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PL-480 TITLE III (FOOD FOR DEVELOPMENT) PROGRAM
JOINT GOVERNMENT OF SENEGAL/UNITED-STATES EVALUATION REPORT
FOR
THE PERIOD FROM JUNE 1984-DECEMBER 1985

August 1986

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Staffing of the evaluation team

The members of the evaluation team were:

- Mamadou M. Thioune, Ministry of Plan and Cooperation (Evaluation team coordinator.)
- Cynde Robinson, USAID/ADO/LC
- Olga Sedo Paguéguy, USAID/FFP
- Sakhaly Ndiaye, Ministry of Finance and Economic Affairs
- Mamadou Traoré, USAID/ADO/LC

In addition, the assistance of the following people was highly appreciated:

- Norman Rifkin, USAID/ADO/LC and Coordinator of the Title III Project
- Mademba Ndiaye, President of the Management Committee
- Koymil Fall, Permanent Secretary of the Management Committee.
- Yacine Fall, Permanent Secretariat Coordinator.
- Fatou Ly, CPSP
- Daby Diallo, USAID/ADO
- Lamine Thiam, USAID/ADO
- Vara Lafoy, USAID/FFP
- Don Rassekh, USAID/ADO/LC

as well as individual GOS project directors.

INTERVIEWED PEOPLE

Boubacar Sidibé	Bandia Project Director
Cheikh Sawaré	Diourbel Project Director
Jacques Faye Adrien Dumont	ISRA Project Director World Bank Architect
Tidiane Sy	ENEA Project Director
Jean Lepriol Ibrahima Diallo Gabou Seck	Technical Manager, Hydrogeological Study Project Accountant Manager
Lamine Diop Mme Coulibaly	CERER Project Director Accountant
Peter Gallagher Paul Ndiaye Awa Sow Siré Thiam	CRS Project Director Technical Manager Accountant Technical Manager
Boubacar Ndoye Mike Hamdy Mr. Guèye	Technical Manager, ITA Technical Adviser Accountant
Mr. Thiam	Assistant Station Chief
Mr. Pape C. Seck	Assistant Project Director - Kebemer
Dr. Mamadou Mbayek Samba Sall Mr. Barry Mr. Nguer	CRZ Director - Kolda Research Center Director - Djibelor Researcher at ISRA Research Center - Djibelor Chief Accountant
Mamadou Ndiaye	Regional Director - OFADEC
	- Villagers at Koulari and Sankagne III

A - Executive Summary

This report examines Senegal's PL-480 Title III program between June 1984 and December 1985. Previous interim evaluations were done in October 1982 and June 1984. A final and more substantial evaluation will be undertaken with the completion of the program at the end of 1986.

While the evaluation reviews program and sub-project implementation, commodity sales, and special account status in some detail, overall questions such as the type of rice imported, appropriateness of the program for Senegal, future programs, program objectives and policy analysis, as well as more detailed questions dealing with the economics of projects, cost benefit analysis and a comparative economic analysis of the different projects can best be addressed in a comprehensive final evaluation.

Since the last evaluation, the financial resources have been in place to permit projects to be funded in a timely manner. Although delays in providing justification on the part of some of the projects, as well as the review of the justification, by the Secretariat, have in certain cases, delayed project timetables, there appears to be no serious obstacles to meeting all project objectives by the end of 1986 as planned. The exceptions are the Hydrogeological study which has been scheduled for termination during 1987, and the SODEVA warehouses which are scheduled to finish the first part of 1987.

It is important to point out here that although sufficient funding has been available for the last one and a half years for all projects, fourth tranche deposits by the CPSP to the Special Account will only permit 4th tranche project financing through the first quarter of 1986. It is thus essential that CPSP deposit the 938 million CFA still required in the Special Account as soon as possible to enable fourth tranche projects to progress towards their objectives and terminate within the scheduled timeframe of 1986.

B - Program Management

The 1984 evaluation proposed several recommendations that needed to be implemented. The first recommendation, in view of the fact that the Secretariat's official role remained unclear, was that the management committee assign the Secretariat its roles and responsibilities as well as the means to carry out those responsibilities. The second recommendation was that the management committee adopt an official Title III per diem policy based on a flat rate for meals with reimbursement of hotel expenses upon presentation of a receipt. This second recommendation has been adopted by the management committee with a flat per diem rate of 6,000 CFA set for meals and up to 3,000 CFA for hotel expenses upon the submission of a receipt.

Although the first recommendation assigning the Secretariat its roles and responsibilities has not been undertaken, a number of positive steps have been taken to permit the Secretariat to function more efficiently. While for a period of time, the Director of Debt and Investment assumed the responsibilities of the Permanent Secretary, he named a Permanent Secretary in mid 1985, Mr. Khoymil Fall, an experienced and long time employee of the Ministry of Finance.

Other recommendations have likewise been implemented. In order to render the Management Committee a more effective decision making body and to facilitate greater contact between the Committee and project directors, the following measures have been taken:

- a. More frequent committee meetings have been held;
- b. Minutes of the Management Committee meetings have been distributed to project directors;
- c. More project visits have been undertaken by members of the Management Committee, although still more are recommended.

Other positive steps have also been taken at the Secretariat. The head accountant has been terminated and replaced by Miss Fall. A circular note has been sent to all projects by the Permanent Secretary specifying the requirements of justification to the Ministry of Finance. A financial status summary has been updated for each project. In addition, the Management Committee has asked the Sahel Regional Financial Management Project (SRFMP) to undertake a financial review of the accounting procedures and internal controls used in some of the projects, as a follow-up to the accounting system that SRFMP introduced to the projects in March of 1985.

There are however, still certain areas that need to be improved and we recommend the following:

- 1) That the Permanent Secretary assign the employees of the Secretariat precise work schedules, with a time frame in which to do it. The procedure put in place should assure that project justifications are reviewed quickly and the projects responded to with a minimum delay.
- 2) That the Permanent Secretary makes sure that decisions of the Management Committee are understood and put into practice by the staff of the Secretariat.
- 3) That the Management Committee undertake more project visits thus familiarizing themselves more with activities at the project level.

- 4) During the last year of the project, in order to assure that projects receive their required funding, it is essential that the Management Committee review at each meeting amounts disbursed to projects as well as any problems with justifications that may exist. The agents of the Secretariat should follow up those problems immediately with the goal of permitting funding to flow as scheduled to projects.

STATUS OF SALES AND DEPOSITS OF PROCEEDS FROM TITLE III COMMODITIESI. SALES1. Introduction

The May 1984 evaluation, as well as those undertaken during the previous years, pointed to the slow pace of sales of PL 480 rice. This was due to the high price at which the rice had to be sold to avoid a substantial deficit with regard to the purchase price. In order to address this issue and to sell the rice at a reasonable pace, the GOS made several changes in the selling price (these changes are shown in the table below). It should, however, be pointed out that these changes relate to the last 3 tranches only.

- 3 September 1981 to 30 April 1982:	179,235 F CFA/ton
- 1 May 1982 to 19 November 1982: (Ref. Letter from Ministry Finance received at CPSP on 19 Nov 1982).	142,000 F CFA/ton
- 19 Nov 1982 to 20 August 1983:	110,000 F CFA/ton
- 20 August 1983 to 12 Jan 1985:	120-122,000 F CFA/ton
- 12 Jan 1985 to date:	147,859 F CFA/ton

Recommendation:

For accounting and technical reasons, it is recommended that the CPSP quantify the rice sold during each period and at the prevailing price.

2. Sales Statusa. Second and third tranches

An amount of 12,962T170 kilos and 23,908T917 kilos were imported under the second and third tranches respectively: i.e an overall amount of 36,871T087 kilos. According to the maritime survey reports, 36,164T998 kilos were actually received. Previous evaluations have pointed out the reasons for the slow rice sales which have already been explained, above.

The second and third tranches rice were entirely sold by June 1984. However, according to the sales status prepared by the CPSP in September 1984, some rice (767T572 kilos) from these two tranches was still being sold in January through June 1985. It is important to note that the quality of this remaining portion was not deemed suitable for human consumption by the CPSP and had to be used as animal food. The above figures show that about three and a half years, from September 1981 through June 1985, were necessary to sell the two tranches of rice, which resulted in storage losses. The following table illustrates the sales and stock status.

