PD-AA6-072 (2)

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UNCLASSIFIED

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

PROJECT PAPER

Proposal and Recommendations
For the Review of the
Development Loan Committee

AFRICA REGIONAL - Entente Livestock II

AID-DLC/P-2155

UNCLASSIFIED

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

UNCLASSIFIED
AID-DLC/P-2155
May 11, 1976

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: Africa Regional - Entente Livestock II

Attached for your review are the recommendations for authorization of a loan in an amount not to exceed Four Million, Five Hundred Thousand Dollars ($4,500,000) to the Entente Fund to finance local and foreign exchange costs of sub-loans and sub-grants to Entente member states for livestock projects.

No meeting has been scheduled; please note your concurrence or objection is requested by C.O.B. Wednesday, May 19, 1976. If you are a voting member a poll sheet has been enclosed for your response.

Development Loan Committee
Office of Development Program Review

Attachments:
- Summary and Recommendations
- Project Analysis
- Annexes

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE ("X" APPROPRIATE BOX)

[X] ORIGINAL [ ] CHANGE [ ] ADD [ ] DELETE

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DOCUMENT CODE 3

2. COUNTRY/REGIONAL ENTITY/GRANTEE
Entente Fund

3. DOCUMENT REVISION NUMBER

4. PROJECT NUMBER

5. BUREAU — A. SYMBOL: AFR — B. CODE: 1

6. ESTIMATED FY OF PROJECT COMPLETION
FY 81

7. PROJECT TITLE - SHORT (STAY WITHIN BRACKETS)
[Entente Livestock II]

8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION
A. INITIAL MO. YR. 3 76 B. FINAL FY 78

9. SECONDARY TECHNICAL CODES (MAXIMUM SIX CODES OF THREE POSITIONS EACH)

10. ESTIMATED TOTAL COST ($000 OR EQUIVALENT, $1= ——)

A. PROGRAM FINANCING	FIRST YEAR			ALL YEARS		
	B. FX	C. L/C	D. TOTAL	E. FX	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL	750	6,750	7,500	750	6,750	7,500
(GRANT)	(300)	(2,700)	(3.000)	(375)	(2,625)	(3,000)
(LOAN)	(450)	(4,050)	(4,500)	(375)	(4,125)	(4,500)
OTHER U.S. 1.						
OTHER U.S. 2.						
HOST GOVERNMENT	0	830	830	0	2,500	2,500
OTHER DONOR(S)	170	170	340	1,000	1,000	2,000
TOTALS	920	7,750	8,670	1,750	10,250	12,000

11. ESTIMATED COSTS/AID APPROPRIATED FUNDS ($000)

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			3,000	4,500					3,000	4,500
TOTALS			3,000	4,500					3,000	4,500
12. ESTIMATED EXPENDITURES										

13. PROJECT PURPOSE(S) (STAY WITHIN BRACKETS) [ ] CHECK IF DIFFERENT FROM PID/PRP

[(1) To increase the efficiency and productivity of the livestock sector in the Entente countries while increasing the standard of living of small livestock producers; (2) To foster increased regional cooperation and coordination in livestock production and marketing in the Entente states and to support within the region a process of sectoral analysis which serves to provide continuing information to be used in policy and program evaluation and development.]

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NA [ ] YES [ ] NO

15. ORIGINATING OFFICE CLEARANCE

SIGNATURE
David Shear

TITLE
Director, Office of Central and West Africa Regional Affairs

DATE SIGNED MO. DAY YR.

16. DATE RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
MO. 11 DAY 27 YR. 75

AID 1330-4 (5-75)

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TOTALS			3,000	4,500					3,000	4,500

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SIGNATURE: David Shear

TITLE: Director, Office of Central and West Africa Regional Affairs

DATE SIGNED: MO. DAY YR.

