

**AURORA
ASSOCIATES INC.**1140 Connecticut Avenue, NW, Suite 1200, Washington, DC 20036
(202) 463-0950 Telex: 440109 AURA UI**STANDARDIZED PROJECT PROGRESS
REPORTING FORM
(INTERNATIONAL DIVISION)**PROJECT TITLE: Guinea-Bissau Rice Production ProjectPROJECT NUMBER: 657-0009 USAID 041 - AuroraDURATION (START AND END DATES): April 1982 - January 1987LOCATION: Contuboel, Guinea-BissauREPORTING PERIOD: April 1, 1985 - June 30, 1985REPORT NUMBER: 13NAME AND TITLE OF REPORT PREPARER: Linda SmithProject CoordinatorDATE: July 27, 1985
(SIGNATURE)



AURORA ASSOCIATES INC.

1140 Connecticut Avenue, NW, Suite 1201, Washington, DC 20036 (202) 659-1481

**FORM A
SUMMARY**

PROJECT PROGRESS REPORT	PROJECT # 657-0009 USAID 041 Aurora		AGENCY USAID	REPORTING PERIOD Apr. - June 1985	
DATE PROJECT APPROVED April 1982	START OF FIELD WORK		COMPLETION OF FIELD WORK		REVIEW During Reporting Period Yes ___ No <u>X</u> DATE:
	Scheduled Apr 83	Actual Apr 83	Original Est. Aug 85	Current Est. Jan 87	

SUMMARY OF ACTIVITIES:

Nine participating villages have been surveyed and dikes and drainage canals plowed by DEPA tractor. A total of 156.4 ha have been surveyed.

Manual completion of dikes was begun in one village with the help of an extension agent/topographer team. Hoes and shovels have been loaned to villages until handtools arrive from Dakar.

35 kms of road have been improved this quarter (97 kms to date).
3 water control structures were installed in 2 villages.

Sites were chosen and land preparations begun to supplement rainfall in Sare Djaiba and Santanto. Drainage/irrigation canals are being completed by villagers.

The Topographer Trainer arrived and began a succesful training program for 4 DEPA topographers.

The Extension Specialist arrived on May 22 and began training agents as they were made available. Followup and site training continue. A guide for Rice Growing Operations was prepared for the agents.

Demonstration fields have been planned and some parcels made available in villages. Meetings continue with village Comites to explain the concept.

The warehouse was organized and fertilizer and farm equipment received from Senegal was inventoried. Stock books and a requisition system were created for the Central warehouse, for sales stocks and for village storehouses. A new stockclerk is being trained.

(continued next page)

BUDGET (U.S. \$)	FORMS SUBMITTED (Check)
	A <input checked="" type="checkbox"/> B <input checked="" type="checkbox"/> C <input checked="" type="checkbox"/> D <input checked="" type="checkbox"/> E-1 <input checked="" type="checkbox"/> E-2 <input checked="" type="checkbox"/>
	F <input type="checkbox"/> G <input checked="" type="checkbox"/> H <input checked="" type="checkbox"/> I-1 <input type="checkbox"/> I-2 <input type="checkbox"/>
	Annex I and II

Form A Continued

Account books were set up for the credit fund, and a credit accountant has been selected and begun training.

Administrative materials for control and credit systems were purchased and topographic materials ordered through USAID.

Sale and distribution of agricultural materials to farmers was begun.



PROJECT PROGRESS REPORT	PROJECT # 657-0009 AID 041 Aurora	AGENCY USAID	REPORTING PERIOD Apr. - June 1985
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General Account of Project Implementation

APRIL

Bolanha Development

Because of the problems involved in preparing dikes and canals during the dry season (see March report), the DEPA/Contuboel Director decided to make one tractor available to assist the villagers, providing that the villagers contribute funds for gasoil. Once the survey crew has staked out canals and contours, the tractor plows in line with the stakes. The villagers then have loose soil with which to complete dike construction. The first village to receive tractor assistance was Samba Iobel, where a small earth dam was also planned to further aid the village. Plowing of dikes and drainage canals for 10 has was completed on the 11th. Survey and tractor work were completed in Ginane on the 22nd for 16 has, and in Madina Sara on the 30th (12 ha).

A serious problem developed in Samba Iobel after the tractor had completed the canals and dikes. The villagers insisted that if the tractor could not plow all of their bolanha they did not want to continue with the program. With only one tractor available to assist all project villages this was practically impossible. After further efforts to encourage the villagers to manually plow their bolanha, to no avail, it was decided to discontinue assistance to Samba Iobel. The reservoir planned for the village has also been discontinued. Further hard feelings were encountered at Fataco, which also decided not to participate after the survey work had been completed. The reasons were identical. After the loss of this second village, meetings were intensified in order to assure that the villagers fully understood the program before beginning development work. This proved to be a time-consuming and rather frustrating enterprise which might have been unnecessary had the villages had the benefit of full-time extension agents to work with and inform them. (Agents were not yet available.)

A water control dike is a new concept to the farmers in this area and one that is not easily grasped until it is seen. To avoid future misunderstandings about the bolanha work it is hoped to identify the 1986 villages as soon as possible and take Comite members to present bolanhas to see what the structures will look like and the purpose they serve. It is also anticipated that with the 10 bolanhas being developed this year, over a large area, future villages will have a much better notion of what to expect.

Two villages were added to the program, time permitting, to replace Samba Iobel and Fataco. Village meetings were held in Sare Djaiba and Sare Bissa, both of which had requested DEPA assistance. Sare Djaiba was selected as it is next to the river and could provide important information on supplementing rainfall with irrigation, if a pump can be made available. DEPA has become increasingly concerned with the problem of diminishing rainfall and could benefit from data on rainy season pump use. It is hoped to determine pumping costs vs yield on at least two experimental sites receiving pump backup.

Wooden water control structures were installed at Ginane and Sare Bissa with the CAT D-6. This consists of (40 cm square) wooden water flow boxes, 6 meters long, with a water control head on the upstream side to allow water levels to be maintained or drained off. The CAT D-6 also opened a new road from Sare Bissa to the Samba Iobel bas fond (6 km) to facilitate access to that area.

Charges to villages for tractor use in dike work was made somewhat difficult due to the absence of standard measures for fuel, and timepieces for determining tractor hours. It was decided to purchase plastic jerricans and inexpensive watches to assist in determining costs. These will also aide in determining pumping costs in experimental villages.