2nd and 3rd TRANCHES

	<u>Amount based on bill of lading</u> 36,871.087	<u>Amount received According to survey report</u>	<u>F CFA requirements</u>
1. <u>Total</u>	36.871T087	36,164T998	4,400,150,702
-2nd tranche	12,962T170	12,354T693	1,923,798,437
-3rd tranche	23,908T917	23,810T305	2,476,352,265

Transit Losses 706T089

2. <u>Sales</u>	<u>Quantity (tons)</u>	<u>Proceeds F CFA</u>
Sept 81 - Dec 82	<u>3,031T692</u>	<u>427,550,972</u>
- cash	1,911T600	278,482,472
- credit	1,120T092	149,069,500
Jan 83 - Dec 83	21,419T036	<u>2,463,644,142</u>
- cash	10,189T612	<u>1,204,686,046</u>
- credit	11,229T424	1,263,958,096
Jan 84 - Dec 84	<u>8,896T651</u>	1,033,846,946
- cash	8,856T605	1,928,992,415
- credit	40T046	4,854,531
Jan 85 - June 85	767T572	91,740,117
Total sold through June 1985	34,114T951	4,021,782,177
Unaccounted stock	(2,050T047)	

Recommendation:

It is recommended that CPSP make a final status report of the sales and stock of the second and third tranche rice.

b. Fourth tranche

Following the one year extension of the initial three year program, a mix of rice and sorghum was imported under the 4th tranche.

Rice: An amount of 11,058 tons was received in October 1983, in addition to the 2nd and 3rd tranches stock which amounted to 2,161 tons at that period. However, in order to avoid the confusion which occurred with the 2nd and 3rd tranches lots, the 4th tranche rice sales proceeds deposited in a separate account. Though not faced with the same sales constraints as the previous lots, the fourth tranche rice nonetheless took several months to be sold. The following table shows the sales of this rice;

4th tranche - Rice

	<u>Quantity based on bill of lading</u>	<u>Quantity received based on monitoring report</u>	<u>FCFA Requirements</u>
1. <u>QUANTITY</u> <u>Ocean losses</u>	11,058T968	11,049T080 9T388	1,389,843,389
2. <u>Sales</u>		<u>QUANTITY</u> (tons)	<u>PROCEEDS</u> (F CFA)
1984		9,918T959	1,200,672,577
Jan-June 85		464T908	40,168,409
Total		10,383T867	1,240,840,986
Unaccounted stock		(665.T13)	

Sorghum: The 24,608 ton of fourth tranche sorghum was also received in October 1983. Unlike the rice, there was no problem with the sale of the sorghum. This was primarily due to the fact that the 1983 local production was very low. The sorghum was sold at cost price and thus without profit in the marketing channel. As well, a portion amounting to 11,800 tons was handed over to the CSA for emergency distribution which accelerated the sale. Sorghum was put on the market in January and completely sold by June 1984. The sales were made as follows.

4th tranche - Sorghum

	<u>Amount based on bill of lading</u>	<u>Amount received based on the monitoring report</u>	<u>FCFA requirements</u>
1. Amount 24T608		23,851T700	2,798,585,562
Transit losses		756T300	

2. Commercial sales

<u>Periods</u>	<u>Quantities (tons)</u>	<u>Proceeds (F CFA)</u>
Jan 84	103	8,600,500
Feb 84	8,983	750,071,836
March 84	1,674	139,779,000
April 84	313	26,157,294
May 84	798	66,594,674
June 84	97	8,081,381
<u>Total</u>	<u>11,968 tons</u>	<u>999,294,685</u>
3. <u>Sales to CSA</u>	11,800 tons	987,805,083
Total	23,768 tons	1,987,099,768
Unaccounted stock:	840 tons	

Recommendation:

Like the 2nd and 3rd tranches, it is recommended that CPSP makes a final status report of the sales and stock of 4th tranche rice and sorghum.

II. DEPOSITS INTO THE SPECIAL ACCOUNT

In accordance with the recommendation of the last evaluation, the proceeds from the sale of the Title III commodities were regularly deposited in the special accounts established for this purpose at the USB for the first three tranches and at CITIBANK for the 4th tranche.

1. First tranche

Theoretically, the local currency requirements for the first tranche were fulfilled in April 1982. An agreement between the GOS and USAID permitted the interest generated by the Special Account, amounting to 37,073,286 FCFA, to be used to fulfill the local currency requirements of the first tranche. However, the General Accounting Office (GAO) during its audit of Title III in August 1984, deemed this agreement in conflict with USAID regulations. Thus, USAID has requested that the interest be recollected from CPSP in order to completed the first tranche requirements.

2. Second and third tranches

The second and third tranche rice, 36,871 tons according to the bill of lading, should generate 4,400,150,702 FCFA (1,923,798,437 for the 2nd tranche and 2,476,352,265 for the third tranche) according to the prevailing rate of exchange at the date of boarding as stated in the agreement. To date, 4,064,657,290 FCFA have been deposited into the Special Account. This figure includes the 298,000,000 F CFA deposited by the Government of Senegal and allocated to SAED, and the payments made by CPSP amounting to a total of 3,766,657,290 FCFA. Thus, there remains 335,493,412 FCFA to be deposited in order to fulfill the local currency requirements for the second and third tranches.

According to the sales tables issued by CPSP, sales amounted to 4,021,782,177 FCFA, which means that between actual sales proceeds and payments made to the Special Account, there is a difference of 255,124,887 FCFA, which is still at the CPSP. It is necessary for CPSP to deposit this amount in the Special Account because this non-payment is in violation of the provisions of the Agreement (Amendment n° 2) which states that any proceeds from Title III commodities sales should be deposited 14 days after the sale.

Recommendation:

It is recommended that CPSP deposit all sale proceeds still under its possession so that US Government knows precisely the amount of the deficit remaining.

3. Fourth tranche

A separate Special Account was opened at CITIBANK for the proceeds of the sale of rice and sorghum of the fourth tranche. The rice should yield 1,389,843,389 FCFA, and the sorghum, 1,408,742,173 FCFA, or, a total of 2,798,585,562 FCFA for the fourth tranche.

To date, CPSP has deposited 1,860,282,071 FCFA into the Special Account. 938,303,491 FCFA remain to be paid to fulfill the deposit requirements of the fourth tranche.

The rice sale generated 1,240,840,986 FCFA in proceeds. The commercial sales of sorgho generated 999,294,685 FCFA, and 987,805,083 FCFA from sales to CSA for a total of 3,227,940 754 FCFA for the fourth tranche commodities sales. This amount exceeds the local currency requirements and even leaves a surplus of 429,355,192 FCFA. It is important to point out that the grain transfer to the CSA was made on credit and that the CPSP is still to be paid by the CSA. Furthermore, the commercial sales amount to 2,240,135,671 FCFA, and only 1,860,282,071 FCFA have been credited to the Special Account. Therefore, the CPSP still must deposit 379,853,600 FCFA from rice sales.

Recommendation:

It is recommended that CPSP deposit into the Special Account at CITIBANK all sales proceeds, and that the CPSP also request the CSA to pay for the sorghum in order to meet fourth tranche local currency deposit requirements.

General Recommendation

It is recommended that CPSP for its part, and the Government of Senegal on the other, deposit the necessary funds for each tranche in order to fulfill the requirements of the agreement which states that the local currency requirements for each tranche should be deposited into the Special Account six months after the boarding of the commodities. The required funds are the following:

- 1st tranche	37,073,913 F CFA (refund of interest)
- 2nd/3rd tranches	335,493,412 F CFA
- 4th tranche	938,303,491 F CFA
	<hr/>
Total	1,310,870,816 F CFA

DUNE STABILIZATION - KAYARBACKGROUND/OBJECTIFS

The purpose of the project is to stabilize the dunes threatening the interior fertile vegetable producing zone called the Niayes. Three species (casuarina, eucalyptus, and anacardium) have been planted on a 73 km stretch of dunes along the coast north of Dakar (Noto, Kayar, Mboro) as well as the area around the lakes. The activity is not only a defense against the encroaching dunes, but it also provides the 9,000 villagers in the area with a source of wood for fuel as well as fruit and construction materials. Furthermore, the project assists farmers in the protection and exploitation of their gardens. The original objectives were to plant 3700 hectares by the end of 1983 and to construct 10 buildings to serve as offices and lodging for project forestry agents. Later, the Management Committee decided that due to delays experienced in contracting procedures, the construction component was no longer necessary in order to meet the planting objectives and reduced the budget accordingly. It should also be noted that this area of dune fixation has a long history of activity. Original stands were planted around Kayar in 1955-57. However most of the zone was relatively unplanted and unmanaged except for a few stands around Malicka and Lake Retba until Title III began activity support in 1981.

PROJECT STATUS - MAY 1984

At the time of the last evaluation, 2200 of the original 3700 ha objective had been achieved. The objective had not been fully attained due to the slow sales of Title III rice and subsequent delays in funding. However, despite the problems caused by a reduced budget, the project personnel achieved impressive results. It was assumed that project goals could be met in 1985 with improved funding allocations alleviating the financial situation.

PROJECT STATUS - DECEMBER 1985

The project was nearly able to realize its project objectives of 3700 ha despite a continued problem with the financial pipeline. The table below, recapitulates the accomplishments realized by the project. It should be noted that several years of reduced rainfall hampered the growth of plantations and increased the need to replant certain areas.

<u>YEAR</u>	<u>HECTARES PLANTED</u>
1981	500
1982	1,000
1983	650
1984	650
1985	<u>730</u>
TOTAL.....	3,580

The survival rate is between 75 and 90 percent.

