible]

03 MAR 83
TOR: 1057
CN: [illegible]
ACTION: AID
INFO: AMB
DCM
CHRON

AIDAC

E.O. 12356: N/A
TAGS:
SUBJECT: SENEGAL - AGRICULTURE DECENTRALIZATION AND CREDIT (685-0247) PID

REF: AGRICULTURE SECTOR PID, DATED 2/12/82 AND AGRICULTURE DECENTRALIZATION AND CREDIT PID SUPPLEMENT, DATED 9/1/82

ADO

ACTION
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DDIR
[illegible]
[illegible]
[illegible]
[illegible] Cm
[illegible]
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[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
Chron
Reading
Embassy

1. SUMMARY. PID NOT APPROVED FOR DEVELOPMENT OF PROJECT PAPER AS PROPOSED IN REFERENCED DOCUMENTS. RATIONALE FOR DISAPPROVAL CONTAINED PARA 2, BELOW. PARAS 5 AND 6 PRESENT TWO OPTIONS FOR MISSION CONSIDERATION AND RESPONSE. OPTION 1 ALLOWS FOR PREPARATION OF A PAAD FOR A DOLS [illegible] MILLION ESF-FUNDED FERTILIZER IMPORT PROGRAM TO BEGIN IN FY 83 AND DEVELOPMENT OF A PROJECT PAPER FOR ASSISTANCE TO COOPERATIVES AND CREDIT DEVELOPMENT. OPTION 2 ALLOWS FOR THE PREPARATION OF A PAAD FOR [illegible] MILLION SIP-FUNDED FERTILIZER PROGRAM AND PREPARATION OF A PAAD FOR A DOLS [illegible] MILLION ESF-FUNDED CIP; BOTH PROGRAMS ARE TO BEGIN IN FY 83. LOCAL CURRENCY GENERATED UNDER THE ESF COULD BE APPLIED TO ROADS MAINTENANCE AND REPAIR AND SIP GENERATION [illegible] ACTIVITIES TO BE DETERMINED, AGREED TO BY BOTH AID AND GOS, AND JUSTIFIED BASED ON CRITERIA SIMILAR TO THAT USED FOR PROJECTS. END SUMMARY.

2. RATIONALE FOR DISAPPROVAL:

--A. THE PID AND PID SUPPLEMENT GIVE INSUFFICIENT INFORMATION TO ALLOW APPROVAL OF EITHER A SECTOR GRANT OR PROJECT APPROACH IN THEIR PRESENT FORM. THE PRESENTATIONS LACK AN ANALYSIS OF THE REFORMS NEEDED IN THE AGRICULTURE SECTOR OR A CLEAR ARTICULATION OF WHICH REFORMS TAKE PRIORITY AND WHETHER A PROJECTIZED OR PROGRAM SECTOR GRANT SHOULD BE USED TO FACILITATE THEM. WHILE THE PLAN DE REDRESSEMENT PROVIDES A DESCRIPTION OF THE CURRENT PROBLEMS AND BROAD GUIDELINES OF THE REFORM PROGRAM, MISSING FROM THE MISSION SUBMISSION IS AN ANALYSIS OR ASSESSMENT OF THE SECTORAL PROBLEMS AND RELATED POLICY CONSTRAINTS. SUCH AN ASSESSMENT WOULD NORMALLY DESCRIBE PUBLIC AND PRIVATE INVESTMENT LEVELS AND AVAILABILITIES OF RESOURCES FOR RECURRENT COSTS AND AN ANALYSIS OF THE SECTORAL INSTITUTIONS EXPECTED TO PROVIDE GOODS AND SERVICES TO THE SECTOR. FROM THE

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ANALYSIS SHOULD FLOW A RANKING OF THE CONSTRAINTS AN CHANGES REQUIRED IN POLICIES, INSTITUTIONAL STRUCTURES AND RESOURCE ALLOCATIONS AND AN ASSESSMENT OF THE HOST GOVERNMENT FINANCIAL, POLITICAL AND INSTITUTIONAL CAPABILITY TO CARRY OUT THE CHANGES. THE SECTOR STRATEGY RESULTING FROM THIS ANALYSIS FOR IMPLEMENTING A PROGRAM TO ADDRESS THE PROBLEMS IS NEEDED. FINALLY, THERE SHOULD BE A DISCUSSION OF THE ROLE OF DONORS IN THE SECTOR AND THE MANNER IN WHICH AID'S PROGRAM FITS WITHIN THE TOTAL ASSISTANCE EFFORT AND A RATIONALE FOR SELECTION OF AID'S AREAS OF ASSISTANCE.