Estimates of gasoil consumed in dike work this month:

Samba Iobel	-	70	liters	for	10	ha
Ginane	-	100	"	"	16	ha
Madina Sara	-	185	"	"	12	ha

(Extreme variation due to differences in terrain and lack of proper measuring devices.)

Meetings were held in Sare Birro to determine interest in continuing with the DEPA program. The meetings were long and the villagers appear ambivalent. There are some bonafide grievances from last year, but at the same time the villagers recognize the benefit of water control in the bolanha. The men still insist that the rice fields are the work of the women and that they cannot be spared from their own fields. At the same time they have asked DEPA to increase the hectarage of their bolanha. When they were told that they themselves must now do this work, they agreed to help the women with the difficult labor. DEPA has offered all assistance if the village decides to increase its hectarage, and an extension agent is to be placed there to help repair and ready existing dikes and canals.

Management

Credit materials (account books, stockbooks, pens etc.) and supplies for extension agents (notebooks, pencils, etc.) were purchased, and a stock for topographic and extension materials was set up under Joseph Coly's management.

Forms for credit and control systems were designed and ordered from the printers at Bissau. (Requisition, Reimbursement and Credit booklets) Account books have been set up for the revolving credit fund. DEPA Director/Bissau and Contuboel asked that one credit system be established for all farmer sales, thus a small credit department for this in the Extension section of DEPA.

Malan Sadjo had requested that the stockclerk be trained to double as the credit bookkeeper. This, however, was not practicable in terms of logistics and time, nor was it possible from the standpoint of control. The training of the bookkeeper was delayed until the issue could be resolved (June).

DEPA accelerated the construction of shelving in the new parts warehouse in order to liberate space in the Central warehouse for agricultural materials soon to arrive. Storage space is problematic as there is only one warehouse to accommodate all equipment and supplies. This will also pose problems in reserving materials destined for sale to farmers. It is hoped to eventually include a separate warehouse in the project budget for farmers stocks.

On order in April: Parts and equipment for 2 tractors, credit and control forms, cabinets for materials.

An inventory was done of all project materials under Aurora control. Requests have been made to establish routine medical procedures for contractors, and clarification of regulations from Washington has been requested.

Topographer Training

Albert Soumah, topographer/trainer, arrived on April 22, and with Joseph Coly established a training program for four DEPA topographer candidates. He began immediately teaching basic survey techniques at and near the Center. Armando Sambou, DEPA's chief topographer, continued to supervise project bolanha work during this elementary phase, and rejoined the trainees in the afternoons for the design room and theory sessions.

Mr. Soumah was temporarily lodged in the DEPA guest house until electrical repairs were completed on the USAID guest house (May 3).

Not Completed in April:

1. Construction of contour dikes was not begun due to lack of hand tools in the villages.
2. The Extension Specialist did not arrive as planned.
3. The credit bookkeeper was not trained as explained above, as he had not yet been identified.
4. The analysis of motorpump production costs was not done due to the lack of information available at the DEPA center. Gathering data from scratch would necessitate following an entire production season. This has been postponed until the rainy season and next dry season.

Visits for the Project in April:

April 12 - Norman Garner (to make video film of project)

MAY

Bolanha Development

Survey work began at Cutame on the 7th and was completed on the 13th. Dembel Uri was surveyed from the 14th to the 17th. The second survey crew worked in Tanta Cosse from the 16th through the 29th and at Sare Djaiba from the 22nd through the 31st.

Area surveyed and dikes plowed at each village include:

Saucunda	28 ha	100 liters of gasoil
Cutame	21 ha	80 " " "
Velingara	6 ha	80 " " "
Dembel Uri	10 ha	100 " " "

Villagers' main concern and request continued to be for tractors to plow all of their bolanha.

The CAT D-6 opened and improved about 10 km of road between Saucunda, Fulamora and Sonaco. Water control structures were installed at Fulamora (1) and Sonaco (2). A road was also opened from Sare Djaiba to their bas fond, approximately 5 km.

The dry season (pumped irrigation) crop was harvested. This created a major problem in the work planned for the bolanhas, as extension agents were tied up with the harvest and credit collection at a time when they were badly needed in the bolanhas.

Suitable sites were explored for installation of motorpumps to supplement rainfall so that data may be gathered on the feasibility of using pumps in the future.

Management

Fertilizer for sale to farmers arrived from Dakar (May 19th): 300 sacks of Urea and 240 sacks of NPK. Because there was insufficient space in the warehouse for DEPA stocks as well as farmer stocks, DEPA shipped much of its fertilizer to outlying village storehouses. At the time there was no provision in the DEPA system to keep track of materials once they left the central warehouse and this resulted in considerable confusion later when distribution began in the villages. (See Credit Report) This problem was later resolved.

Stock books were set up for the DEPA warehouse and the new stock-clerk began training. Printed forms for DEPA credit and control systems arrived from Bissau and a requisition system for the warehouse was established. Malan Sadjo has designated "department heads" who are authorized to requisition materials in the new system.

Pepito approved a bank account at Bafata for funds received from the farmers. Linda Smith and Malan Sadjo are to be co-signatories. The account will also be used for receipts from sale of bicycles and spare parts to extension agents. (This was determined to be the best method of guaranteeing upkeep of the bicycles.)

In order to assist the villages with distribution of agricultural materials, a Village Notebook has been created in which individual farmer "accounts" and payments are to be recorded. The extension agents will assist the Village Comites in maintaining the records. It is hoped that this will alleviate somewhat the confusion and discrepancies experienced in the past. (As DEPA sells globally to the village there has been minimal assistance in internal distribution or repayment.)

The project obtained authorization to purchase certain urgently needed office and extension supplies from the Petty Cash fund in Kolda.

Extension

Doctor Varde, Extension Specialist, arrived on May 22 and spent his first few days becoming acquainted with DEPA operations. Dona Quemabe, his counterpart was not available immediately but

Varde was able to begin visiting project villages with Donald Broussard, Joseph Coly and Dudu Mane.

Only one extension agent was made available in May (29th). He was placed in Ginane with a topographer-aide familiar with dike construction, where they are working as a team to assist the farmers with their parcels.

Topographer Training

Lists of needed topographic materials were reviewed by Mr. Soumah and submitted to USAID for purchase. It was hoped that some of this material, notably design room supplies, could be purchased in Dakar through the Bouette contract, but USAID has decided to order all materials from the U.S. There is still a chance that these materials will be on hand for the second training session planned for January 1986.