Activities have included the following interventions:

- a) The introduction of filao on maritime dunes, thereby virtually arresting the sand dune movement where trees are planted.
- b) The stabilization of the continental dunes with eucalyptus and acacia and the establishment of 70 km of wind breaks have helped alleviate the encroachment of the interior dunes on the fertile farming land of the Niayes.
- c) 400 ha of farming land were planted with nitrogen fixing cadd trees to assist in soil regeneration. A 90% success rate was realized in 1985 due to a more favorable rainy season.

A supplementary aerial study of the zone was conducted in December 1985 to better define the problem parcels and to prioritize those areas which more urgently required intervention. The Geography Department at the University of Dakar in collaboration with the AID bilateral Remote Sensing Project produced a report and maps which assisted the Water and Forestry in identifying specific problems areas.

In the Spring of 1985, it was observed that a significant quantity of filao was dying back in some of the older parcels. A USAID team was sent to study the area to determine the problem. It was found that no disease was apparently affecting the trees, but that trees in the older stands were to closely clustered due to lack of systematic cutting and thinning.

The dedication of the Water and Forestry Service is to be commended. Despite a persistent financial shortage, poor rainfall and GOS restrictions on the purchase of new vehicles which would facilitate the work, the objectives have nonetheless been achieved and positive results realized.

FINANCIAL STATUS

While budget requirements were better met in 1985, the project continued to have difficulty in adequately justifying vouchers at the level of the Secretariat so subsequent allocations of additional funds by the Management Committee were delayed. Following is a recapitulation of yearly allocation.

1981	265,200,000 FCFA
1982	100,000,000
1983	182,000,000
1984	182,347,340
1985	<u>298,496,218</u>

TOTAL..1,028,043,608 FCFA

The global budget was approved at 1.4 Billion FCFA, thus, leaving a balance of 371,956,392 FCFA. The Management Committee has approved in principle the utilization of these funds in 1986 to continue the dune stabilization activities.

FUTURE ACTIVITIES

Taking into consideration the recommendations made by the aerial survey and the technical expertise of the Forestry Service, the following activities are scheduled for the 1986 campaign with the remaining balance:

- 1) 900 ha of trees planted:
 - a) Replant old parcels, 450 ha
 - b) Plant the 337 ha remaining in original objectives around Nyalor Dune,
 - c) Plantation of 200 ha of continental dune from Thiénodène to Kayar.
- 2) 75 km of wind breaks around gardening plots with assistance from farmers. In return, the farmers will be provided technical assistance and some gardening materials.
- 3) Repair of 25 km of dune front with new trees.

RECOMMENDATIONS

- 1) Develop a management plan to deal with the cutting, thinning and replanting of old stands.
- 2) Begin experimental tests with other tree species to eventually diversify the plantations to avoid future problems associated with monoculture.

DUNE STABILIZATION - KEBEMER (DOLS 286,000)

BACKGROUND/OBJECTIVES

The Kebemer dune stabilization is a Fourth Tranche extension to the Cayar project. Its goal are similar: to fix the maritime and continental dunes in order to arrest their encroachment on the valuable agricultural farmland of the Niayes. The Kebemer project (Fas Boye-Lompoul-Potou) was begun in 1975 as the test program with FAO support and ended in 1984. Title III funds were used during the past two years to expand the band of trees along the maritime dunes from 200 to 300 meters (200 ha), stabilize 100 ha of continental dunes, and intercrop trees in order to regenerate 40 ha of sandy soils. Furthermore, eucalyptus and cashews were to be planted as windbreaks in gardening areas (40 km) and 50 ha of village woodlots were to be established.

PROJECT STATUS - DECEMBER 1985

The following objectives were attained during the 1984 and 1985 campaign:

Stabilization of maritime dunes	212 ha
Establishment of windbreaks	70 ha
Stabilization of interior dunes	110 ha
Soil Regeneration	400 ha
Village Woodlots	30 ha
Replantating certain 1983 and 1984 plots	

All objectives were met or surpassed except for establishment of village woodlots. These proved difficult due to the poor rainfall experienced in 1984.

Overall, the stabilized maritime and interior dunes have arrested the sand movement in the zones where trees have been planted. Some of the trees on the top of the maritime dunes have had a lesser survival rate as a result of constant sand movement and winds.

During 1983 and 1984 the survival rate of the trees in the dune plantations as well as in the fields for soil regeneration suffered due to poor rains. 1985 registered a far better rainfall and the survival rate for soil regeneration trees is estimated at 90 percent. Areas which suffered during the poor years were replanted in 1985.

Fencing was put up in areas where winds risked covering young plants with sand. A permanent tree nursery was established at Lompoul to provide seedlings after the project is completed. A reliable and sizeable vehicle park (14 vehicles) was necessary in order to transport seedlings, fencing, and workers to and from the plantations. Long distances, lack of any type of public transport for workers to the dunes and the wear and tear placed on vehicles working in such an environment necessitated the project to be self-sufficient and expend a significant amount of the budget (23%) on the running and maintenance of the vehicle park.

FINANCIAL STATUS

Timing is particularly critical for forestry projects and necessitates inputs at specific points to assure preparation for the few months of the planting season (July-Sept). The Kebemer project chief may be commended for his judicious planning and prioritization which avoided any significant gaps in critical activities such as purchase of plastic bags for seedlings and maintenance of the vehicle park. Money has been reasonably well dispensed to the project by the Secretariat. As of 12/85 all money except for 2 M CFA has been dispensed.

FUTURE ACTIVITIES

The first phase of the Kebemer project was completed as of 12/85. However, the Management Committee is considering reallocation of some funds in order to finance additional project activities in 1986. The project has already delineated planting zones and proposed the following interventions:

Fixation of Maritime Dunes	100 ha
Protection of Niayes windbreaks	25 ha
Fixation of interior dunes	50 ha
Plant production	600,000

DIOURBEL VILLAGE WOODLOTS (DOLS 114,000)BACKGROUND/OBJECTIVES

The objective of this project is to enable the Forestry Service to continue to develop village-based reforestation schemes, thereby increasing self-sufficiency in firewood and promoting soil conservation techniques. In this densely populated region (over 100 inhabitants/km²), women must go increasingly long distances to look for fuelwood. Project activities include production of seedlings in village nurseries, soil regeneration, plantations for fuelwood, shade and fruit trees, and windbreaks. Forestry agents, in collaboration with Peace Corps Volunteers, will continue to assist villagers in determining reforestation activities that most closely correspond to their development needs. This project was originally a bilateral project funded under Renewable Energy (0247) and administered by Africare. Because the project was beginning to show encouraging results towards the end of the project, it was felt that continued support was required in order to establish a firmer base in the Diourbel zone which was greatly affected by the drought of the last few years.

PROJECT STATUS - DECEMBER 1985Global Objectives: 1984-1985

- 400 ha of woodlot plantations
- 42 villages organized
- 250,000 plants produced

Annual Objectives 1984

- 40 ha new plantation
- 20 ha replanted
- 80 ha soil regeneration
- 40,000 plants produced

Results Achieved 1984

- 23 ha replanted (73% survival rate)
- 260 ha soil regeneration (55% survival)
- 18 ha shade trees (80% survival)
- 16,623 plants distributed

Major Problems

- Lack of water due to poor rains;
- Destruction of odd trees for soil regeneration by animals
- Delay in financing

Annual Objectives 1985

- 15 ha shade trees
- 80 ha soil regeneration
- 130,000 plants produced
- 14 central nurseries established

Results Achieved - 1985

155 equivalent/ha plantation
73 villages organized
14 nurseries established

Major Problems

Locust attack of plants after hibernage.

The Region of Diourbel is the northern most zone where village reforestation schemes have been deemed feasible in Senegal (except for isolated areas on the Senegal River). Nonetheless, project success has been precarious and has greatly depended upon rainfall each year. As can be seen from the preceding figures, annual objectives were adhered to only in general terms.

The Project Director explained that due to the lack of rain in 1984, he considered it more important to replant plantation losses and to emphasize soil regeneration activities. Several project activity modifications have been made which appear to be improving its long term viability. Vegetable gardens are being intercropped with young trees in the plantations. This provides the communities with more immediate benefits and incentive to care for the plantations. Centralized nurseries have been established furnishing plants to satellite villages rather than having each village establish its own nursery. This centralized method has provided economies of scale and a higher survival rate of seedlings in the nursery. Live fencing has become the preferred fencing method though barbed wire is used until live fencing becomes established.

In discussions with Peace Corps volunteers working on the project, a subtle evolution in villagers' comprehension of reforestation has significantly affected the project for the better. For example, current requests for village woodlots exceeds that which PCVs and Eaux et Forêts agents can properly follow. Villagers are also more willing to select accessible and adequate land to donate for the plantation. This is in contrast to when the project began as it was then difficult to generate community interest. Furthermore, there appears to be a greater appreciation of the value of planting nitrogen - fixating trees in the fields. PCVs feel that certain savings could be introduced to extend the number of villages assisted e.g. fewer purchased tools, reuse of plastic sacks for seedlings and less use of barbed-wire fencing.