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AID 1330-4 (5-75)

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[Entente Livestock II]

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A. INITIAL MO. YR. 3 76 B. FINAL FY 7 8

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TOTALS			3,000	4,500					3,000	4,500
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(LOAN)		(450)	(4,050)	(4,500)	(375)	(4,125)	(4,500)
OTHER U.S.	1.						
	2.						
HOST GOVERNMENT		0	830	830	0	2,500	2,500
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TOTALS			3,000	4,500					3,000	4,500
12. ESTIMATED EXPENDITURES										

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A. INITIAL MO. YR. 3 76 B. FINAL FY 7 8

9. SECONDARY TECHNICAL CODES (MAXIMUM SIX CODES OF THREE POSITIONS EACH)

10. ESTIMATED TOTAL COST ($000 OR EQUIVALENT, $1= ——)

A. PROGRAM FINANCING	FIRST YEAR B. FX	C. L/C	D. TOTAL	ALL YEARS E. FX	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL	405	95	500	1,000	240	1,240
(GRANT) T.A.	(287)	(35)	(322)	(680)	(80)	(760)
~~(LOAN)~~ Research	(118)	(60)	(178)	(320)	(160)	(480*)
OTHER U.S. 1.						
OTHER U.S. 2.						
HOST GOVERNMENT	–	188	188	–	692	692
OTHER DONOR(S)	–	212	212	640	–	640
TOTALS	405	495	900	1,640	932	2,572

11. ESTIMATED COSTS/AID APPROPRIATED FUNDS ($000)

A. APPROPRIATION (ALPHA CODE)	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE	FY 76 D. GRANT	FY 76 E. LOAN	FY 77 F. GRANT	FY 77 G. LOAN	FY —— H. GRANT	FY —— I. LOAN	ALL YEARS J. GRANT	ALL YEARS K. LOAN
			322	–	438	–			760	–
			178	–	302	–			480*	–
TOTALS			500	–	740	–			1,240	–
12. ESTIMATED EXPENDITURES										

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*/ $120 obligated in FY 1975; total CRED study is $600.

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AID 1330-4 (5-75)

ENTENTE LIVESTOCK SECTOR II

OUTLINE OF PROJECT PAPER

PART I SUMMARY AND RECOMMENDATIONS

A. Borrower, Guarantor and Administering Agency

The Borrower and Administering Agency is the Mutual AID and Guaranty Fund of the Council of the Entente, henceforth designated as the Entente Fund. The Entente Fund is the economic aim of the Council of the Entente and established in 1966 by the governments of the Ivory Coast, Upper Volta, Niger and Dahomey, and Togo. The Loan will be guaranteed by the Member States of the Entente Fund. Implementing agencies for the project also include the Entente Livestock Community and government agencies in the five Entente member states.

B. Amount of Assistance: Sector Program

Development Loan	$4,500,000
Capital Grant	3,000,000
Technical Assistance: Grant	764,000
CRED Livestock Research Grant	480,000

The Loan and capital grant will finance local and foreign exchange costs of sub-loans and sub-grants to Entente member states for livestock projects. A minimum of 10% of capital funds will finance imports from Code 941 countries. The technical assistance and research grants will finance program-related foreign exchange and limited local currency costs. The total cost of the project is estimated at approximately $14.7 million with the balance contributed by the Entente Fund, participating governments, and other donors. (See Financial Plan, Section III.D.6.)

C. Terms of Loan

a. U.S. Government to Entente Fund: This will be a 40 year loan to the Entente Fund with interest of 2% during the 10 year grace period and 3% during the remaining 30 years. Repayment of the Loan by the Entente Fund will be in U.S. dollars. The Borrower's repayment of the Loan will be jointly and severally guaranteed by each of the five member states of the Borrower.

b. Entente Fund to Member States: This is a two-step loan. The Entente Fund will reloan AID funds to the five member states for livestock projects. Interest on sub-loans will be up to 3.5% during the grace period and 3.5% during the repayment period. Grace periods will be for 10 years and repayment period will be for 30 years in order to give the Entente member states the full benefit of the AID terms, except for exceptional subprojects which generate sufficient revenue to assure repayment over a shorter time-frame. For these projects, the Entente Fund will determine the length of the grace period and the repayment period, which will be subject to AID approval.

Repayment of the subloans by the Entente member governments to the Entente Fund will be in CFA francs. Repayment of the AID loan by the Entente Fund will be in U.S. dollars.

D. Summary Description of the Project

This sectoral program supports major initiatives on the part of the Entente Fund and its member states to increase the efficiency and productivity of livestock production in the Entente region, to foster increased regional cooperation and coordination in livestock production, and marketing, and to support within the region a process of sectoral analysis which will serve as a continuing basis for policy and program evaluation and development. The program reinforces and strengthens the regional approach to livestock sector development in the Entente states which AID supported with the Entente livestock I section loan ($6.0 million) authorized in 1971 and should result in movement towards achieving the sectoral goals of: a) increased availability of reasonably priced animal protein for consumption within the region; and b) improved standards of living for those rural poor associated with livestock production.