Albert Soumah continued his training program with the DEPA topographers and survey team. As the beginners began grasping basic survey techniques the class moved out to the bolanhas for practical experience. This proved to be an excellent system for verifying the accuracy of bolanhas already surveyed this year. (No problems were found in the fields surveyed by DEPA, under the management of Armando Sambou.)

The afternoon sessions concentrated on theory and mathematics. The trainees have not had sufficient math education to move directly into the calculations necessary to process their field data.

Much progress has been made to date and Mr. Soumah has proved to be an excellent teacher with much experience and patience.

The team progressed to the point of surveying fresh bolanhas. The first, at Tanta Cosse, was begun on May 16, at which 9 ha was completed by the trainees. 32.7 ha at Santanto was surveyed next.

Not completed in May:

1. Extension agents were not available to train in water control or correct employment of the technical package.
2. Agricultural materials did not arrive for distribution to farmers.

3. Neither the Extension Specialist nor agents were available to begin demonstration plots or to develop an extension program.
4. Field Study trip arrangements still awaited AID authorization.

Visits to the Project in May:

May 1 - Tim Rosche
13 - Tim Rosche
16 - Gussie Daniels and Tim Rosche
22 - Tim Rosche accompanied Extens. Specialist to project
24 - AID/Bissau outing to project site.
24-26 - Denny Robertson, REDSO

JUNE

Bolanha Development

At Santanto the dry-season harvest delayed clearing of the area to be developed and the survey crews did not begin until June 12th. From the 12th to the 15th both survey crews completed 32.7 hectares of contour dikes and layout for irrigation and drainage canals. Plowing of dikes and canals was completed on the 24th. 100 liters of gasoil was consumed.

Area surveyed and dikes plowed at each village include:

Sare Djaiba	17.5 ha
Tanta Cosse	12.2 ha
Santanto	32.7 ha

The village of Sare Bisse will not participate in the development program this year as there was not time to develop that area before the rains began. In addition, it was confirmed that most of this area is not suitable for survey work needed for contour dikes due to the presence of deep pits filled with soft organic matter. A better area will be identified for the 1986 season.

Water control structures at Ginane, Sare Bisse, Saucunda, Fulamora and Sonaco were cemented to prevent leaks and allow better water control.

Rain gauges were installed at Ginane, Santanto and Velingara. The first recorded rainfall was June 11th. Sare Birro received

9.4 mm and Contuboel 10.2 mm. The first recorded rainfall in 1984 was May 18th. This delayed rainfall will cause serious production problems in the Contuboel area if the rainfall does not extend into the month of November.

Recorded rainfall to June 30, 1985 was 158.1 mm.
Recorded rainfall to June 30, 1984 was 327.4 mm.

Given the lack of rains DEPA has become anxious to install experimental motorpumps to supplement rainfall. Three sites are being developed next to the Geba river and plans have been made to use motor pumps this year if needed. These sites will not be developed until late July due to the lack of hand tools and extension agents.

The late rainfall, the delay in receiving hand tools, non-availability of extension agents and the working problems encountered during first year development will definitely have an impact on overall development and production for the 1985 rainy crop season. However considering these constraints the work now taking place in the bolanhas is impressive and many valuable lessons are being learned which will help establish a smoother program for next year.

The only village actively involved in the bolanha work for most of June was Ginane where an extension agent was working. There were initial problems in this village stemming from two ethnically different groups working in the same bolanha who insisted that they would not be able to cooperate on the bolanha. For this problem project personnel began exuberantly encouraging the one group who had begun completing their dikes, including visits by the AID representative and DEPA Director, and eventually succeeded in soliciting the cooperation of the more recalcitrant members.

While it was planned to install aid-topographers in each village to help the extension agents demonstrate techniques of dike building, problems of feeding the topographers in the villages have prevented this. DEPA is unable to furnish food to the topographers and rice is unavailable in the villages. This was unfortunate as the aid-topographers might have alleviated somewhat the lack of extension services in the villages.

With the absence of extension agents and hand tools bolanha work halted once the tractor finished the initial plowing. Villages became discouraged when it seemed they had been abandoned. Project personnel thus began a series of visits to villages to explain delays and boost morale. The late rains

this year effectively helped the project, as the villagers insisted that they would be unable to continue with the program if the rains arrived before the tools and agents, obliging the men to leave for their traditional fields. In fact with the first rains Saucunda began cultivating. The women, following traditional practices, destroyed the contour work they had paid to have done. Santanto also lost many of their dikes for the same reason. Project personnel convinced the villages to "ressurrect" the dike-work (traces were still visible) but this will demand a major village effort.

In general the villages have not developed bad feelings toward DEPA over these delays, and they continue to hope that the bolanhas will be completed. The one village in which there was a trace of bitterness was Cutame, complaining that last year DEPA spent 11 months surveying their bolanha and to date they have had no help. (This is the bolanha surveyed under the supervision of the former Team Leader.)

Extension

Extension agents became available on a "temporary" basis beginning the 17th of June. They were given a crash course on demonstration fields planned for the villages this year, the agricultural credit program and village level record keeping. The agents were placed as quickly as possible in order to accelerate the bolanha work and generate lists of village needs for agricultural materials. Many of these people were "inferior" agents who were to be replaced later once the superior agents were released from the DEPA Trainers seminar. Agents are receiving concentrated follow-up in the field to develop skills and to prepare demonstration plots.

Land is being contributed in participating villages for demonstration fields. This is not always choice land nor is it always as large a parcel as we anticipated. Meetings continue, however, with village chiefs to explain the benefits of the fields. The farmers are supportive of the idea. The main drawback is that the surface area of developed land this first year is relatively small in some bolanhas, thus villages are reluctant to sacrifice even 1/3 ha.

As extension agents were freed up DEPA provided hoes from an old stock and shovels were located in Bissau to loan to farmers until tools arrive from Dakar. The hoes are too large for use by women, but they have helped in setting the work in motion.

Topographer Training

The training team began surveying bolanhas further from the DEPA Center, and to avoid logistical problems and the heat, changed their working hours to a continuous day (07:00 - 14:30). The Santanto bolanha work was completed after which they surveyed 16 ha in the Geba area. Wakilare was planned for July.

The students continued to upgrade their mathematical skills in preparation for the design of contour maps which will follow the survey work.

Mr. Soumah is pleased with the progress the students are making and has not encountered any logistical or work-related problems.