FINANCIAL STATUS

The first tranche of money was not received by the project until after the 1984 planting season (October) due to insufficient Title III funds. Eaux et Forêts nonetheless accomplished a good portion of its objectives by purchasing materials on goodwill. During 1985, all money except 2,155 MCFA of the 48 MCFA budget was given to the project.

RECOMMENDATIONS

1. Funding should be extended to the project through 1986 to continue similar project activities;
2. Test the results of using fewer material inputs so that the woodlots and soil regeneration activities can be more easily replicable by individual communities.
3. Look into the feasibility of digging bore holes, at least for nurseries, to reduce seedling losses caused by poor rainfall and thereby assure a more constant water source.

STATE TREE NURSERIESBACKGROUND/OBJECTIVES

The GOS Forestry Service is to develop financially viable state nurseries which will act as departmental seedling outlets to better meet public demand for trees. Fifteen sites have been selected throughout the 10 regions of Senegal. Each nursery will produce 1 million plants a year to supply trees for village woodlots. The GOS increasingly sees community participation as the key element in combatting environmental degradation. Past popular campaigns have been hindered by insufficient quantities of available seedlings. Objectives entail establishing 4 new nursery sites and expanding, renovating, and equipping 11 old nurseries. The project is financed for two years.

PROJECT STATUS DECEMBER 1985

The project was scheduled for funding in January 1984. However due to lack of sales proceeds and difficulty in detailing a project work plan, the first tranche allocation was delayed until November 1984. Activity thus began in preparation of the nurseries for the 1985 campaign. Improved fencing and more reliable water supplies were the most immediate improvements for the established nurseries. While the established nurseries were already enclosed by combination brick and barbed wire fencing, Eaux et Forêts wanted to expand the nursery area as well as reinforce the barbed wire, which was considered inadequate to protect the seedlings from scavenging animals. The project manager considered "Ferlo" fencing to be the most economical yet effective fencing available. Only one firm (La Société Industrielle du Fleuve) produces this type of fencing in Senegal and thus a non competitive contract was awarded to them in May 1985. As of September 1985, all nurseries were fenced with the exception of Bambey and Linguere where site selections are still under negotiation. Identification of sites with adequate water and protection from wind has proven difficult.

Many of the new sites as well as the older nurseries have experienced serious water problems. The sites without their own water supplies i.e. no wells within the nurseries, must depend on SONEES, the GOS parastatal water company, and pay exorbitant charges. Eaux et Forêts has not been able to gain approval from SONEES to change its status to agricultural in order to benefit from reduced rates. Thus nearly all the sites have budgeted well construction or well improvement, including construction of storage basins. As of September 1985, six of the sites had functional independent water systems.

During the 1985 campaign, the nurseries produced and distributed a total of 2 million plants, (the objective was 15 million per year until the end of the project). The reasons for such a modest production was explained by late completion of nursery infrastructure and to delay in allocation of funds.

FINANCIAL STATUS

As previously mentioned, the project start-up was delayed by 10 months. Below is a recapitulation of request by quarter and actual allocations.

<u>Quarter</u>	<u>Proposal</u>	<u>Actual</u>
4th-1984	40 MCFA	25 MCFA
1st-1985	75 ""	35 ""
2nd-1985	70 ""	25 ""
3rd-1985	40 ""	15 ""
4th-1985	44 ""	*50""

*An additional 10 MCFA has been approved to cover arrears, but has not yet been deposited in the project account.

In August 1985, the remaining project budget was reapportioned in order to realign the budget within an extended completion date (12/86). The new budget assigned nearly 50% of the remaining money to salary a labor force (25% in original budget). 140 workers (approximately 14 per center) were hired to produce the plants.

While money flow was a factor in the slowness of project activity, it should be noted that the ambitious nature of the project to cover all 10 regions made it a difficult project to manage and assure timely completion of nursery centers.

FUTURE ACTIVITIES

The project has stated the following objectives for the 1986 campaign and through the end of project:

Nursery preparation;

Distribution of plastic sleeves to nursery centers for seedlings;

Settle water supply issue at remaining sites: Niore, Ndounka, Sedhiou, Keur Ibou Fall and Bambey;

Settle nursery siting at Linguere and Bambey;

Produce 3 million plants; and

Construction of on-site storehouses and guardian lodging.

RECOMMENDATIONS

1. It is estimated that 4 million seedlings can be produced per hectare of land devoted exclusively to production. Thus, Actions Populaires' objective to produce 3 million plants among 15 nurseries, each containing at least one hectare of available land for seedling productions, is an inadequate objective. Considering as well the level of infrastructure provided to the project and the number of salaried laborers per center (14), it appears that project input has not been effectively utilized. In this light, it is recommended that the project budget be scaled down, if in fact Actions Populaires is only capable of such limited seedling production.
2. Seedling production is a relatively simple and straight forward procedure. Ultimate success in reforestation is not achieved until seedlings have been distributed, planted, protected and allowed to grow. Survival of trees to maturity so that their environmental impact can be realized is the final goal. Thus, it is recommended that an assessment be conducted to determine the survival rate of the seedlings distributed by Actions Populaires.
3. It is recommended that a scheme be formulated to sell at least a proportion of seedlings, such as fruit trees, in order to permit the Eaux et Forêts nurseries to meet running costs at the end of the project.

BANDIA FOREST - MAINTENANCEBACKGROUND/OBJECTIVES

PARFOB (Projet Autonome de Reboisement de la Foret de Bandia) was originally begun as a USAID bilateral project to replant a natural forest area with more productive species. The goal was to produce fuelwood and charcoal for Dakar and Thies which would in turn help stabilize pricing. As the GOS viewed continued financial support to Bandia as a priority, PL-480 funding was to begin in early 1984 after bilateral funding was completed. This support was to assure proper maintenance and protection of the forest until selective harvesting began and enough revenue was generated to become auto-sustaining by the end of 1985.

Maintenance of the 1850 ha forest consists of weeding, controlling pests, clearing fire lanes and guarding against domestic livestock, forest fires, and illegal wood cutters.

In addition, research by the National Center for Forestry Research (CNRF) was to continue study of the effects of eucalyptus on soil and water tables and develop techniques to reduce fuelwood production costs. Finally, research was to begin on natural forestry techniques and a management and commercialization study was to be conducted.

PROJECT STATUS - DECEMBER 1985

The Bandia forest has experienced several years of below average rainfall:

1983: 238 mm
1984: 330 mm

Studies have shown that 700-800 mm of rainfall is required for acceptable growth of eucalyptus, which is the major species planted in Bandia Forest. During the project design, a 20-year average had given a figure of 739 mm of rain per year and was considered representative for the zone. Thus, the choice of eucalyptus.

It was decided at the end of the bilateral project in 1983 to try to maintain and protect the plantation in hopes that better rains would be experienced and that some eventual revenue could be generated. In addition to the general maintenance of weeding, surveillance and seedlings production, a replanting operation was begun to replace the eucalyptus with *prosopis juliflora*. 225 ha were replanted in 1984 and an additional 125 ha in 1985 totalling 350 ha. Eucalyptus has experienced a 50 percent survival rate while that of the hardier *prosopis* has been nearly 100 percent. While *prosopis* is drought resistant it must be carefully protected during the first two years until protective thorns are produced. Bandia must devote a large percentage of its budget to a guard force of 12 people per day, to survey the area against animals, fires, and wood cutters in order to protect the investment.

Final reports of the eucalyptus studies have been received from CNRF. The other studies are ongoing and reports have not yet been received. Pilot test areas for natural forest with both indigeous and exotic species are ongoing.

FINANCIAL STATUS

Bandia was initially scheduled to receive funding during the first quarter of 1984. However, due to slow rice sales and competition for limited funds from other projects, Bandia received its first allotment in August 1984. This created hardship and illwill on the part of the workers who were not paid for many months. During the remaining 18 months, allocations became more regularized and nearly all the budget, 106 M CFA (8.5 M CFA/CNRF plus 97.5 M CFA/PARFOB) was allocated by the end of 1985.

RECOMMENDATIONS

- 1) Develop a plan for selective cutting and selling of wood and an accounting system to manage the revenue received from the sales in order that Bandia becomes more auto-sufficient.

CHARCOAL PRODUCTION

BACKGROUND/OBJECTIVES

The USAID - funded Charcoal Production Project concerns the introduction of a new technique called the "Casamance kiln" whose initial testing revealed several advantages over the traditional method.

The Casamance Kiln is an improved charcoal production method developed by Mr Ed Karch, a forester and Peace Corps Volunteer, assigned to the UNDP/FAO project in the Casamance, Senegal. The innovation of this new method consisted mainly in the use of a portable metal chimney for the outlet of hot gases through the kiln base.

