

USAID/PROJECT IMPLEMENTATION :1. Country: Senegal : Page 1 of 11 pages
 ORDER FOR TECHNICAL :2. PIO/T No.: 685-0281-3- 50333
 SERVICES (PIO/T) :3. Original or Amendment: Original
 :4. Project No.: 685-0281
 : Project Title: Transfer of Technology Project
 A.I.D. 1350-1 (10-86) : Project Sub-title:

AID/W Distr. :5. Appropriation: 72-11X1012
 AID/PPC/CDIE :6. Budget Plan Code: GSHX-85-21685-KG13
 AFR/SWA/S :7. Implementation Document Administrative Reservation
 AFR/PD/SWAP :8. Project Assistance Completion Date (PACD): September 30, 1993
 SER/OP/OS/AFR:9. Authorized Agent: USAID/Senegal EXO
 AFR/PD/PS :10. This PIO/T conforms with Grant Agreement No. 685-0281 as amended,
 : original dated: July 31, 1985
 :11a. A.I.D. Contract PASA/RSSA A.I.D. Grant Other
 :11b. Contract No.:

12. Estimated Financing (See budget, attachment No. II)

Maximum A.I.D. financing available	Previous Total	Increase	Decrease	Total to Date
	-0-	\$269,243	-	\$269,243

13. Mission References: Action Memorandum for the Mission Director, USAID/Senegal of August 6, 1991.

14a. Instructions to Authorized Agent:

The USAID/Senegal Grant Negotiating Officer is authorized to negotiate a grant with Africare to finance a project entitled the "Bok Jom Animal Fattening" in accordance with Attachments I, and II, Program Description, and Budget, respectively. The amount of the grant as earmarked under this PIO/T shall not exceed \$269,243 and no further budget increase is anticipated.

RCN C500010 ECN D500136 ELM 15

14b. Address of Voucher Paying Office:
 Regional Controller's Office, USAID/Senegal, B.P. 49, Dakar, Senegal

15. Clearances:

A.	PDO:MGFall	Dates	B.	Dates
	PR	8/06/91	PRM:RGilson	8/2/91
	ANR:RKite	8/6/91	D. Funds for the services requested are	
	PRM:SCissé	8/6/91	available	
C.	RLA:AAdams	Aug 7/91	AWD	
E.	EXO:Mireland	8/7/91	CONT: WMcKee	

16. For the Cooperating Country: The terms and conditions set forth herein are hereby agreed to. :17 For the Agency For International Development

Signature: Baba Top 8/8/91 :Signature: Julius E. Coles 8/8/91
 Name: Baba Top Date :Name: Julius E. Coles Date
 Title: Director of Planning, MEFP :Title: Director, USAID/Senegal

Note: This completed form contains sensitive information the unauthorized disclosure of which may subject the responsible personnel to disciplinary action.

- 18. Statement of work is described in Attachment I.
- 19. Special Provisions (check applicable blank or insert requested data):
 - A. Language requirements (specify): Working knowledge of French & local languages
 - B. Access to classified info __ will will not be required by technical specialist(s). (Indicate level) _____
 - C. Duty post(s) and duration of technical specialist(s) services at post(s) (in mos) 24 months; in the Thies Region.
 - D. Dependent(s) __ will will not be permitted to accompany technical specialist(s).
 - E. Geographic code applicable to procurement under this PIO/T is 000 __ 899 935 __ 941 __ Other (specify) _____
(If other than authorized in HB 1, sup B, Chap 5, Para 5A1d, then attach waiver(s).)
 - F. Salary approval(s) to exceed FS-1 salary ceiling are __ attached __ in process N/A.
 - G. Cooperating country acceptance of this project (applicable to AID/W projects only) __ has been obtained __ is in process is N/A to services required by PIO/T.
 - H. Justification for use of external resources for consulting services is __ attached N/A
 - I. Clearance for procurement of ADP equipment, software, and services is __ attached __ in process N/A.
 - J. O&B approval of any report to be completed by ten or more members of the general public under the statement of work is __ attached __ in process N/A.
 - K. Participant training __ is is not being funded as part of this PIO/T.
 - L. Requirement (contracts only) is recommended for __ small business set-aside __ SBA 8(a) Program neither.
 - M. Other (specify).