(See Annex I, Summary of Topographer Training Course - Progress to Date.)

Management

In June we encountered several serious blocks that were not easily resolvable at the Contuboel level. The Agricultural campaign was at this point one month late and as yet there were no extension agents for project villages, no tools available to the villagers for dike completion, no official decision on prices for agricultural equipment due to arrive from Dakar, no pesticides for known problem areas, and no fuel in Contuboel. In addition the project Extension Specialist had arrived but his counterpart was still unavailable to work with him. The lack of extension services was rapidly becoming the most serious setback to the bolanha work, and the absence of the DEPA Extension Chief affected all phases of the preparatory work. He was overextended with credit collection on irrigated perimeters, temporary stockclerk duties and sundry other tasks, to which was added a two-week seminar in June on Extension Supervision. (This seminar was well-conceived but ill-timed. The overlap between dry and rainy season campaigns had already created a lack of extension services for the bolanhas, and the addition of a two week extension seminar was at this point catastrophic.) Project personnel were unable to schedule time with the Extension Chief, and were in the end obliged to continue campaign preparations without him. The result, once he was finally free to work on the project, was that he was not up to date on developments in the program, creating difficulties in materials distribution and coordination in the villages. These problems were aggravated by the unexpected and sudden departure of DEPA/Contuboel Director to the Philippines, and of his deputy to Portugal. The Project Coordinator therefore arranged a meeting with the DEPA/Bissau Director in an effort to move ahead before the season advanced much further.

The Bissau meeting on June 11, at which USAID ADO Norman Garner was present, was extremely helpful. Pepito was able to remove several blocks and assist in furnishing needed supplies (tools, insecticides and fuel). He also authorized the training of a full time credit accountant at Contuboel to free up the Extension Chief for extension duties. A serious extension agent was chosen as bookkeeper, who has had much experience in the villages and is familiar with the bolanha program. He began training in credit on June 12.

Prices for agricultural materials was discussed but the conclusion was less concrete than for the other problems. Pepito felt that the farmers could not afford to pay Dakar prices for hand tools (admittedly high), thus it was felt that the credit fund would be obliged to take a loss this first year until a less expensive source could be located. Mr. Garner agreed to this, and the final decision on sale prices was left to DEPA/Contuboel (see Annex II, Report on Credit Program) Prices for larger farm machines (plows, carts, etc.) were to follow official guidelines, and the DEPA Director said that he would inform us as soon as the new prices were fixed, presumably the next week. When new prices did not materialize, the project was obliged to sell at the 1984 rate with the arrival of the new materials on June 24.

The DEPA warehouse was organized and readied for the arrival of the new materials from Dakar. Potential problems were identified in keeping separate materials required for the operation of the Center itself. In the past there has been no real distinction between these commodities and no attempt to maintain a rolling sales stock. (Credit Report) A "Small Stock" section meant exclusively for sales has thus been included in the Central stockbook. Supplementary stockbook sections have been set up to keep track of materials stored in sector warehouses. The stockclerk continued training in the use of Sales Stocks and recording movement of materials.

Equipment arriving from Dakar was inventoried and immediate distribution began to participating villages. Fertilizer, equipment and seed was supplied to villages in which extension agents had been placed. Problems arose with the programming of trucks for distribution. The Extension division was often in competition with Seed Multiplication for truck time or laborers. Programming vehicles is not a concept well known outside of the project, and pre-arranged truck time is an illusion. Many hours were lost in arranging transport with the result that a good day meant that one delivery was made.

The project had considerable difficulty in soliciting assistance from the national crop protection service. Certain bolanhas are known problem areas where insects did much damage last year, thus assistance was requested as early as last quarter. The agent in Bafata, however, was unable to keep appointments due to lack of transportation and project vehicles were tightly scheduled given the dearth of operational vehicles at the Center. The DEPA Director arranged a visit from the national crop protection service in Bissau (June 24). Unfortunately the team arrived very late in the season and was unable to perform the necessary tests to verify the presence of insects in the soil. Samples taken in one afternoon showed no insects in bolanhas known to be infested, with the result that the agents were reluctant to contribute the Furadan requested for this problem. After further discussions with the project agronomist they agreed to furnish a supply of Furadan to be distributed under the supervision of the Bafata agent. The furadan arrived the same week. We are hoping to meet with the agency in Bissau in the next few months and establish a system whereby this problem might be avoided in the future.

Not completed in June:

1. The reservoir in Samba Iobel had been eliminated when the village dropped out of the program.
2. Pump use has not yet begun on experimental sites, thus documentation is delayed.
3. Bas fonds development continues into July as hand tools did not arrive in June.
4. Recruitment of 1986 extension agents has been delayed until pressures of the present campaign ease up.
5. AID authorization for study trips was received in June, thus arrangements have yet to be made.

Visits to the Project in June:

June 6	-	Norman Garner
14	-	Pepito
27	-	Credit specialist from Caboxanque
"	-	Gussie Daniels, Norman Garner, Chargé d'Affairs (and families)



P R O J E C T P R O G R E S S R E P O R T	PROJECT # 657-0009 AID 041 Aurora	AGENCY USAID	REPORTING PERIOD Apr. - June 1985
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ACTI- VITY NO.	PROJECT ACTIVITY	ACTIVITY STARTED		ACTIVITY COMPLETED		MAJOR POSITIVE/NEGATIVE FACTORS AFFECTING RESULTS OF ACTIVITIES AND IMPLEMENTATION
		SCHED.	ACT. (EST.)	SCHED	ACT. (EST.)	
1	Survey work - local		Continued from Jan. 1985	(continuous)		a. Fields completed as planned b. Lack of foodstuffs meant some delays
2	Plowing and Construction of dikes & canals	4/1	4/8	6/1	6/24	a. DEPA provided tractor & plow b. Villagers paid for tractor fuel c. Manual development not begun until late June when tools arrived d. Extension agents not available until late e. Tractor not always available when needed
3	Topographer Training	4/1	4/22	(continuous)		a. Trainer well equipped & highly qualified b. Late rains allow more time to do field work
4	Meetings with villages to encourage canal & dike work		Continued from Jan. 1985	(continuous)		a. Slow reaction of farmers to idea of water control b. Lack of extension agts. to help farmers c. Villages insist on having land plowed by tractor d. No hand tools to work with
5	Road Repairs & Water control structures	3/1	3/15	5/1	5/15	a. 35 km roads improved b. 5 villages able to control drainage from rainfall c. Materials available from AID d. Villagers assisted DEPA