The kiln has the following advantages over traditional methods:

- increased charcoal yield per wood unit;
- better quality charcoal (less fragile);
- reduced carbonisation time, hence higher yields;
- regeneration of tars and other volatile products which have some market value;
- possibility of using wood of different sizes and qualities; and
- low cost, as the method only requires the use of a chimney made of locally available materials.

The Project aims at training Senegalese charcoal - makers in the use of this new technique (the Casamance kiln) which results in about 30 % increase in production over traditional methods. If widely adopted, this method could slow down the rate of deforestation through improved use of wood resources.

PROJECT STATUS - DECEMBER 1985

PL 480 funding succeeded the "bilateral" funding in January 1984 but funds were not available until August 1984. These funds are being used for the organization of training sessions for charcoal producers at the rate of 4 sessions per year (30 trainees per session for 40 days each).

The project's target zones are Kolda and Koumpentoum (Tambacounda). If each zone held 4 sessions per year starting in 1985, the following results should be reached by the end of 1986:

- No. of sessions : 16
- No. of trainees : 420
- No. of training days 640

However, due to the late availability of funds, training did not start on schedule. Each center was able to hold only two sessions in 1985.

The number of participants trained in 1985 at the two centers of Koumpentoum and Kolda were as follows:

1985 Kolda	- 1st session	35 trainees
" "	- 2nd session	35 trainees
" Koumpentoum	- 1st session	35 trainees
" "	- 2nd session	25 trainees

Total number of charcoal-producers trained in 1985.....130 trainees

One to two special catch-up sessions per center are planned by year end 1986. Throughout their training, the trainees are supported by the project which provides them with lodging and board at the rate of FCFA 600/day. Also, transport costs for the return trip are refunded to those trainees who are non-residents of the region where training takes place. The chimneys used for training purposes are given to the trainees.

Organizing the charcoal production sector

In Senegal, charcoal production is strictly regulated by the Division of Water and Forest Resources. Through this agency, the GOS establishes quotas for the amount of which can be cut in each administrative region. Only traders within a cooperative are authorized to market charcoal and firewood. The elected chairman of a cooperative is, in principle, granted by the forestry Service a license for every cooperative member to cut and market wood. These traders employ laborers (i.e. charcoal producers) to cut wood, pile it, build and operate the kilns and then gather the charcoal into 50 kg sacks. Through additional permits issued by the relevant services, the cooperative members may transport and sell their charcoal either directly or using another intermediary. In general, the laborers are paid about 250 FCFA per sack, but not until after the charcoal is sold.

These laborers ("sourga") are the project's targeted beneficiaries. As illiterate and poor migrants, they are dependent upon the wood traders for their daily food and household expenses throughout the five to eight weeks of charcoal production. Although they should theoretically receive a fixed amount per sack, they are in fact obliged to accept whatever the traders are willing to pay. This poses a problem as the laborers believe that even if they use the Casamance kiln which gives higher yields and better quality charcoal, their earning of additional resources remains at the discretion of the traders to whom they sell their product. Thus, they feel that the traders stand to benefit more than they do from the new technique and therefore the laborers are rather reluctant to adopt and use it.

FINANCIAL STATUS

The project has been budgeted FCFA 100 million from PL - 480 funding, 46 million of which was allocated last year. 23 million is budgeted for the first six months of 1986. The budget balance of 31 million has been projectized for the third and fourth quarters of 1986.

The proceeds from the sale of charcoal produced during training sessions are FCFA 3,208,015. An account has recently been opened with Citibank to hold these proceeds pending an answer to the question of how and by whom should the receipts be used.

FUTURE ACTIVITY

The number of trainees anticipated for the 1986 sessions in Kolda and Koumpentoum are as follows:

1986 Kolda	- 1st session	35 trainees
" "	2nd session	35 trainees
" "	3rd session	35 trainees
" Koumpentoun	- 1st session	21 trainees
" "	2nd session	25 trainees
" "	3rd session	35 trainees
TOTAL.....		186 trainees

RECOMMENDATION

In order to encourage the charcoal producers to adopt the new production system, it is recommended that they be guaranteed a base price for their charcoal.

HYDROGEOLOGICAL STUDY (DOLS 1,086,000)BACKGROUND/OBJECTIVES

The Division of Hydrological Studies in the Ministry of Hydraulics is to carry out a study of the subterranean aquifer in an area beginning in the eastern Sine-Saloum and stretching to Tambacounda. By providing new knowledge of aquifer capacities, the study will contribute to the rational development of this land primarily for agricultural production. It will also enhance and show the interrelationships existing among the other recent studies done of the Sine, Gambia, Casamance, and Senegal Oriental River Basins and Maestrichtean aquifer.

OBJECTIVES

- Completion of 23 bore holes during the study which can be used in the future for village water supplies;
- Topographic Survey of bore holes;
- Completion of 130 electric logs;
- Study and evaluate quantitatively and qualitatively the subterranean water resources and the potential effect on the economic development of the region; and,
- Study the recharge process of the superficial water table in order to determine its depth and the effect of rainfall on its recharge capability vis a vis desertification.

The final report is due the end of 1987.

PRESENT STATUS - DECEMBER 1985

Considerable start-up time was required for this study before actual data collection could begin. In November and December 1984, suppliers were selected in Europe to furnish water analysis and measurement equipment. Early year 1985 activities included final site selection for bore holes and field organization of personnel to take measurements. During hibernage, rainfall data and piezometrical data were collected and anticipated in the work plan. Authorization for vehicle purchases were finalized in June as well as the selection of INTRAFOR-COFOR for construction of the bore holes.

In October and December, the project vehicles were finally delivered (11 months after project began). In order to proceed with the work calendar, the technical assistant had used his car and an interim loan had been approved to use a Land Rover from the Ministry of Hydraulics. As of October 15, drilling of the bore holes began. Six bore holes and 2 piezometers have been completed. In addition to the field team, the chief technical advisor visits the field each weeks to supervise the drilling. The TA has expressed his

satisfaction regarding INTRAFOR-COFOR's work. Water table measurements are continually being taken by the selected village monitors and data is periodically collected by the field study team. In October, CPGF was selected as the contractor for the 130 electric logs.

FINANCIAL STATUS

As of December 1985, the study had received 130 MCFA which is 130 MCFA less than the original budget repartition proposed (50 M for 1984 + 210 M for 1985). However, except for an occasional urgent deposit request, which was processed by the Permanent Secretariat, the project appears to be proceeding without financial bottlenecks.

The original budget request for the project was 388 MCFA, but the Management Committee only approved 380 M CFA. The project feels the additional 8 MCFA is essential to meet the project objectives. The Management Committee has not addressed the issue despite a letter from the project. USAID feels that certain economies will likely be realized making it unnecessary to increase the budget.

The correct procedure for payment of the villagers responsible for recording measurements was in question during the year. The accountant is normally held responsible for salary payments. However, the accountant often would not find a villager present after a long arduous trip to an isolated village. The matter was finally resolved by allowing the chief of the field team to pay and certify the salaries.

FUTURE ACTIVITY

During the first half of 1986, the project team will assure that all drilling of bore holes and installation of piezometers and geophysical instruments are completed in order to prepare for hydrological measurements during the rainy season. Collection of data will continue through December of 1986. Analysis of data and drafting of the preliminary report will begin in early 1987. While the project is behind schedule according to the initial activity plan, it should be noted that the start-up date was delayed (four months) due to lack of available Title III funds and that contracting procedures and procurement of materials and vehicles were slower than anticipated. Nonetheless, the technical advisor feels confident that all equipment will be functional in time to collect the necessary data and complete the project on time.

RECOMMENDATIONS

1. The 23 bore holes will be turned over to the Rural Water Department at the end of the project. It is recommended that a plan be devised in advance for exploiting the wells for village use.
2. It is recommended that the Management Committee respond to the project request for the additional 8 MCFA.
3. One of the project goals is to indicate the potential of the projects zones for future agricultural production. However, other factors such as soil quality and disease prevalence must also be considered before the zone can be developed. It is recommended that the Ministry of Hydraulics include a list of related studies to the project zone in the final report in order to make the report more valuable to the GOS for developing the potential of the area.

CERER (CENTRE D'ETUDES ET DE RECHERCHES SUR LES ENERGIES RENOUVELABLES) ENERGY EFFICIENT COOKSTOVESBACKGROUND/OBJECTIVES

Since March 1980, CERER has been the research center for the development of energy-saving cookstoves which employ designs and methods similar to traditional means of food preparation. These energy-efficient stoves lessen the demand for fuelwood and decrease the burden of fuelwood gathering, normally a woman's job. Various designs have been developed, tested and improved upon for better performance. In addition to research, CERER organizes and conducts training in construction methodology and develops and implements strategies for popularizing the cookstoves.

Four teams of masons/trainers and one team of women trainers cover eight Regions of Senegal for cookstoves diffusion. CERER also collaborates with other government agencies to reach as many people as possible.