Based upon recent analyses of the livestock sector in the Entente states, AID, the Entente Fund and the Entente member states have agreed to support the following common sectoral objectives:

1) to increase the efficiency and productivity of the livestock sector in the Entente States and in doing so to place increased emphasis on the development and testing of low-cost technological improvements which can benefit small livestock producers and on developing systems by which livestock services in the member states can provide these technological improvements to large numbers of small livestock producers at acceptable costs to government;

2) to increase the production of alternative sources of animal protein (small ruminants, poultry, pigs) as a means to augment the supply of animal protein which can be readily purchased by consumers at low cost;

3) to improve regional livestock marketing channels which facilitate the efficient movement of livestock and meat between the Entente States and to fully implement regional agreements (protocols) developed under the 1st AID/Entente livestock Sector loan;

4) to endeavor to promote improved regional cooperation and coordination in the development of livestock policy with the Entente States.

AID will provide an integrated multi-model package of assistance to the program. AID will provide to the Entente Fund $4.5 million in loan funds and $3.0 in capital grant funds for re-lending and re-granting to member states for sub-projects which meet joint AID/Entente Fund sub-project approval criteria and which will test the viability of various means to achieve sectoral objectives. AID will complement these capital inputs with grant funds for technical assistance, training, office equipment, sectoral research and sub-project evaluation. The sectoral research and sub-project evaluations are particularly important in that they will lead towards improvements and refinements in existing sectoral analyses, will provide feedback from field-testing of interventions and will suggest alternative improved policies and investment programs for the livestock sector in the future. The results of these sectoral research and evaluation activities will be reviewed and discussed under the regional sponsorship of the Entente Fund.

Entente Fund and Entente-member state commitment to and counterpart funding for the program is sufficient to ensure a reasonable opportunity for program success (see Section B. Subject Description for details).

The Entente Fund will administer the project and will approve sub-loans and sub-grants of AID funds to member states. Except for those sub-projects involving more than $1.0 million in AID financing. AID shall review sub-projects only to ensure compatibility with established beneficiary criteria.

The project has been designed in close consultation with the Entente Fund, the Entente Livestock Community and Entente member state taking into full consideration the results of a recent evaluation of the first AID/Entente Livestock Sector Project.

E. Summary Judgement

Pursuant to the analysis contained in this project paper, the Project Paper Committee recommends that a loan of $4.5 million, a capital grant of $3 million and a technical assistance grant of $764,000 be authorized to assist in the development of the livestock sector in the Entente states. In addition, the Project Committee recommends that a research grant of $480,000 be authorized from FY 1975 to FY 1977 to the University of Michigan's Center for Research for Economic Development to conduct research in the livestock sector in West Africa, and to assist in sub-project design and evaluation as appropriate. The need for the capital funds has been demonstrated in Section III.A. The capacity of the Entente Fund, the Entente Livestock Community and the Entente member states to implement the project with limited U.S.

technical assistance has been demonstrated in Section IV. The Project Paper Committee is satisfied that the project will make a major contribution to African efforts to develop the livestock sector in the Entente region. The project is recommended by REDSO/WA, the Regional Development Office in Niamey, AID representatives in Upper Volta, Togo and Benin , and the U.S. Embassies in the five Entente countries.

F. Certification of Mission Director

The Mission Director, having taken into account the requirement for additional sources of capital if the Entente States are to be in a position to supply their growing demand for livestock products, certifies that the Entente Fund and the Entente member states have the financial and human resources capability to utilize effectively this capital assistance project. See Annex C.

G. Statutory Criteria

The project meets all relevant requirements. See Annex H.

H. Issues: None.

I. Recommendation

Authorization of a two-step loan in an amount not to exceed $4.5 million, a capital grant not to exceed $3.0 million, and a technical assistance grant of $764,000 to the Entente Fund in accordance with the terms and conditions set forth in the proposed authorization shown as Annex A. Conditions precedent and covenants are set forth in Section IV.D. and IV.E. In addition, authorization of a research grant to CRED (Univ. of Michigan) for $480,000 is recommended.