PROJECT PROGRESS REPORT		PROJECT #	AGENCY	REPORTING PERIOD		
ACTIVITY NO.	PROJECT ACTIVITY	ACTIVITY STARTED		ACTIVITY COMPLETED		MAJOR POSITIVE/NEGATIVE FACTORS AFFECTING RESULTS OF ACTIVITIES AND IMPLEMENTATION
		SCHED.	ACT. (EST.)	SCHED	ACT. (EST.)	
6	Pump sites to backup rainfall chosen & prepared	5/1	5/1	(continues)		a. Villagers willing to pay fuel costs
7	Measurement of rainfall	5/1	5/1	(continues)		a. Lack of rain gauges (ordered from U.S.) b. Funds for 3 gauges loaned to project & purchd in Dakar by FAO c. Late installation - some data missing
8	Placing & Training of Extension Agents		6/17	(continues)		a. VERY late - unfamiliar with villages & program b. Varied educational & language background
9	Preparation of Guide for Rice Growing Operations for Agents		6/12		6/24	
10	Planning & Preparation for demonstr. fields; briefing of agents & farmers		5/30	(continues)		a. Positive village attitude toward fields & project personnel b. Developed land small this year; not always choice plots
11	Receipt of fertilizer & some agr. materials; Organize warehouse & inventory		5/19 6/19		5/19 6/25	a. Not enough space in DEPA warehouse
12	Admin. materials for Credit system purch.		(2 weeks)			a. good printing service in Bissau b. No file folders; requests from AID & Aurora
13	Acct. books for credit fund & stock books for DEPA created		(2 weeks)			
14	Training of new stock clerk & credit Accountant		5/29 6/12	continues "		a. Stock clerk & bookkeeper not avail. until late b. Good personnel; hard-working & serious



PROJECT PROGRESS REPORT	PROJECT #	AGENCY	REPORTING PERIOD
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ACTIVITY NO.	PROJECT ACTIVITY	ACTIVITY STARTED		ACTIVITY COMPLETED		MAJOR POSITIVE/NEGATIVE FACTORS AFFECTING RESULTS OF ACTIVITIES AND IMPLEMENTATION
		SCHED.	ACT. (EST.)	SCHED	ACT. (EST.)	
15	Distribution of Agricultural Materials		6/21	continues		a. Lack of trucks, laborers & coordination between DEPA departments
16	Project Administration & Contractor support activities		(3 weeks)			a. Good working relations between team members b. Many medical concerns this quarter

P R O J E C T P R O G R E S S R E P O R T	PROJECT # 657-0009 AID 041 Aurora	AGENCY USAID	REPORTING PERIOD April - June 1985
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AURORA INPUT

	DURING PERIOD		CUMULATIVE	
	PLANNED	ACTUAL	PLANNED	ACTUAL
Technical Personnel (P/M)	15.0	4.75	154	?
Subcontracts (\$US000)	N/A	N/A	N/A	N/A
Equipment Rec'd (\$US000)	"	"	"	"
Fellowships (Person-Months)	"	"	"	"

GOVERNMENT INPUTS

Counterpart Staff (Person-Months)	"	"	"	"
Support Staff (Person-Months)	"	"	"	"
Equipment Rec'd (\$US000)	"	"	"	"
Buildings, Land (\$US000)	"	"	"	"
Cash Support (\$US000)	"	"	"	"
OTHER _____ (Specify)				

REMARKS:



AURORA ASSOCIATES INC.

1140 Connecticut Avenue, NW, Suite 1200, Washington, DC 20036 (202) 659-0480

FORM E-1
AURORA PERSONNEL

PROJECT PROGRESS REPORT	PROJECT # 657-0009 AID 041 Aurora	AGENCY USAID	REPORTING PERIOD April - June 1985
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POST NO.	POST DESCRIPTION	NAME OF INCUMBENT and (NATIONALITY)	ARRIVED* (MO/YR)		DEPARTED (MO/YR)	
			Sched.	Actual (Est.)	Sched.	Actual (Est.)
	Rice Production Specialist	Donald Broussard (American)	April 83	April 83	May 86	
	Project Coordinator	Linda Smith (American)	Jan. 85	Jan. 85	Jan. 87	
	Admin. Assistant	Gilbert Z. Pouho (Ivorian)	Feb. 85	Feb. 85	Jan. 87	
	Agriculture Extension Spec.	Naraina P.S. Varde (Indian)	April 85	May 85	Jan. 87	

REMARKS:



AURORA ASSOCIATES INC. 1141 Connecticut Avenue, NW, Suite 1211, Washington, DC 20036 (202) 659-4480

FORM E-2
HOST GOVERNMENT
PERSONNEL

PROJECT PROGRESS REPORT	PROJECT # 657-0009 AID 041 Aurora	AGENCY USAID	REPORTING PERIOD April - June 1985
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POST NO.	POST DESCRIPTION	NAME OF INCUMBENT	FULL/ PART TIME	ASSUMED DUTY (MO/YR)	
				Sched.	Actual (Est.)
	Director DEPA/Contuboel	Malan Sadjo	PT	-	-
	Agronomic Engineer	Jacinto Da Silva	FT	-	-
	Field Extension	Dona Quemabi	FT	-	Jan.83
	Hydrol. Technician	Joseph Coly	FT	-	July 84
	Topographer	Armando Sambu	FT	-	March 83
	Draftsman	Jose L. da Silva	FT	-	Feb.84
	Entemologist	Joaquim D. N'Djai	PT	-	-
	Bookkeeper - Credit	Ernesto D. Mane	FT	-	April 85

REMARKS:



PROJECT PROGRESS REPORT	PROJECT # 657-0009 AID 041 Aurora	AGENCY USAID	REPORTING PERIOD Apr. - June 1985
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EQUIPMENT	DELIVERY (MO/YR)		REMARKS
	SCHED.	ACTUAL (EST.)	
Agricultural materials for sale to farmers	April '85	May, June '85 - some still due	
Vehicle spare parts	"		Pro-formas submitted to AID March 1985
Topographic and admin. supplies	?		Submitted to AID. Will be ordered from U.S.
2 Tractors and spare parts, equipment	?		Submitted to AID.