CERER was originally financed through an AID bilateral renewable energy project (685-0937.7). Since October 1984 Title III has supported the CERER activities from the fourth tranche account.

PROJECT STATUS - DECEMBER 1985

The original model Cookstove, Ban Ak Suuf, was introduced in 1980. It is estimated that 13,000 have been constructed in the rural areas. Recently, the model has been redesigned to a "trois pierres améliorées" which is simpler in construction design; and therefore more easily diffused to the rural population.

In addition, a metal charcoal burning cookstove "fourneau sakkana!" has been designed for urban use. Local metal workers are being trained to construct the new design. A few traditional restaurants are using them in Dakar with positive energy-saving results. Other tests are being conducted on a wood-burning metal cookstove.

CERER has performed multiple energy consumption tests and found that both cookstoves save up to 50% on fuel since they cook much more quickly and efficiently than the traditional methods.

The most difficult task of CERER, increasing the acceptability of the cookstove, will be greatly eased by the new rural cookstove model. Women can easily construct it themselves in a few minutes rather than the hours it required for the original Ban Ak Suuf. Furthermore, the metal urban model appears to be acceptable and CERER thinks it can be sold for the same price as the traditional one.

CERER is now in the process of decentralizing its responsibilities in each region. The regional offices, CONAFAS, will consist of a Coordinator, a female extension worker (monitrice) in social services, and men and women's training teams. Social Services has not yet named the monitrices.

FINANCIAL STATUS

The global budget approved for CERER is 125,988,000 CFA. To date, only two tranches of 20,000,000 and 16,000,000 have been dispersed out of 64,544,000 CFA for the first year. The accountant has difficulty in reconciling the books on time because the bank statements are received late. The accountant also commented that she would like more contact with the accountant at the Permanent Secretariat in order to keep funds flowing on a more timely basis.

FUTURE

CERER will continue to research improved cookstove designs, diffuse the new model to rural areas, train artisans to construct metal stoves and demonstrate urban stove cooking techniques to women's groups. CERER also is experimenting with other types of fuel such as peat. The regional offices will be established and begin to function.

RECOMMENDATIONS

- 1) Send trimester financial and activity reports to USAID as well as Secretariat so that USAID can better monitor progress.
- 2) CERER needs to replace its vehicles. This is a difficulty, since the GOS has a freeze on additional vehicle purchases.

OFADEC (OFFICE AFRICAIN POUR LE DEVELOPPEMENT RURAL INTEGRE) INTEGRATED DEVELOPMENT PROJECT

BACKGROUND/OBJECTIVES

OFADEC, a PVO, has been involved with integrated development in the Tambacounda Department since 1977 aimed at improving agricultural production and living conditions in rural areas. This settlement project is centered on agricultural cooperatives (comprising between 70 and 200 members) involved in food and commercial crops, cattle raising, health and literacy activities.

PROJECT STATUS MAY 1984

At the time of the last evaluation, 14 villages were under OFADEC supervision - 1277 cooperative members. However, food crop yields were reduced by the poor rainfall since cereals were only grown under rainfed cultivation while banana production faced no major problem. Bearing this in mind, farmers decided to grow cereals under rainfed conditions with irrigation support.

On the road to becoming self-reliant, four villages have entirely repaid their loans and five have paid partially while five have not yet begun repayment.

PROJECT STATUS-DECEMBER 1985

OFADEC supervision seems well established at this time. The PVO is better organized and is increasingly popular with farmers. Supervision reaches 1500 people out of which 500 are women who are involved in varying degrees of production.

OFADEC works in the following areas:

- Agricultural production (cereals and commercial crops) and animal husbandry;
- Training: OFADEC borrows and audiovisual material and equipment from various cultural centers;
- Health: OFADEC has built health huts in each village under its supervision.

All the services are being paid for now by the villages. The regional director, Mr. Mamadou Ndiaye pointed out, that payment creates no problem because farmers have adequate incomes; each group, according to Mr. Ndiaye has an account.

The demographic distribution according to origin is as follows:

- Sankagne: These are generally youths coming from the Dakar ghettos;
- Guene: These are mostly Serers from the Thies region.

The remainder is made up of local people.

Agricultural system

The production system is based on 2 patterns:

1st pattern: communal exploitation

There is always a good start but production decreases after two or three years. Reimbursement spreads out over three years.

2nd pattern: individual plots

Agricultural credit is fully repaid and over a shorter period: 3 years. Development cost per ha is 600.000 CFA francs in Tamba. Each farmer has 1/4 ha and earns between 20 to 30 000 CFA per month. In Podor, development cost per ha is 450.000 CFA francs.

Observations:1) OFADEC activity in the Saint-Louis area:

OFADEC started its assistance in the village of Ndiandane which includes four perimeters comprising on the average sixty members each. In the same area, OFADEC started an extension phase in Podor and in Riski in 3 perimeters: Riski 1, Riski 2 and Riski 3. At the time of our visit there, the preparation work was almost completed in Riski.

2) Marketing of Tamba grown bananas

Tamba grown bananas are marketed as follows:

15% in Tamba
28% in Kaolack
57% in Dakar

Farmers are fully responsible for the marketing of their products; OFADEC assists them in contacting businessmen who purchase on the local market at the official price of 105 CFA francs/kg. Vegetable production is mainly for self consumption in this region.

On the other hand, it is nearly the opposite in the Fleuve area where only small quantities of bananas are marketed locally. Vegetable production (potatoes, onions) which is sent to Dakar is accompanied by groupement leaders to better assess the market. Each farmer's production is registered by the perimeter leader. This is based on orders placed by the merchants. With regard to Tamba, transportation is provided by OFADEC or by the merchant or in many cases, by the farmer.

In the Fleuve area, OFADEC provides the transportation. It should be noted that OFADEC is a member of the oversight committee on bananas and potatoes established within the Division of Internal Trade and Price whose aim is to ensure a favorable market of locally produced goods. This division assesses local production and sets import quotas. Authorized dealers may only import needed products for consumption after local production has been marketed. In addition, this committee has suggested that the bananas be conditioned and packaged, which may increase the current price by 5 to 10 FCFA. This arrangement will be tested during the 86-87 agricultural season.

FINANCIAL STATUS

Out of 181.961.500 FCFA total budget, OFADEC had received 143.000.000 FCFA by March of 1984. In May 1984, two categories remained outstanding. The first one dealt with functional literacy and the second one dealt with extension; both in the Tambacounda area and in the Podor area. Since June 1984, the amounts paid by the PL-480 to the PVO are the following.

June 1984	30.000.000 FCFA
July 1984	15.000.000
June 1985 (Tamba)	8.961.000
July 1985 (Podor)	100.000.000
December 1985 (Podor)	25.000.000
	<hr/>
	178.961.000

Despite difficulties encountered at the start, this project has been very successful in establishing the farmers. It has been noted that farmers have a sufficient command of the various cropping techniques in which they have been trained and that OFADEC disengagement can realistically take place.

CATHOLIC RELIEF SERVICES- INCOME GENERATION PROJECTS ASSOCIATED WITH MCH CENTERSBACKGROUND/OBJECTIVES

The objective of this project is to develop small scale income-generation projects involving recipients of the CRS implemented Mother/Child Health programs (Centre des PPNS). The ultimate goal is for women who have a greater amount of discretionary income, therefore making it possible for them to improve their families's diet and lessen the need for outside food assistance. Furthermore, this project gives women the opportunity to manage projects themselves thus increasing their organizational and financial management skills.

The actual process of identifying a viable, feasible, and economically sound project takes careful planning and development in order to assure a successful outcome. CRS staff evaluate project viability in two phases before funding is awarded to a proposal: 1) define the kind of project which would be feasible and, 2) study the kind of financial commitment required. The women must be able to demonstrate their ability to organize themselves and some capability to manage the project technically and financially with assistance from CRS staff or other GCS technical services. This identification process may take several months, but CRS considers it essential to successful project implementation.

PROJECT STATUS - DECEMBER 1985

To date, 6 projects have been financed and 8 more approved out of the 25 total project goal. Types of projects fall into 3 categories: gardening, animal husbandry and milling machines. Activities include well construction for gardening projects, construction of housing facilities for the milling machine projects and sheds for the animal husbandry projects. It is too early to evaluate specific project success though planning and organization appear to be progressing satisfactorily. Other village pprojects have been identified and CRS staff is in the process of working with the womens' groups to refine the proposals. One reason for the delay in project implementation is the slow rate of proposal submission by the CER agents who are responsible for the initial submission. Often active villages are a long distance from the CER (which usually lacks adequate transport) so that contact with village groups is limited. Villages closer to the CERs have an advantage in that project submission time is generally less than those farther away. Once the CER agent submits the proposal, the Chef de Poste, who works for CRS, assists in the village animation process. As mentioned above, eight additional projects have been approved for funding.