20. Provisions for Logistic Support	: in kind by:	: from CFA from:	: provided/
A. Specific items (indicate with "X" as applicable)	: A. : Host : D. : country :	: A. : Host : D. : country :	: arranged : by : supplier : N/A :
(1) Office Space	: : : :	: : : :	: <input checked="" type="checkbox"/> : :
(2) Office Equipment	: : : :	: : : :	: <input checked="" type="checkbox"/> : :
(3) Housing and Utilities	: : : :	: : : :	: <input checked="" type="checkbox"/> : :
(4) Furniture	: : : :	: : : :	: <input checked="" type="checkbox"/> : :
(5) Household Appliances	: : : :	: : : :	: <input checked="" type="checkbox"/> : :
(6) Transportation in-Country	: : : :	: : : :	: <input checked="" type="checkbox"/> : :
(7) Trans. To and From Country	: : : :	: : : :	: <input checked="" type="checkbox"/> : :
(8a) Interpreter Services	: : : :	: : : :	: : : <input checked="" type="checkbox"/> :
(8b) Secretarial Services	: : : :	: : : :	: <input checked="" type="checkbox"/> : :
(9) Medical Facilities	: : : :	: : : :	: <input checked="" type="checkbox"/> : :
(10) Vehicles (official)	: : : :	: : : :	: : : <input checked="" type="checkbox"/> :
(11) Travel/Tickets	: : : :	: : : :	: <input checked="" type="checkbox"/> : :
(12) Residential Guard	: : : :	: : : :	: <input checked="" type="checkbox"/> : :
(13) Other (specify) for workshop	: : : :	: : : :	: <input checked="" type="checkbox"/> : :

Block 20 continued next page

20. Provisions for Logistic Support (Continued)

B. Additional Facilities Available From Other Sources

- Diplomatic pouch PX Commissary
 Other (specify, e.g. duty free, entry, tax exemption)

C. Comments: N/A

21. Relationship of Contractor or Participating Agency to Cooperating Country and to A.I.D.

A. Relationships and Responsibilities: The grantee will coordinate with the USAID chief ANR or his/her designee and the Mission Sub-project Officer.

B. Cooperating Country Liaison Officials: Mayor of Tivaouane, GOS Direction de l'Elevage.

C. A.I.D. Liaison Officials: USAID/Senegal Head of ANR or his/her designee.

22. Background information (additional information useful to authorized agent):

23. Summary of attachments that accompany the PIO/T (check applicable boxes)

 A. Detailed budget estimate in support of increased funding (Block 12) B. Evaluation criteria for competitive procurement (Block 14A) C. Justification for procurement by other than full and open competition or noncompetitive assistance D. Statement of work or program description (Block 18) E. Waiver(s) justification(s), clearance(s), certification(s) (Block 19) (specify number _____) to be prepared by USAID F. Administration responsibilities

ATTACHMENT IIII. PROJECT DESCRIPTION & DESIGNA. Project Description1. Goal & Purposea. Goal

Improving the quality of life through food security - the availability of nutritious foods, at affordable prices, to all people, at all times - along with the creation of productive employment opportunities, constitute a major goal of the GOS. As such, the GOS envisions a strategy which provides for the improvement of various systems of animal production. Such interventions are intended to result in more rational use of feed and pasture resources; and, are to provide livestock producers' organizations the latitude to define and implement programs therein which meet their economic and social needs.

The goal of the Bok Jom Animal Fattening Project then, is: "to improve the quality of life of the people of Tivouane through the active participation of the "Groupement d'Interet Economique" (GIE) known as Bok Jom, in a program of cattle and sheep fattening." The project will address the general issue of rural poverty, a plight faced by greater than 65 per cent of the Senegalese population, by creating jobs and increasing food availability in one such poverty-stricken pocket.

b. Purpose

In support of its goal, the project will establish and maintain a sustainable animal fattening enterprise. Technical and material support for intensive cattle and sheep fattening activities will therefore be provided to the Bok Jom GIE. Immediate results from these interventions include: gainful employment for the group's members, and their families; reduced rural exodus of the youth from the community; soil improvement from the increased return of manure to the fields; and an overall increase in income from sustainable exploitation of available resources.

Other secondary and tertiary issues will also be addressed by the project. As beef is the nationally preferred meat source, the GOS supports all efforts to produce beef in sufficient quantities at affordable prices, in conjunction with local demands. A primary problem faced by livestock producers, however, is the traditional marketing channels through which their produce must pass. Between the farm gate and the "butcher's shop" there may be as many as five middlemen. Logically, their intervention leads to ever-increasing prices for the end product, generally borne in the price paid by the eventual consumer.