PROJECT PROGRESS REPORT	PROJECT # 657-0009 AID 041 Aurora	AGENCY USAID	REPORTING PERIOD Apr. - June 1985
TITLE OF REPORT, PAPER, ETC.		REMARKS	
<p><u>Report on the DEPA Credit Program 1985, Contuboel</u></p> <p>Linda Smith Project Coordinator Aurora Associates</p> <p>July, 1985</p>		<p>ANNEX II of this report.</p>	

Summary of Topographer Training Course - Progress to Date

Mr. Albert Soumah arrived in Contuboel the 22 of April, and the same day was able to outline a training program with Joseph Coly. Mr. Soumah has been training and improving the skills of four DEPA topographers: Armando Sambu, Tome Yalla, Souleimane Barry and Arnaldo Barboza. In addition he has been assisting eight aid-topographers: chain, leveling rod and stake men.

It was decided to concentrate field work in the mornings and, given the heat, to reserve afternoons for theory, calculations, design and drawing contour maps. As the team began working in areas farther from the Center they opted to work a continuous day, from 07:00 until 14:30 instead of breaking for lunch. This resolved problems involved in locating transportation and food for the topographers.

With the rains threatening to begin, the topographers spent virtually all of their time surveying, thinking to hold the bulk of the design room work until the rains drove them from the field. The rains were late this year, thus the team was able to accomplish much more than anticipated.

Mr. Soumah was able to verify the accuracy of bolanhas already surveyed this year. The surveying had been done accurately under the direction of Armando Sambu. The remaining bolanhas scheduled for development were used as practical training experience for the students. The program of bas fonds survey work for the training group includes:

Tanta Cosse	9 ha
Santanto	32 ha
Geba	16 ha
Waquilare	6.6 ha

Field work on the above bolanhas took place between May 16 and July 12, for a total of 63.6 ha.

Mr. Soumah has reviewed the lists of topographic and design room materials requested by DEPA. He found them to correspond to actual needs at the Center and has recommended that these materials be purchased.

Three of the trainees had had no initial experience in survey work. Only Armando Sambu had topography background, having been trained by Mohamed Barry, Aurora contractor.

The initial level and progress of each trainee is as follows:

	<u>Background</u>	<u>Present Level</u>
Tome Yalla	1 year highschool no topo experience	Capable in all survey functions
Souleimane Barry	5 years highschool no topo experience	" " " " "
Arnaldo Barboza	Highschool diploma no topo experience	" " " " Ready for University
Armando Sambu	3 years highschool 3 " topo exper.	Capable of managing survey team. Capable of generating contour maps

All of the trainees lack appropriate mathematical skills. The afternoon sessions have stressed the strengthening of these skills. It is anticipated that much of the remaining time will be used to improve design room skills of all trainees, especially the beginners. This is the most difficult part of topography work and the area in which the trainees are still notably weak. Even Armando Sambu is hoping to improve his design room skills.

DEPA and project personnel have been very impressed with the work and personal comprehension of Albert Soumah. He arrived well equipped and has been able to carry on his training program without making demands on DEPA. The trainees have benefitted greatly from his considerable experience in his field and patience with his students. During a brief visit by Mr. Bouette on July 8, Joseph Coly requested that Mr. Soumah be allowed to continue this training session until mid-August so that the trainees would have time to design the maps of the area presently being surveyed. This is a very important phase of the survey process and the one requiring the most supervision.



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ANNEX 11

Report on the
DEFA Credit Program 1985
Contuboel

Linda D. Smith
Project Coordinator
Aurora Associates
Project 657-0009
July 1985

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- I. Initial Problems in DEPA Credit Program
 - A. Stock Records
 - B. Requisition System
 - C. Commodities Distribution and Control
 - D. Credit Department
- II. Sales of Agricultural Materials
 - A. DEPA Internal Record Keeping
 - B. Village Records
 - C. Credit Terms and Repayment
- III. Pricing of Agricultural Materials for Sale

I. Initial Problems Identified in DEPA Credit Program

DEPA has provided credit services to farmers in the past but on an ad hoc basis. Materials donated to DEPA have been sold through the Extension division with no thought of creating a continuous credit fund. This was evidenced in the lack of a formal system or credit personnel, and in the use of reflow funds (used to finance Center operating costs). In order to prepare for a credit program some basic preliminary improvements had to be made in the DEPA internal management system:

A. Stock Records

A notebook of commodities was kept in which stock movements were recorded. In fact the stock sheets were incomplete, periodic inventories were not made, not all transactions were recorded, different individuals were authorized to remove stocks - often with no documentation - no reference was recorded for materials removed from stock, thus no means of tracing the transaction; cash or credit sales and "loans" were sometimes recorded on requisition slips - thus stock documents were loosely serving as payment records or receipts with no corresponding bookkeeping; materials not inventoried were leaving the warehouse with no documentation, and often the only reliable source for commodities received by a given village was the village itself.

A stock book was created for commodities stocked in the Central warehouse and a "Sales Stock" created for materials to be sold. This enables DEPA to reserve materials for sale to farmers and allows for monitoring the value of the sales stock (or credit fund). As the Central warehouse became overcrowded with the arrival of new agricultural materials, however, stocks were arbitrarily removed for storage in smaller village warehouses (6 exist) where no records were kept of movement, distribution or quantities in stock. Thus a supplementary stockbook was created by section for each village warehouse, to record DEPA commodities stored outside the Central warehouse, but under the control of the DEPA stock clerk. This allows DEPA to know what quantities exist and where they are located, while allowing distribution to neighboring villages.

B. Requisition System

DEPA previously allowed several key personnel access to the warehouse and commodities were often moved, distributed or received without the knowledge of the stock clerk, and without appropriate documentation. In order to consolidate control and responsibility, a new requisition system was created, authorizing

one individual in each DEPA department to requisition materials. "Sales Stocks" can only be requisitioned by the Extension service in order to prevent the absorption of these materials into the operations of the Center's agricultural activities. Requisition booklets were printed and distributed to each division with a division code and numerical series to allow "tracing" of materials requisitioned through the stockbook. (All materials removed from the warehouse are recorded by requisition number.) A copy of each requisition remains in the booklet to provide a permanent source record of all goods requisitioned.

C. Commodities Distribution and Control

As mentioned above, in the absence of a sole responsible agent for control of commodities, several personnel often assumed responsibility for distributing various goods or supplying farmers. This often resulted in confusion as to what quantities of materials moved to, or were stocked in, different locations. Further confusion developed at the end of the campaign in ascertaining quantities of materials villages actually received, for which they were obliged to pay. In addition shipments of materials to DEPA were often delivered directly to village warehouses without documentation, and confusion existed even as to quantities of materials actually received by DEPA.