FINANCIAL STATUS

CRS has only received one deposit of 32 million CFA since December 1984. Other projects can not be financed until a second allocation is approved. (As of this writing 1/86, the vouchers have been cleared and additional funds have been deposited to the CRS account). CRS accounting procedures are complicated by the fact that each village group opens an account making final vouchering for expenditures a slow process. Thus CRS headquarters may have no more available funds to finance further projects, because funds from the village accounts may be outstanding.

FUTURE ACTIVITY

CRS will continue to identify new projects using its project criteria and work with active projects to assure their objectives. CRS also is exploring new activities, such as restaurants in semi-urban areas, which could diversify the type of projects women's groups could execute. Depending upon the geographical zones, more traditional type projects might not be feasible.

RECOMMENDATIONS

- 1) Settle vouchering problem with Permanent Secretariat.
- 2) Identify new types of projects which are feasible for womens'groups.

ITA - (FOOD TECHNOLOGY INSTITUTE)BACKGROUND/OBJECTIVES

The project seeks to develop pre-processed millet-based foods which are consumer acceptable, technically feasible and economically viable to produce and sell. The ultimate goal is to develop a manufacturing, marketing/financial plan to help the GOS attract investment capital and induce the production and distribution of domestically produced and processed millet foods which will in turn reduce Senegalese dependence on external food sources and lighten the balance of payment deficit.

This project combines U.S. bilateral funds (Project no. 685-0250), in-kind contributions of salaries and equipment by the GOS, and Title III funds. PL-480 funds have been allocated for costs of local studies, equipment purchase and operating expenses.

Product and process development is to be accomplished by means of a series of local studies and research activities which will determine the production capacity and consumer market for a variety of millet-based foods. The selected prototypes are then to be tested for their technical and financial feasibility.

The studies are to be contracted to local firms which receive guidance from ITA and expatriate technical assistance. Research activities are conducted by the ITA staff and the expatriate technical advisor assigned to the project.

PROJECT STATUS - MAY 1984

Initially the project experienced delays in its implementation due to equipment procurement and personnel recruitment problems, and cumbersome administrative procedures for contracting local studies. Nonetheless, product research identified several food prototypes (couscous, weaning food, flour, cracked grain and semolina) and performed milling methods and packaging materials tests. Two of the originally planned studies were deemed unnecessary due to adequate availability of information. The millet supply study was considered inadequate and due to its importance, the project team felt it must be redone.

PROJECT STATUS - DECEMBER 1985

As recommended by a mid-term project evaluation, the project completion date has been extended through May 1986 in order to achieve the project objectives. An additional Title III contribution was requested by ITA to support equipment purchases and operating expenses. The incomplete studies have been financed under the bilateral project to avoid continued delays.

experienced by local contracting procedures. All studies have been contracted. Preliminary consumer acceptability and household tests were conducted for the prototype products and met with favorable results. However, due to a breakdown in equipment at the mill and the contamination of the stored millet, the marketing test has been delayed until early 1986. A problem in ordering proper packaging materials has been solved and the order has been placed. Animal and clinical tests of the weaning food are completed. Market consumer tests at local clinics are in progress.

FINANCIAL STATUS

The original Title III project budget was 130,320,000 CFA. An additional 70,000,000 CFA was approved in March 1983 from fourth tranche funds. A second addition of 48,000,000 CFA was approved from fourth tranche funds to cover the project extension.

FUTURE ACTIVITY

Final reports of the financial analyses, the millet supply sub-studies and the industrial constraints study will be completed by Louis Berger. Marketing tests will be conducted for all products. A colloquium will be held near the end of project which will advise the GOS and interested private sector investors of products research findings and financial feasibility.

RECOMMENDATIONS

Submit a revised budget to incorporate program changes until completion of project May 31, 1986.

SODEVA SEED STORAGE FACILITIESBACKGROUND/OBJECTIVES

In an effort to reduce farmer dependence upon government provided peanut seed, Senegalese farmers are now encouraged to grow and keep part of their own seed stock. However, lack of appropriate storage facilities for peanut seed have severely hampered this initiative.

The highly successful SODEVA seed storage program in the Sine-Saloum, which had previously been operating for more than two years, has been continued with 83.000.000 FCFA of Title III financing. The project's principal goal is to aid in developing the human and physical infrastructure necessary for the gradual transfer of seed storage responsibility from the GOS to the producers. One hundred and fifty fifteen-ton capacity (peanuts in shell) storage facilities are to be constructed in the Sine Saloum, and villagers are to be trained in bookkeeping and warehouse management. Villagers will participate extensively through payment of some construction costs, supplying of unskilled labor and the formation of village management committees. In addition, SODEVA personnel will be trained to monitor the project (construction progress, village organization, seed quality) and aid in bookkeeping. Training materials will also be developed.

The distribution of building materials for the construction of warehouses was scheduled to be made according to the following timetable; (construction would be completed a few months later).

1. February 1985	24 warehouses
2. October 1985	36 warehouses
3. February 1986	24 warehouses
4. October 1986	36 warehouses
5. February 1987	<u>30 warehouses</u>
	150 warehouses

PROJECT STATUS DECEMBER 1985

The material for the first tranche of 24 warehouses has been delivered, and only minor work such as paint remains to finish them.

Out of the 36 second tranche warehouses, only material for 20 has been delivered and construction started. The 16 remaining warehouses have been rescheduled for early 1986. The two causes given for the delay are:

- 1) The delay on the part of SODEVA/Dakar in transferring funds to SODEVA/Kaolack.
- 2) Modification of construction plans to include a central roof support.

The cost of supplied materials for each warehouse is presently 394,000 FCFA. In addition, participation by the villagers is estimated at 150,000 FCFA for the roof and 100,000 FCFA for the construction, totalling approximately 650,000 FCFA per warehouse.

FUTURE ACTIVITY

According to the chart above, deliveries of construction materials are scheduled through February 1987, with construction to be finished by June of 1987 and training to take place from October to December 1987.

RECOMMENDATIONS

1. In line with the Management Committee's decision to make allotments directly into the SODEVA/Kaolack account, it is recommended that all justifications and reports go directly from SODEVA/Kaolack to the PL-480 Secretariat, in order to avoid delays.
2. It is recommended that SODEVA take the necessary measures to catch up in view of the delays experienced at the end of 1985, so that all construction work is finished by the end of 1986.

DECENTRALIZATION OF RESEARCH - ISRABACKGROUND/OBJECTIVES

The Title III project component entitled "Decentralization of Research" complements the construction activities carried out under the ISRA/World Bank Decentralization project, the research activities under the Casamance Integrated Development Project (685-0205), as well as the Agricultural Research and Planning Project (685-0223).

The Title III activities are focused on three elements:

- 1/- Construction and renovation of laboratories and houses in the regions,
- 2/- Purchase of necessary equipment for these infrastructures, and
- 3/- Funding of operating costs for the research activities undertaken by the Farming Systems Dept. and the Macro Economic Analysis Bureau (BAME) of ISRA.

PROJECT STATUS - MAY, 1984

At the time of the last evaluation in May 1984, many activities were fully underway such as: the publication of a report on the second year research activities on the farming systems in the lower Casamance; the installation of the farming systems teams in the Fleuve and Sine-Saloum. Agreements have been signed with SOMIVAC, SODEFITEX, SODEVA and SAED in order to make research more immediately applicable to farmer needs.

However, constructions activities have still not begun due to contrasting delays.

PROJECT STATUS DECEMBER 1985

Since the last evaluation, the project has progressed significantly and the current status is as follows.

A/- Contract no. T/51/FM - 1st phase. Contractor: CDE

Kolda	4 houses
Dahra	5 houses
	1 infirmary
Djibolor	1 house

Furniture:	12,668,000 FCFA
Construction:	9,730,000 FCFA

B/- Contract no. T/51/FM - 2nd phase - Contractor: CDE

Saint-Louis 4 houses	Construction:	43,008,000 FCFA
	Furniture:	4,000,000 FCFA

C/- Contract no. T/50/FM - Contractor: CGCE

Tambacounda 4 houses	Construction:	16,414,000 FCFA
1 office building	Furniture:	9,876,000 FCFA
1 social center		

D/- Contract no. T/07/FM - Contractor: EBTP

Saint-Louis 8 houses	Construction:	75,889,000 FCFA
	Furniture:	12,000,000 FCFA

E/- Contract no. 1 of 7/16/83 - Contractor: Sylla.

Tamba	Surveillance of contract CGCE/T/50/FM:	764,000 FCFA
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F/- Contract no. 2 dated 7/19/83 - Contractor: Sylla

St-Louis	Surveillance of contract EBTP/T/07/FM:	2,532,000 FCFA
" "	Supplementary:	3,000,000 FCFA

G/- Contract dated 11/29/84 - Contractor: Herlicq-Frères

Ndiol	Electrification (transformers):	9,670,000 FCFA
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Comments

A/- The construction activities were completed on 12/31/85. A final payment of 9,730,000 FCFA is being made.