Project Paper Committee

Project Officers	:	John Pielemeier, AFR/DS Morgan Gilbert, REDSO/WA Helen Soos, AFR/DS
Livestock Advisors	:	Wilford Morris, Purdue University Donald Ferguson, University of Michigan
Counsel	:	James Phippard, REDSO/WA
Entente Fund	:	Jacques Gurgand

PART II: PROJECT BACKGROUND AND DETAILED DESCRIPTION

A. History And Development of Proposal

1. Creation of the Entente Fund Livestock Program

Livestock performs several major functions in the economies of West Africa. Livestock has traditionally constituted a major source of livelihood (milk, meat, revenue for taxes) for a large proportion of the inhabitants of the Sahelian and Sudano-Sahelian zone of West Africa. It represents a major source of foreign exchange for exporting countries (Upper Volta: 45% of export value in 1972; Niger: 16% of export value in 1973) and an essential source of protein for rich and poor alike in both coastal and interior countries. Rapid population growth and increased per capita income, especially in urban areas, have led to a steady increase in demand for meat and meat products in the Entente state .

In the early years of independence African governments with the help of donor agencies promoted the development of the livestock sector through programs which concentrated on provision of veterinary services and water supplies. A combination of factors including increased demand for meat in urban areas, higher taxes coupled with more efficient government tax collecting procedures, and improved transportation linkages between the interior and coastal countries had the effect of 1) encouraging traditional herders to increase offtake and 2) stimulating government and private sector interest in the application of "modern" techniques to livestock production in West Africa. Interest also grew in facilitating the commercial movement of livestock, from the interior producing countries to the coastal consuming countries by removing or reducing artificial economic barriers.

As a regional organization encompassing both interior and coastal states, the Entente Fund was encouraged by its member states to extend its activities to deal with the livestock sector. In 1966 the EF asked SEDES (a French semi-public research organization) to inventory the livestock situation in the region encompassing the Entente states plus Mali, Ghana and Northern Nigeria, and to recommend measures to be taken by the states in common to alleviate an eventual deficit in production and to improve the region's livestock marketing system. The study, "Supplying Middle-West Africa with Meat", completed in 1968, indicated that without a major effort to increase livestock production and improve commercialazation, the region's meat deficit of 43,000 metric tons in 1966 could increase by more than five-fold by 1980. A second study, undertaken in 1968, discussed fiscal legislation, standardization of administrative procedures and other actions believed necessary to implement a harmonized strategy of production and trade in livestock and meat between the two primary producing states (Niger and Upper Volta) and the three consuming states (Ivory Coast, Togo, Dahomey). In March 1970 the Entente states created the Econômic Livestock Community

(ELC) headquartered at Ouagadougou and charged it with the promotion, in a regional framework, of the production and commercialization of livestock and meat*. An inventory of national and regional investment projects was drawn up aimed at increasing the productivity of the livestock sector and facilitating the movement of livestock on the hoof and the trade in meat.

2. AID and Other Donor Assistance to the Entente Livestock Program

As a further stimulus to regional coordination of livestock sectors activities among the Entente states in 1971 AID authorized a $6.0 m. livestock sector loan to the Entente Fund to be used to fund projects in the member states which would be approved by the ELC and the EF. In order to encourage the development of a regional common market for meat, AID made signature by the Entente States of a series of protocols facilitating livestock production and trade among the five countries a condition precedent to the disbursement of funds for the second tranche ($4.0 m.) of the loan. The protocols dealt with 1) harmonization of statistics and data collection measures; 2) licensing of professionals and merchants (butchers, traders, etc.); 3) gradual reduction of customs duties in livestock and meat; 4) pricing; and 5) sanitary (health) regulations. Other conditions precedent to the loan required the Borrower to prepare a plan for the utilization of loan funds including definition of standards and procedures under which all sub-projects would be appraised, and the formation of a consultative committee which would attempt to improve coordination of donor assistance programs in the livestock sector whether on a regional or bilateral basis. AID and FAC (French Assistance Program) provided additional grant assistance to the Entente program. Under a grant agreement signed in December 1970 and subsequent amendments AID agreed to provide technicians to help staff the ELC; the EF would develop and implement the protocols; review and approve projects to be funded under the AID loan; and formulate and promote a regional livestock policy. Over the duration of the program AID has also provided limited office equipment for the ELC, training funds for ELC and member country Livestock Service staff, the salary of a bilingual secretary, and short-term technical assistance to assist in sub-project design. FAC has complemented AID inputs by providing additional technicians to staff ELC (originally two, now three), logistic and operational support including a technical library at the ELC and several short-term sub-project design teams. To date the program has proved to be an excellent example of effective AID/FAC cooperation.