The Central warehouse stock clerk in Contuboel has now been entrusted with the responsibility for all DEPA stocks in all locations, through stockbooks kept at Contuboel. All movements of these stocks must be requisitioned from him so that appropriate records might be kept of goods distributed to villages and those still in DEPA control.

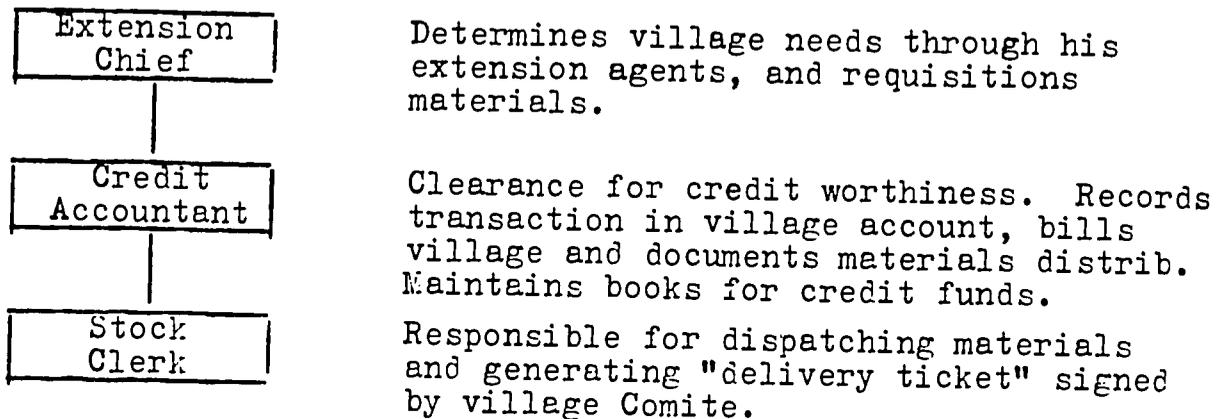
D. Credit Department

In the past some "sales" records were jotted on requisition forms, thus stock records contained partial sales, credit or loan information while other credit and payment records were kept by the DEPA Extension Chief. These were often incomplete when delivery slips did not make their way back to him. In order to bill villages at the end of a campaign the Extension Chief was obliged to coordinate and compare records with the stock clerk and extension agents. Discrepancies could only be resolved by consulting the village concerned as to quantities received. There has been no central record of sales - either cash or credit - of DEPA commodities. The Extension Chief was entrusted with

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distribution, credit and collection thus rendering him unavailable at key times to attend to normal agricultural extension activities.

A Credit bookkeeper has now been named and a credit program established in the Extension division. All sales and distribution pass through him so that records might be maintained by village for commodities received, payments made, and for determining credit worthiness and guaranteeing appropriate billing. All sales are made through this department. The chain of sales to farmers is presented below:



II. Sales of Agricultural Materials

Because agricultural materials received were insufficient to meet the demand, it was necessary to ration out stocks to villages participating in bolanha development this year. Only those farmers having parcels in project bolanhas were allowed to purchase these materials. Because of the lack of extension agents in the villages the system did not function as smoothly as we anticipate for future years. However the following system has been established for village sales. All sales are made to the village and not to individual farmers. The Comite is responsible for commodities received and for guaranteeing distribution and payment.

A. DEPA Internal Record keeping

The extension agent determines village needs with the bolanha Comite for participating farmers. A list is submitted to the Extension Chief to verify that it is a realistic request and to calculate quantities of agricultural inputs such as fertilizer and seed based on hectareage under cultivation in each village.

In theory all materials for a given village would then be received and shipped, and appropriate billing would take place at that time. Sales booklets were printed to record materials by category: agricultural equipment and tools, fertilizer, other. Unit prices, quantities and totals are recorded. Payment terms are summarized at the bottom to record the amount advanced in cash, the credit remaining and interest on credit taken. One copy is delivered to the Village Comite, one copy is included in the individual village accounts file, and one copy remains in the booklet as a permanent sales record.

Subsequent payment on village accounts are written up in printed booklets, and copies follow the same pattern as for sales: village, account file, and sales file (remains in booklet). The "account" copy stays with the money received until it has been recorded in the sales journal.

Individual accounts have been established for all participating villages. The files include a) the village request for materials, b) delivery tickets of materials to village (signed by Comite), c) one copy of the sales receipt, described above, d) copies of all subsequent payment receipts on account, and e) a Recapitulation Sheet detailing values of materials received, payments and credit status. The Recapitulation Sheets are designed to

1. Several factors have necessitated small changes in the system this first year. Lack of extension agents in the villages resulted in additional requests for materials trickling in after orders were shipped out. Late receipt of agricultural materials by DEPA meant that villages received materials on a piecemeal basis and therefore could not be billed globally upon receipt of their equipment. In addition villages were used to the old system of receiving materials at random with no demands for payment until a much later date. Thus farmers who had requested materials did not bother to produce cash advances although they had been warned of credit terms.

Therefore we have adopted a "one month delay" allowing us time to transport all materials to the village, and allowing the village time to collect necessary cash advances which they are presently making in weekly payments, before they are billed globally for materials received. Thus interest on credit taken will be calculated at the time the bill is prepared and all advances recorded as cash sales. Given the problems of truck availability at the Center this may be continued in future years.

correspond to categories on the sales receipts and all figures are taken directly from receipts.

A Sales Book is kept by the Credit Accountant recording all sales, cash or credit, for agricultural materials. The book allows one to know at a glance how much has been received in cash sales, credit given, repayment and credit due. Receipts are posted daily to the Cash Receipts and Disbursements Journal, which is the central account book for the revolving credit fund.

A bank account has been set up at Bafata with the DEPA Director/Contuboel and the Project Coordinator as co-signatories. As of July 19th a total of 608.215,50 pesos has been deposited in cash sales.

B. Village Records

In the past there have often been discrepancies between village and DEPA accounts as to materials received and amounts due. Some villages keep very accurate records of these debts while others lack this capacity. In order to help villages maintain records of materials received and payments made we have created a Village Notebook for global materials received and payments made to DEPA, and for keeping track of individual farmer sales and payments to their Comite. The extension agents are charged with helping the Comite maintain the Notebooks.