--B. ASSUMING THE ABOVE WOULD SUPPORT A SECTOR ASSISTANCE MODE, THE REFERENCED DOCUMENTS PROVIDE INSUFFICIENT DATA TO SUPPORT AN INTERVENTION IN THE CREDIT SUB-SECTOR. TO SUPPORT THE PROPOSED ASSISTANCE IN CREDIT (SPECIFICALLY THE NEW RURAL DEVELOPMENT BANK), INADEQUATE CREDIT SHOULD BE SHOWN AS A KEY CONSTRAINT TO ECONOMICALLY VIABLE PRODUCTION. THE PRESENTATION SHOULD HAVE DEMONSTRATED THAT THERE ARE INADEQUATE ALTERNATIVE SOURCES OF CREDIT AND THAT FUNNELLING CREDIT THROUGH THE BANK TO THE RESUSCITATED COOPERATIVES TO VILLAGE SECTIONS AND FINALLY TO INDIVIDUALS IS A WORKABLE, COST-EFFECTIVE APPROACH.

--C. PROPOSED REFORMS: THE PRESENTATIONS SHOULD HAVE CLEARLY SUMMARIZED THE REFORMS WHICH AID WOULD SEEK AND PRESENTED THE ANALYSIS FOR SELECTION OF THE REFORMS. SEEKING A POLICY OF SETTING A MARKET INTEREST RATE FOR THE NEW BANK IS AN ACCEPTABLE PROJECT RELATED POLICY REFORM AND THE PP COULD HAVE EXAMINED WHETHER THE RATE COULD BE SET AT A SUFFICIENTLY HIGH LEVEL TO PREVENT DECAPITALIZATION OF THE BANK WHEN A REASONABLE REPAYMENT RATE IS ASSUMED. HOWEVER, IT IS NOT A SUFFICIENT POLICY CHANGE TO WARRANT A SECTOR APPROACH.

--D. THE PID SHOULD HAVE DESCRIBED THE ROLE OF THE WEST AFRICAN MONETARY UNION (WAMU) AND HOW WAMU RESTRICTIONS ON THE SPREAD BETWEEN BORROWING AND LENDING RATES WOULD AFFECT THE BANK. IF AN ISSUE EXISTS, THE PID SHOULD HAVE IDENTIFIED WHETHER IT CAN BE ADDRESSED AT THE NATIONAL OR WAMU LEVEL.

--E. DECENTRALIZATION: THE SUPPLEMENT IDENTIFIED ONLY ONE CONSTRAINT -(I.E., IMPROVEMENT OF INFRASTRUCTURE, ESPECIALLY ROADS) THAT INHIBITS ENTREPRENEURS FROM EXPANDING TRADE AND INDUSTRY IN OUTLYING REGIONS OF

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SENEGAL. IT SHOULD HAVE CONSIDERED WHETHER LOCAL CURRENCY RESOURCES SHOULD BE USED SOLELY TO ADDRESS INFRASTRUCTURE CONSTRAINTS OR WHETHER OTHER MARKETING AND ENTERPRISE CONSTRAINTYMMIGHT ALSO NEED TO BE ADDRESSED. THERE IS ALSO NO MENTION OF WHETHER REFORMS WERE NECESSARY IN THE TRANSPORTATION SUB-SECTOR.

--F. NEITHER A DESCRIPTION OF THE INTERRELATIONSHIP OF THE LOCAL-CURRENCY SUPPORTED ACTIVITIES (I.E., ROADS, COOPERATIVES, CREDIT) NOR THE RATIONALE FOR SELECTION OF THIS GROUP OF ACTIVITIES WAS PROVIDED.

3. DESPITE DISAPPROVAL TO PROCEED WITH PREPARATION OF PP AS PROPOSED, BUREAU WISHES TO ENCOURAGE MISSION TO PROCEED WITH DEVELOPING ITS PROGRAM APPRACH. BUREAU BELIEVES OPTION 2 PROVIDES THE OPPORTUNITY TO MOVE-AHEAD SLOWLY, AT THE SAME TIME OBTAIN A BETTER APPRECIATION OF THE AGRICULTURE SECTOR, AND MOVE CLOSER TO THE MODE OF ASSISTANCE DESIRED BY THE MISSION.

4. GIVEN THE DISAPPROVAL TO PROCEED WITH THE AGRICULTURAL DECENTRALIZATION AND CREDIT PROGRAM, AN OPTION OPEN TO THE MISSION IS TO PROCEED IMMEDIATELY WITH THE REQUIRED ANALYSIS OF THE CREDIT SITUATION, INCLUDING THE NEED FOR AN INSTITUTION, AND WHEN PREPARED, TO DEVELOP A PROJECT PAPER JUSTIFYING AID

ASSISTANCE (OPTION 1). AID/W BELIEVES, HOWEVER, THAT THIS COURSE OF ACTION WILL BE UNLIKELY TO RESULT IN AN AUTHORIZATION OF THE [illegible]-FUNDED PROJECT IN FY 198[illegible] BECAUSE OF THE SUBSTANTIAL STUDIES AND ANALYSES REQUIRED. THIS OPTION [illegible] ONLY IF USAID STILL BELIEVES AN IMMEDIATE CREDIT PROJECT IS THE BEST-AND ONLY COURSE OF ACTION.