Project participants will therefore be encouraged (and provided with requisite training) to become more directly involved in the marketing process so as to eliminate some of these traditional

costs. This will help to ensure that greater quantities of more affordable meat products are available.

2. Project Activities

a. Animal Fattening

Animal fattening is the primary activity of the Bok Jom project. Each participating GIE member will receive a loan from the association with which s/he will purchase animals, feed and veterinary services for one fattening rotation. Each of the following rotations will be financed with proceeds from the previous cycle.

Africare will establish a loan mechanism through the local banking system - with the CNCAS or another bank. A special account will be set up in the GIE's name which will allow the group to access funds specifically for animal fattening purposes. Current interest rates being applied by the bank will be applied for reimbursement. Further detail on the credit component can be found below.

Actual animal fattening activities will be carried out through a modified, intensive feed-lot system. The animals will be kept and cared for in pens. There will be: 50 cattle, 2 x/year for 4 month periods; and 100 sheep, 2 x/year for 6 month periods. All GIE members will be involved, on a rotational basis, in performing the daily activities necessary for feed-lot viability. This "learning by doing" method involves all members, thereby ensuring sustainability, as the members will develop thorough knowledge of feed-lot operation and maintenance.

The ideal age for purchasing animals to be fattened in Senegal is: sheep, 1 year; cattle 3 years. The project will therefore adhere to these norms in purchasing the animals. Cattle will be fattened over a four month period; sheep over six months, at which time they will be sold. Actual slaughtering depends on the buyer.

Animals will be fed from the by-products of agricultural crops, including maize, millet and peanuts. Manure from the pens will be returned to the fields as part of a soil improvement program. This process should result in high quality meat in a relatively short period of time.

<u>CATTLE RATION PER DAY/PER ANIMAL</u>		<u>SHEEP RATION PER DAY/PER ANIMAL</u>	
Peanut hay	3.0 kgs	Rice straw	1.60 kgs
Millet stalks	5.0 kgs	Peanut cake	0.38 kgs
Millet bran	2.0 kgs	Concentrates	0.02 kgs
Concentrates	2.0 kgs		
Salt block	0.0008		
TOTALS	12.0008 kgs		2.00 kgs

Each cattle will each consume approximately 40 liters of water per day; each sheep requires 3 liters per day. Two wells will be provided in order to fulfill these requirements.

Intensive livestock production requires a solid program of preventive health care. Appropriate sanitation practices will be taught and practiced under the project. The support of the local veterinarian or veterinary service will be solicited for these efforts. The local elevage service has agreed to assist the project in the procurement and administering of necessary injections; the procurement of foodstuffs for the balanced animal rations; and will assist in the delivery of training sessions on animal hygiene and preventive health care.

The following results are anticipated from the animal fattening.

WEIGHT GAINS

Cattle: 800 - 1,080 grams/day Sheep: 125 grams/day

b. Construction

Necessary infrastructure to be established by the project include: one sheep pen; one cattle pen; one storage warehouse for food and other project materials; two wide-diameter wells with cement rings and a protective lip, approximately 10 meters deep; and barbed wire fencing for a two hectare area. The barbed wire will be reinforced with live fencing and windbreaks planted around its exterior. The animal pens will basically be open sheds with galvanized roofs.

c. Training

Technical and managerial training will be provided throughout the life of the project. The Mayor of Tivouane has already made arrangements to have an agricultural technician assigned full-time to the project. The project will also include a full-time technical Project Coordinator. Training will mostly be through the supervised farm practice method of "learning by doing". This is why all group members will participate in performing day-to-day duties.

Practical training will include but not be limited to:

- Construction of pens and paddocks, taking into consideration hygiene, space, security and shelter.
- Purchasing animals.
- Furnishing of the pens and paddocks, and their maintenance.
- Supervision and maintenance of livestock.
- Sanitation, hygiene, control of diseases and their treatment.
- Feeds and feeding: a) rations; b) concentrates; c) salts and minerals; d) hay, straw, roughage; e) pastures; f) agroforestry and alley-cropping for fodder production.
- Water.
- Technical words and their meanings.
- The business of animal fattening: a) investment; b) operational costs; c) depreciation; d) record keeping; e) accounting.

Financial management and accounting training will cover topics such as: budgeting and planning, amortization, credit, marketing principles, financial records and their rationale, and accounting journals.