The problem encountered to date is the late placement of these agents, thus little time to train them in the use of the Notebook. We will be able to work more closely with agents on this once distribution has been completed and the billing is underway.

NOTE: The system of global sales to villages is theoretically more efficient for DEPA. Paperwork is reduced and individual accounts are few in number (villages as opposed to farmers). The real load falls on the village where accountability is made difficult by the lack of educated record keepers, numerous individual accounts and no record-keeping materials. (Small villages obviously have an easier task.)

However the economic realities of this region make global village sales a "surface" affair. The lack of agricultural materials on the market, subsidized prices, and the proximity of the Senegalese border (where goods can be resold at a much higher value for hard currency) make the demand for agricultural goods

overwhelming. In order to assure that these materials remain in Guinea-Bissau to be used for agricultural purposes and not commercial gain, DEPA is obliged to closely monitor village distribution and use of materials, and in some cases to follow up on materials sold in the past. In addition the low priority placed on rice production in the area means that farmers often purchase agricultural equipment and supplies to be used on their cash and other food crops, against which DEPA attempts control. Thus the presence of the extension agents and the use of village records are also necessary to the minor "policing" role DEPA is obliged to perform.

C. Credit Terms and Repayment

Because DEPA project villages overlap with other projects (Peanut, Cotton...) we have attempted to coordinate our credit terms with those familiar to the farmers. Both the Bafata Cotton project and now DEPA are trying to introduce interest to the farmers in an attempt to eventually bring about an awareness of realistic values. Thus a token interest rate of 5% is being charged for credit sales.

After the one month "delay" for collection of cash advances, all amounts not fully paid are subject to 5% interest.

Following the system implemented by DEPA in the past, at least in theory, it was decided to ask 1/3 cash down on agricultural equipment, with 1/3 due after each succeeding campaign. In fact many of the villagers, more familiar with the 1/2 cash payment demanded by the Bafata project began paying 1/2 down. This has not been discouraged, and will in fact become the policy for next year. Given the extremely low prices for agricultural materials sold by DEPA the farmers have no problem meeting this demand. This would also resolve the dilemma of permitting future credit for villages that have not completed payment on this year's credit.

The due date decided on for 1985 credit is February 28, 1986. By then it was reasoned that farmers will have had time to harvest and reimburse.

III. Pricing of Agricultural Materials for Sale

Much effort was invested in an attempt to establish realistic prices for agricultural materials, hoping that a revolving credit

fund could be maintained. Although the government is attempting to steadily bring the peso in line with real market value, it is still far from the goal. Thus any translation of the purchase price of materials into pesos results in an automatic loss of much of the original fund. This is a reality of Guinea-Bissau, however, and the best that might be hoped for at this time is to establish a system that could continue itself once the peso becomes stable. In order to habituate the farmers to as realistic a system as possible, it was hoped to translate the purchase price of materials (from CFA) into the official peso equivalent. To this we would have preferred to add a markup sufficient to cover transport and overhead - 20% is normally an accepted figure. An additional 15% should have then been added for credit sales in order to provide a high enough margin to encourage cash payment.

The Government of Guinea-Bissau, however, has a very protective policy toward farmers. Not only has interest on credit been discouraged, but highly subsidized prices have been fixed by the national government for most necessary agricultural equipment and materials. Although updates are made annually the official selling price does not begin to approach the purchase price of these materials, even at the official rate.

Our original conversion of buying price to peso equivalent, without markup, was rejected by the DEPA Direction/Contuboel as being too high for the farmers to pay. An additional concern, a valid one, was that farmers could not be asked to pay higher prices for DEPA goods than was asked by the Cotton project. From discussions with Cotton Project personnel it became clear that they too would prefer to charge actual prices but are hindered by government set prices.

1. In Caboxanque, where there are no supplementary agricultural projects, the DEPA project has evolved a "fair" selling price: purchase price plus 20% overhead, in addition to which 20% interest is attached for credit sales. DEPA/Contuboel was surprised at this information as we were not able to obtain government authorization to increase prices in our area. The reason seems to be that while Contuboel (and Bafata as well) asked for government permission to change prices, Caboxanque did not, and simply assumed that the government prices did not hold for different qualities of goods with obviously different purchase prices! In spite of much higher prices the Caboxanque credit program is a success, farmers are willing and able to purchase, and the program has a chance of continuing itself once the peso is stabilized.

In the end the credit program was obliged to accept the official selling price for agricultural equipment and to set prices for hand tools at an extremely low level. (Attached is the price schedule for agricultural materials compared with purchase price.)

If DEPA were allowed to sell at closer to actual costs, not only would many of the problems outlined in section 2.B be resolved, but the credit program would be better protected and more in a position to continue itself at a later date (that is, without outside intervention). The reality is that where the demand for materials is so overwhelming, the population is willing to pay the necessary amount to procure them. From conversations with participating villagers it has become clear that there are two basic misconceptions regarding farmers' payment abilities and attitudes. The first fallacy is that farmers cannot afford to pay real prices for agricultural materials. When limited goods were delivered to villages, farmers not only offered full payment in cash to be given buying priority, but often tried to "outbid" each other for the goods. The second fallacy is that farmers do not understand credit interest. The farmers of this region have much interaction with Senegal where credit is an institution. They understand that loans must be paid back at more than their value. In one village where farmers were shown the difference between what they would pay today for a hoe and what that same hoe would cost later, they immediately changed their story about the availability of cash in the village, and project personnel spent the rest of the day recording cash payments. Farmers in Guinea-Bissau, like economically-minded farmers everywhere, are ready and willing to lay out cash today to save 15 pesos of interest. In the future DEPA would do well to emphasize cash sales, reserving the credit option to those truly unfortunate enough to not have operating capital. This could be done quite simply by increasing the interest rate to promote incentive.

Thus it is hoped that in future years DEPA/Contuboel will be able to demand realistic prices for materials sold to farmers, including markup for transport and overhead, and a realistic interest rate for credit.

Purchase and Selling Price Comparison of
Materials Provided to Farmers - 1985

	<u>Purchase Price CFA</u>	<u>Selling Price FG</u>
Serfouette	1,900	390
Houe	4,960	690
Coupe-coupe	3,950	545
Faucille	2,710	425
Rateau	1,070	220
Semoir	46,410	6,500
Charette - ane	73,500	14,650
" - boeuf	150,000	15,100
Houe Occidental	38,905	6,500
Multiculteur	25,940	15,300
Urée - kg	162	12.50
NPK - kg	145	9.00

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