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* The ELC Charter is reproduced as Annex B . Initial hopes that Mali, Ghana and Nigeria might join the ELC have not materialized.

3. Request for a Second AID/Entente Livestock Project

By early 1975 most AID loan funds were committed to approved sub-projects and the Entente Council of Ministers asked AID to consider funding a second AID/Entente livestock program. The Council argued persuasively that due to the after-effects of the Sahelian drought, requirements for the livestock sector development assistance had increased, especially for production-related activities. Drought-related livestock losses (through death or premature slaughter) have been heavy and moderate estimates place the region's cattle population in 1975 at approximately the level of 1966 (see table 3). Over this period demand for meat increased substantially, although not at the rate (5-fold by 1980) predicted by SEDES. While concentrating on livestock production, the Entente Fund requested follow-on technical assistance to ensure the proper implementation of the livestock protocols approved as part of the first program and to increase the effectiveness of the Entente Livestock Community.

In February, 1975, a Project Review Paper for Entente Livestock II was approved. The PRP proposed a $10 million loan, a $5 million capital grant and a technical assistance grant for program support activities. During April-May a three-man design team carried out an evaluation of the 1st Entente Livestock Program, reviewed the present status of the livestock sector in the Entente states and prepared this Entente Livestock II Project Paper. The team benefited greatly from the availability of DAP livestock sector analysis for Niger and Upper Volta (prepared in Nov. - Dec., 1974) and carried out similar analyses for the Ivory Coast. Togo and Dahomey as part of their mission. Thus, this document has been prepared with the benefit of in-depth up-to-date information of the region's livestock sector, and a sober realization of the strengths and weaknesses of the first program and the implementing agencies. While the first AID/Entente Livestock program encountered substantial difficulties and cannot be termed a model of efficient program implementation, this second program has been designed to guard against the recurrence of the problems which plagued the first program.

4. Evaluation of Entente Livestock I

The purpose of 1971 Entente Livestock sector loan and the accompanying technical assistance grant was to assist the Entente Fund and the Entente Livestock Community (ELC) to "put into effect a common market for meat in the Entente regions ". The loan paper assumed that "without agreement among the Member States for mutual cooperation in key areas affecting livestock sector (in the form of protocols), there can be no significant modernization of the traditional production and marketing system" and that delineation of a valid livestock development plan was possible on a regional level. AID Loan funds coordinated by the ELC with other donor contributions "would be directed into priority investments consistent with an overall plan to increase commercialization of livestock". The loan was designed for disbursement in two tranches, the second tranche ($4 million) to be released for disbursement only after several specific common market protocols had been approved by the Entente member states.

In the paragraphs below we briefly summarize the results of the evaluation of the AID/Entente Livestock Sector program in relation to: 1) development of a common market for livestock and meat; 2) subprojects approved under the AID loan; and 3) program management.

A. Development of a Common Market for Livestock and Meat

Development of a common market for livestock and meat in the Entente area, while a laudable economic objective, has been critically hampered by two political realities: first, the ELC's limited geographic purview and second. the unwillingness of Entente member states to subordinate national interest to broader regional objective. Nevertheless, despite delays in approval of an implementation of ELC protocols, they are now being adopted by the Lake Chad Basin Commission and the CEAO (West Africa Economic Community) as models for harmonizing livestock regulations. With patience and perseverance on the part of the donors, Entente member states may yet fulfill their expected promise. Although the West African livestock market is certainly regional, it is not expected that it will be dominated by trade within the Entente. The largest importer of Entente produced meat is Nigeria, while the dominant supplier of the Ivory Coast, the largest market in the Entente, is Mali. Neither Mali nor Nigeria are members of the Entente and their influence frustrates efforts to establish the origin or control the disposition of livestock in the Entente Countries. Initial hopes that Mali, Ghana and Nigeria would join the ELC as associate members have not been realized.