Topics are to be introduced through the guise of village-level seminars, directed by project technical staff. The seminars will continue over time, including numerous on-site visits and demonstrations. The seminars will be synchronized with project implementation and rotation plans.

3. End of Project Status

By the project's end, it is anticipated that the following will be achieved:

- an intensive feed-lot operation is established with at least two complete fattening cycles per year, thereby fattening up to 200 cattle and 400 sheep over the project's life;
- the 50 members of the GIE are gainfully employed and other employment opportunities (both paid and unpaid labor) are made available to the community;
- the 50 GIE members are trained in the management and operation of the feed-lot;
- 76 tons live weight cattle (200 x 380 kgs./cattle = 76,000 kgs.), and 22 tons sheep (400 x 55 kgs./sheep = 22,000 kgs.) are produced and marketed.

The project will register socio-economic benefits in the areas of appropriate training, employment and income generation opportunities for rural youth who would otherwise have limited options.

B. Project Design

1. Methodology

a. Animal Fattening

The Commune of Tivouane lacks the necessary resources to realize this operation. However, the Bok Jom GIE is formally grouped and officially registered to participate in agricultural and commercial activities. As outlined above, the operation will employ an intensive feed-lot methodology, with all GIE members participating in its operation through a "learning by doing" process. In implementing this type of animal fattening program, the members of the GIE are breaking new ground. Animals, will not be allowed to browse on scarcely available vegetative matter, which is traditional practice, as land has been specifically apportioned to enclose the animals. The GIE will section off part of the 250 hectares to which they now have title.

Animals will be bought, fattened and sold on average twice per year. A revolving credit fund provided the first year by the project will be used for the purchase of animals and feed. On repayment, funds will be used for the subsequent purchase and fattening of animals. At the end of each fattening cycle, the animals will be sold directly to butchers.

Project participants will be organized into small work groups. Each group will be responsible for the daily care and feeding of the animals, on a rotational basis. One supervisor will be appointed for each group from within its ranks. This role of supervisor will also be rotational among group members.

The project will provide one full-time staff person. The Mayor of Tivouane has also arranged for a technical assistant. Other technical assistance, notably from the GOS Elevage Service, will be provided on an as-needed basis. The GIE's members will provide the unpaid labor; and they will share in the project's profits.

b. Credit

As stated earlier, Africare will open an account for the GIE at a local bank. These funds will serve as capital to start a revolving credit fund. The GIE's president and treasurer will be signatories to the account. For the first rotation of fattening, a loan will be drawn from the account on behalf of all participating members. (Each member, under the tutelage of the Project Coordinator, will submit his/her request for a certain amount - based on the costs for procuring and fattening an animal - to the group's treasurer.) On an internal basis, then, each member will be provided - on loan - the necessary funds to purchase his or her animal(s) and requisite accompaniments such as food and veterinary services.

Under the training component, the Project Coordinator will assist the GIE with the establishment and use of necessary management tools, including a system for managing individual credit provided to each member ("cahier de credit"). This notebook, managed by the GIE's administrators, will detail how much credit was provided to each individual, and will be broken down to include the amounts given for animal purchase, food, and other services, etc. It will also show when the loan was reimbursed to the GIE, including interest. Any profit, above the principle and interest reimbursed, belongs to each individual. When the fattening cycle is finished and all members have reimbursed the GIE, the group's president and treasurer will deposit the returned proceeds plus interest back into their account so that subsequent cycles of fattening may then be financed. In the case of individual default, another member or the group as a whole may cover the defaulted portion. The defaulting party would in most instances no longer be able to access credit from the GIE's operations.

c. Technical Assistance/Training

Technical and managerial assistance will be provided by the Project Coordinator in coordination with the assistance being provided by the Mayor of Tivouane and competent local technical services. The Project Coordinator will be responsible for organizing work plans, technical seminars, etc. in concert with representatives from services such as Elevage. He will be responsible for organizing the work groups and their functions; and provide advice and assistance in the purchase of animals. Likewise he will ensure that necessary management systems are put in place and that group members are trained in their use. This includes establishing journals and record keeping systems for: equipment stocks, bank books, amortization of equipment and infrastructure, individual credit accounts, marketing, etc.

C. Project Monitoring & Evaluation

The project will be monitored through the monthly reports of project staff submitted to the Country Representative. Likewise, the Representative will make monthly visits to the project site. Quarterly progress and financial reports will be provided to the donor. At the project's end, an internal evaluation - in collaboration with the donor - will be conducted to assess overall project impact.