5. OPTION 1: UNDER THIS OPTION MISSION WOULD: (A) PROCEED WITH PREPARATION OF THE PROGRAM FOR-IMPORTATION OF [illegible] ACCORDING TO THE GUIDANCE PROVIDED IN THE PAIP APPROVAL CABLE (STATE [illegible]); AND-(B) UNDERTAKE DESIGN OF A COOPERATIVE DEVELOPMENT AND CREDIT PROJECT, [illegible]. PROJECT, USING HANDBOOK [illegible] GUIDANCE.- THERE COULD BE SEVERAL COMPONENTS, EACH REQUIRING ANALYSIS OF THE NEEDS- AND A DESCRIPTION OF HOW THE FUNDS WOULD BE USED.

UNDER THIS OPTION A PROJECT PAPER COULD BE PREPARED WITH TWO COMPATIBLE AND COMPLEMENTARY COMPONENTS I.E.-(1) CLIENT DEVELOPMENT AND TRAINING THROUGH-COOPERATIVES AND (2) THE PROVISION OF RESOURCES TO INCREASE THE PRODUCTIVITY OF RURAL PRODUCERS. IF THIS-OPTION IS SELECTED, IT WILL BE NECESSARY TO:(1) DESCRIBE THE DEMAND FOR CREDIT; (2) SHOW THAT INADEQUATE CREDIT-IS A PROBLEM; (3) DETERMINE THE SOURCES OF-CREDIT (E.G., SUPPLIER CREDIT, VILLAGE MONEY LENDERS, TRADERS, ETC.); (4) DESCRIBE APPROPRIATE TERMS FOR THE CREDIT; AND (5), DETERMINE IF ANYTHING CAN BE DONE TO INCREASE THE SUPPLY OF CREDIT FROM EXISTING SOURCES. IF THESE ANALYSES SHOW THAT A NEW SAVINGS AND CREDIT INSTITUTION IS NEEDED, THE PP SHOULD DEMONSTRATE THE INSTITUTIONAL ANDFINANCIAL

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VIABILITY OF THE PROPOSED BANK AND GIVE EVIDENCE THAT LOCAL PRIVATE FINANCIAL INSTITUTIONS WILL INVEST IN IT. ASSISTANCE FROM THE PRE BUREAU TO REVIEW THE PROPOSED STRUCTURE AND CAPITALIZATION OF THE BANK AND SUGGEST ALTERNATIVES OR IMPROVEMENTS UPON THE CURRENT PROPOSAL IS RECOMMENDED. THE S&T RURAL SAVINGS FOR CAPITAL MOBILIZATION PROJECT (936-5313) IS AN ADDITIONAL SOURCE OF TECHNICAL SUPPORT. IF THE PROPOSED PURPOSE AND FINANCIAL VIABILITY CAN BE DEMONSTRATED, THE NEXT TASK IS TO IDENTIFY THE TYPES OF LENDING ACTIVITIES, TECHNOLOGIES AND COMMODITIES FOR WHICH CREDIT IS PROPOSED. MEDIUM-TERM CREDIT PORTFOLIOS SHOULD BE EVALUATED: EXAMPLES INCLUDE ANIMAL TRACTION EQUIPMENT, TOOLS AND SPARE PARTS, RICE HULLERS OR OTHER FOOD PROCESSING EQUIPMENT, TRANSPORT, OR POSSIBLY VILLAGE STORAGE FACILITIES. THE ECONOMIC AND FINANCIAL VIABILITY OF THESE ITEMS/INPUTS SHOULD BE DEMONSTRATED.

THE NEED FOR ADEQUATE SUPERVISION FOR THESE CREDIT-FINANCED INPUTS SHOULD ALSO BE CONSIDERED.

SOME OTHER CONSIDERATIONS OF THIS OPTION ARE OFFERED:

--DISBURSEMENTS UNDER THIS MECHANISM ARE LIKELY TO BE SLOW, BECAUSE AID WILL PROVIDE ASSISTANCE ONCE THE INSTITUTION IS ESTABLISHED AND DISBURSEMENTS ARE TIED TO THE NEEDS FOR PARTICULAR GOODS AND SERVICES UNDER SUBLOANS MADE BY THE CREDIT INSTITUTION;

--THIS OPTION MOVES SUBSTANTIALLY AWAY FROM THE MISSION PROPOSAL TO PROVIDE MORE OF ITS ASSISTANCE IN THE NON-PROJECT MODES;

--WE BELIEVE THE POLICY REFORMS WHICH ARE BEING SOUGHT WITH RESPECT TO THE INSTITUTION ARE STILL APPROPRIATE AND ACHIEVABLE THROUGH PROJECT ASSISTANCE (E.G. INTEREST RATES, ESTABLISHMENT OF NON-SEASONAL LENDING ACTIVITIES

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