A contract was signed for the purchase of furniture in December 1985. The payment of 12,668,000 FCFA will be made upon reception of the furniture expected in March 1986.

B/- Both construction and furniture for the amounts of 43,008,000 FCFA and 4,000,000 FCFA are included in the second phase of the contract CDE - T/51/FM.

C/- The construction component has been completed on 12/12/85 but the final payment of 16,414,000 FCFA is pending completion of a few repairs.

The contract has been signed for the purchase of furniture and payment is being made.

D/- The construction activities are 50% completed; the remaining amount to be paid totals 75,889,000 FCFA.

The cost for furniture and household equipment is estimated at 12,000,000 FCFA. An invitation for bids is being prepared.

E/- 764,000 FCFA remains unpaid under the surveillance contract for Tambacounda. It will be settled at the completion of the work.

F/- The 2,532,000 FCFA is the remainder to be paid to the architect under the surveillance contract for St-Louis (8 houses). It will be paid incrementally as the work progresses. An additional 3,000,000 CFA should be budgeted to cover the supplementary surveillance costs given the delay incurred under this contract.

G/- The furniture and installation of a transformer for the electrification of Ndiol was receptioned on 7/24/85. However, 9,670,000 F CFA in costs were not calculated for 1985 expenditures.

FUTURE ACTIVITIES

The following projects have been submitted by ISRA for funding in 1986:

Tambacounda	- Electrical installations	8,000,000 FCFA
	- Air-conditioning	2,705,000 FCFA
St-Louis	- Electrical installations	6,000,000 FCFA
	- Water	2,500,000 FCFA
	- 42 phones	2,100,000 FCFA
Kolda	- Office Building	24,000,000 FCFA
	- Equipment and furniture	3,600,000 FCFA
Hann	- Conference room	1,500,000 FCFA
	- Equipment and furniture	20,000,000 FCFA
	- Pig-sty	6,500,000 FCFA
SUB-TOTAL.....		276,456,000 FCFA
Inflation 10%		27,645,000 FCFA
TOTAL.....		304,101,000 FCFA

The total mentioned activities are all required for operations of the Tamba station, Kolda and St-Louis centers and the Farming Systems Dept. at Hann. The Management Committee will review the budget and approve a program for 1986.

AGRICULTURAL POLICY (ISRA)BACKGROUND/OBJECTIVES

This project includes two studies (one on cereals pricing policy and the other on cereals marketing policy) and ISRA's research operation costs. These studies were, on the one hand, concerned with a review of existing documents in their respective areas and the identification of cases where more in-depth research was needed and, on the other hand, with the development, testing and improvement of computer models for the GOS officials to better understand pricing and marketing patterns in Senegal. As indicated in the last evaluation, the contract for both studies was awarded to SONED in May 1982 for the amount of FCFA 94,700,000.

PROJECT STATUS DECEMBER 1985

In the 1984 project evaluation report of agricultural policy studies, several major points were raised with respect to the achievement of project objectives. They include:

- 1) The "dispute" between ISRA and SONED over the methodology proposed by SONED for the implementation of the studies it was charged to conduct. Through collaborations and technical reviews between ISRA and SONED the "dispute" was soon settled. SONED thus took into account ISRA's concerns in its new proposal on how to conduct the studies.
- 2) Furthermore, there were long delays in the submission of reports by SONED:
 - a) The reports on traditional cereals marketing channels were submitted in August 1983; i.e. 10-weeks overdue. Furthermore, ISRA deemed this study inadequate. The Project Director (ISRA) believed this to be due to the overly ambitious original scope of work prepared by expatriates who did not know the realities of the country. For example, the data sampling was inadequate to be statistically valid and ISRA did not yet have the technical expertise needed to properly supervise the SONED studies.
 - b) Other reports (development of an inter-regional cereals marketing model; testing and improvement of the original pricing model) due during the last quarter of 1983 were submitted to ISRA in February 1985. Regarding the pricing model, ISRA had required SONED to update the data that was based on 1973/74 information by including 1983 elasticity and demand curves. The SONED expert who was in charge of this study claimed that he used the latest data he could get from the GOS Statistics Service. Furthermore, he believed that the true reason for the delay was ISRA's inability to adapt the model to its micro-computer. It was agreed that the model should be

tested by ISRA on its software. But, even after the 6-month delay, the model was never tested. An estimated FCFA 30 million was invested in this study, but no report was prepared. The Project Director believes that such inappropriate expenditures are a "real waste of money" and that his predecessor was solely responsible for the development of irrelevant questionnaires based on an unrealistic scope of work.

FINANCIAL STATUS

In March 1984, ISRA had already received a total FCFA 150,000,000 allocation broken down as follows:

October 1982 (cumulative)	43,000,000 FCFA
December 1982	20,000,000
March 1983	50,000,000
June 1983	10,000,000
August 1983	10,000,000
November 1983	5,000,000
March 1983	12,000,000

Total150,000,000 FCFA

Another FCFA 300 million budget was approved for 1985/86, of which 168 millions was allocated as follows:

July 9, 1984	20,000,000 FCFA
July 24, 1984	60,000,000
December 7, 1984	30,000,000
February 27, 1985	20,000,000
September 27, 1985	38,000,000

Total.....168,000,000 FCFA

It is worth mentioning that, as of this writing, FCFA 54,138,631 of the above allocation has not yet been justified by ISRA to the Permanent Secretariat. This has hampered ISRA's research programs which could not receive any additional funding prior to accounting for the previous advances.

The total FCFA 164,000,000 funding requested by ISRA for 1986 has been approved by the Management Committee and will be disbursed on an incremental quarterly basis as follows:

Quarter 1	67,171,000
Quarter 2	36,440,000
Quarter 3	34,109,000
Quarter 4	26,280,000

Total164,000,000 FCFA

However, this new allocation, which should help ISRA proceed with its Bambey, Djibelor, Kaolack and Dakar research programs, will not be disbursed until the FCFA 54,138,631 amount is fully justified. Considering that ISRA has always found it difficult to justify its advances, it was decided to allocate funds directly to the centers who will in turn justify to the Permanent Secretariat all received funds.

CONCLUSION

The final reports submitted in June 1985 were not widely diffused. A few elements in the summary report were shared with the BOM (Bureau Organisation et Méthode) which expressed their satisfaction with them. However, they are hardly used by the ISRA researchers. Bills No. 4 and 5 for a total of FCFA 11,159,000 which had been frozen pending ISRA's solution to the above-mentioned problems are now being paid to SONED.

ENEA

BACKGROUND/OBJECTIVES

The GOS requested financial support to upgrade the facilities at its National School for Applied Economics, ENEA. ENEA trains mid-level technicians in land-use planning, animation, cooperative administration, planning, and statistics. These personnel staff the Senegalese development agencies and technical services working in rural areas. The original project entailed construction of dormitories, a teaching-unit and library, and renovation of existing structures. The project was later amended to include the creation of access roads and to equip buildings constructed with Title III funds. This was felt necessary by the Management Committee as the GOS was unable to honour its commitment to provide the equipment.

Objectives: The work was subdivided into two groupings:

- 1) Renovation of existing structures
- 2) New construction consisting of:
 - a. 7 dormitories of 14 rooms each
 - b. 1 teaching unit comprised of an amphitheater and library
 - c. 2 small meeting rooms
 - d. Access roads, parking, water and electrical hookups
 - e. Wind breaks

PROJECT STATUS - DECEMBER 1985

Renovation:

Five firms were selected to do various components of the renovation. The work was begun in 1981 and completed in 1984. Delays in project financing and establishing a credit system to the entrepreneurs as well as difficulties in coordination of the various sections were the causes of slow progress to complete the renovation. Nonetheless the work was judged of excellent quality and approved by AID/ENG.

New Construction:

The bid for new construction was awarded to ECTP on March 5, 1981. The GOS Department of Construction and Housing was to assure regular inspection and quality control. While work began in a timely fashion, ECTP was soon hindered by the irregularity of credit to its account (due to slow rice sales) and was not capable of prefinancing the work itself. In addition, sharp rises in costs for materials during the period further plagued the construction.

Unanticipated costs deemed necessary to properly execute the project were awarded by individual contracts (e.g. electrical and water supplies) rather than adding to the burden of ECTP. Due to ECTP's inability to complete the contract, the Department of Construction and Housing was eventually forced to assume full responsibility for final construction. An additional allocation of 25 MCFA was approved by the Management Committee to complete the construction in mid 1985. As of December 1985, only finishing work remained to be done the training unit and meeting rooms. AID/ENG judged the work to be of good quality despite the difficulties and delays.

FINANCIAL STATUS

As of December 1985, all money has been dispersed for the renovation and 95% (490 million FCFA) for construction. The furniture and equipment budget has been completely expended.

RECOMMENDATIONS

For future construction projects, it is recommended that all money be available before contracts are awarded. The likelihood of cost overruns and work stoppages would be greatly reduced.