ATTACHMENT II
 IV. PROJECT BUDGET (Aug. '91)
 BOK JOM ANIMAL FATTENING PROJECT

CC	DESCRIPTION	YEAR 1	YEAR 2	TOTAL
SALARIES:				
6011	AFR HQ SALARIES	400	400	800
6012	AFR EXPAT. SALARIES/REP	1,000	1,000	2,000
6021	FIELD STAFF EMPLOYEES	6,000	6,000	12,000
6031	AFR TEMPORARY EMPLOYEES	1,500	1,500	3,000
6041	AFR CONSULTANTS/INTERNS	0	0	0
	SUB-TOTAL SALARIES	8,900	8,900	17,800
BENEFITS/RECRUITING:				
6111	FICA (SOC.SECURITY/7.5%)	105	105	210
6121	HQ/EXPAT BENEF.S. (16.5%)	231	231	462
6122	INT'L WORKNEM'S COMP.	170	170	340
6131	LOCAL HIRE BENEFITS (15%)	900	900	1,800
6141	ACCRUED LEAVE	0	0	0
6211	RECRUIT. ADS/INTERVIEWS	0	500	500
	SUB-TOTAL BENEFITS/REC.	1,406	1,906	3,312
TRAVEL/RELOCATION:				
6221	ORIENTATION PER DIEM	0	0	0
6311	TRAVEL INCIDS/SETTLING IN	0	0	0
6321	STORAGE/FREIGHT	0	0	0
6411	HOUSEHOLD FURNISHINGS	0	0	0
6421	HOUSING RENTAL	0	0	0
6431	HOUSING REP/MAINTENANCE	0	0	0
6511	GENERAL TRANSPORT/GAS	1,000	1,000	2,000
6521	GENERAL SUBSISTENCE	1,000	1,000	2,000
6531	HOME LEAVE/INT'L. TRAVEL	0	0	0
6541	INT'L. & RELOC. SUBSIST.	0	0	0
	SUB-TOTAL TRAVEL/RELOC.	2,000	2,000	4,000
TRAINING:				
6611	WORKSHOP/TRAINING/MATLS.	2,000	2,000	4,000
6621	SUBSCRIPTIONS/PUBLICATIONS	0	0	0
6631	MEETINGS/MEMBERSHIPS	0	0	0
6641	DEPENDENT'S EDUCATION	0	0	0
	SUB-TOTAL TRAINING	2,000	2,000	4,000
OTHER DIRECT COSTS:				
6711	FREIGHT ON COMMODITIES	500	500	1,000
6721	BUSINESS & VEHICLE INS.	500	500	1,000
6731	TAXES/DUTIES	0	0	0
6741	LEGAL/AUDIT FEES	0	0	0
6751	TEL/TELEX/POST/DELIV...	250	250	500
6761	ADVERTISING/PUB. RELS.	0	0	0
6771	DATA PROCESSING	0	0	0
6781	OFFICE RENT/REP/MAINT	0	0	0
6791	FOREIGN EXCH. GAIN/LOSS	0	0	0
6792	DEPRECIATION	0	0	0
6793	OTHER DIRECT COSTS:	30,000	0	30,000

	(REVOLVING FUND)			
	SUB-TOTAL ODC	31,250	1,250	32,500
EQUIPMENT:				
6911	PROJECT EQUIPMENT	20,000	5,000	25,000
6921	VEHICLES	0	0	0
6931	OFFICE EQUIP/FUNISHINGS	0	0	0
6941	EQUIPMENT RENT/REPAIR	0	0	0
	SUB-TOTAL EQUIPMENT	20,000	5,000	25,000
SUPPLIES:				
7011	PROJECT SUPPLIES	38,300	24,200	62,500
7021	OFFICE SUPPLIES	0	0	0
7031	PRINTING/DUPLICATING	0	0	0
7041	REFRESHMENTS	0	0	0
	SUB-TOTAL SUPPLIES	38,300	24,200	62,500
CONSTRUCTION:				
7111	CONSTR FEES, MATERIALS...	58,000	12,000	70,000
	TOTAL DIRECT COSTS	161,856	57,256	219,112
	INDIRECT COSTS:			
	Level 1 (35.71%)	16,268	5,734	22,002
	Level 2 (17.86%)	20,771	7,358	28,130
	SUB-TOTAL INDIRECT COSTS	37,039	13,092	50,131
	TOTAL PROJECT COSTS	198,895	70,348	269,243