In response to AID loan conditions precedent, the following protocols have been approved by the member states:

(i) harmonization and dissemination of statistical information; creation and use of an animal passport to follow the international movement of livestock;

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* AID policy of supporting only regional activities in the CWR area was modified in 1974 to allow for bilateral AID programs in areas affected by the Sahelian drought.

(ii) harmonization of national animal health regulations, improved reporting of outbreaks of major animal diseases, regulations on the health status of livestock which are permitted to cross national frontiers;

(iii) definition of "trades" and licensing of "tradesman" in the marketing of cattle and in butchery. This protocol restricts the conduct of each level of trade to the individual's given "profession" or tradesmens license and also requires medical examinations for butchers;

(iv) a customs protocol which requires the lowering of customs duties on exports and imports by an initial 10% for a 2-year period starting January 1, 1975. Further decreases may be considered after the 2-year trial period. It also specifies that member states will not charge reduced "favored nation" import taxes for meat from third countries.

These last two protocols were signed in Febuary 3, 1974, approximately 18 months later than predicted in the CAP. Their late signature substantially delayed the disbursement of second tranche loan funds. In general, enforcement of the protocols have moved forward slowly, with important assistance from ELC technical experts, but has been delayed by internal bureaucratic procedures. However, their effectiveness is limited by the limited geographic purview of their application. A fifth protocol - to "adopt reasonable price levels for meat" - was waived by AID as a CP when it became apparent that agreement could not be reached on the provisions of the protocol, and might have led to substantial supply discontinuities in the region if approved without the participation of Mali and Nigeria. Although the ELC is carrying out further studies on the structure of prices of livestock and meat in the region, an agreement (protocol) on pricing will be difficult to obtain and could discourage the goals of increased production and free trade within the region.

B. Sub-projects approved under the Loan

AID elected not to review individual projects which were submitted for sub-loan funding under the Entente Livestock sector loan and left full review responsibility to the Entente Livestock Community and the Entente Fund. Sub-loans, however, were to be used for certain priority activities within a regional livestock sector strategy or investment program which was to be prepared by the ELC. Going further, conditions precedent to disbursement of the second tranche of loan funds required a) evidence of the formation of a consultative committee for multi-donor assistance to the member states for livestock and b) "a plan for multi-donor support of a regional livestock program".

Again the program designers were over-optimistic. The concept of a meaningful regional livestock sector strategy or investment program met considerable opposition among officials of the member states,

TABLE 1

AID Entente Livestock Sector Loan - Approved Sub-Loans

(in thousand dollars)

Title	Sub-Loan Agreement Signed	Expected Completion Date	Amount of Sub-Loan Total	FX	LC	Terms of Sub-Loan Grace	Repayment
First Tranche							
1. Ivory Coast: Six Slaughterhouses	6-27-73	12-27 -74	$500,	$11,	$489,	2 yrs. 2%	15 yrs. 3%
2. Dahomey: Cotonou Slaughterhouses	1-29-74	1-29-76	900,	78,	822,	5 yrs. 2%	20 yrs. 3%
3. Cotonou Markets	1-29-74	1-29-76	90	10	80	2 yrs. 2%	20 yrs. 3%
4. Niger: Cattle Trails	1-18-74	7-18-75	900,	225,	675,	7 yrs. 2%	28 yrs. 3%
Second Tranche							
5. Ivory Coast: Abokouamekoo and Sipilou Ranches	6-27-74	6-27-77	$1,125,	270,	855,	5 yrs. 2%	15 yrs. 3%
6. Ivory Coast: Seed Farm	6-27-74	6-27-77	450,	72,	378,	5 yrs. 2%	15 yrs. 3%
7. Togo: Cattle Trails	5- 9-75	11- 9-76	250,	120,	130,	2 yrs. 2%	25 yrs. 3%
8. Ivory Coast: Entry Posts and Trails	5-10-75	5-10-77	1,500,	350,	1,150,	2 yrs. 2%	20 yrs. 3%
9. Niger: Cattle Trails (Amendment)	2-25-75	7-18-75	285,	167	118	7 yrs. 2%	28 yrs. 3%

jealous of their political prerogatives and a regional strategy was never prepared by the ELC. Donors proved hardly more amenable to regional cooperation and although a Consultative Committee has, at least, nominally been created, the Entente initiative to develop a plan for multi-donor support of a regional livestock program has not progressed.

Lacking an agreed regional livestock strategy which could be used as the basis for setting priorities for projects proposed by member states, and hampered by the limited availability of well-designed projects, Entente review of proposed sub-projects was generally limited to a determination of their basic economic and technical feasibility based upon AID-approved standards for approval of sub-loans. With one exception (the Ivory Coast Ranch project) the AID evaluation team felt that all approved projects were feasible and will probably achieve their stated objectives. The particulars of the sub-loans are found in Table 1.

The geographical distribution of loan funds depicted in Table 2 is disquieting. The availability to Niger and Upper Volta of a large quantity of grant funds from other donors discourages the Sahelian countries from proposing projects to the EF for loan financing. While the CAP projected use of 50% of loan funds in the interior countries, only 20% (1 project in Niger) was actually used for these countries. Sixty percent of the loan funds were used for four projects in the Entente's richest country - the Ivory Coast. This is due in part to the Ivory Coast's superior capacity to plan and design projects which meet AID/Entente standards.

C. Project Management

Implementation of the Entente Livestock sector loan has been beset with problems. Although the sluggish disbursement of loan funds reflects in part delays in the signature of the ELC protocols, which were CPs to disbursement of the $4 million 2nd tranche, they are also a reflection of other program management deficiencies which are summarized below.

1) Poor utilization of French and American technical assistance personnel. ELC leadership has taken a relatively passive position regarding assistance to member states in project design, project redesign following ELC appraisal of marginally unacceptable projects, and dealing with problems of sub-project implementation. The ELC was reluctant to allow the expatriate personnel at its disposal to take on troubleshooting roles, to travel frequently to assist member states to resolve sub-project design and implementation problems.
The ELC has elected not to assume an active role in establishing a regional strategy for livestock development when a vigorous problem-solving approach would have been more appropriate to achieve project

TABLE 2

AID Entente Livestock Sector Loan I

Geographical Allocation of Funds

	Suggested $ 000	(CAP) %	Actual $000	%
Ivory Coast	1,200	20%	3,575	59.6%
Benin	920	15.4%	990	16.5%
Togo	890	14.8%	250	4.2%
Upper Volta	1,340	22.3%	0	0
Niger	1,650	27.5%	1,185	19.7%
	6,000	100 %	6,000	100 %

goals. In all fairness, however, when member states have themselves had the technical capacity to resolve loan-related problems, they often can be criticized for passive inattention.

2) Inadequate dissemination of information regarding loan procedures. In part a reflection of the paragraph immediately above, sub-loan regulations (i.e. standard format for submission of sub-projects, regulations for US and shelf-item procurement) have been printed, approved by REDSO and distributed by the ELC, but are often still improperly understood and followed by Livestock Service officials in member states, who have had no previous exposure to AID regulations or US procurement.

3) Design Standards/U.S. Procurement. Several projects submitted for Entente loan funding have been designed by French consultants and equipment specifications reflect French rather than American commodity standards. This caused a lengthy delay in one sub-project (Cotonou Abattoir) while a Code 935 procurement waiver was reviewed in AID/W and finally rejected. It has also caused shorter delays in the procurement of U.S. commodities for other sub-projects.

4) Deficiencies in AID technical assistance and project monitoring. Delays in loan disbursement and deficiencies in the quality of sub-projects must be attributed in part to AID. As noted above, loan design and conditions precedent, while imaginative, were over-optimistic and in some cases quite unrealistic and led to major delays in programs implementation. AID long term technical assistance personnel who worked with the ELC in all cases were largely ineffective due to either poor French speaking ability or passive attitudes towards their job. AID project monitoring responsibilities were diffuse and confusing to the EF and ELC (divided between AID offices in Niamey and Abidjan) and were accentuated by frequent AID personnel changes. Finally, the project suffered from delays in issuing letters of commitment.

D. Summary

Evaluation of the 1st Entente Livestock sector program clearly indicates that the program design was based on certain assumptions that were later proved to be invalid and that program management by both the implementing agencies and AID was mediocre. While we have stressed the deficiencies in the program the positive side of the balance sheet is also lengthy. The attempt to form a regional common market for livestock and meat, while not having fully met program objectives, has encouraged regional livestock policies in other areas and may well be cited in the future as the catalyst for the creation of a larger, more effective regional livestock program, possibly through the fusion of the ELC and the CEAO or through the recently organized CEEAO or ECOWAS (Economic Community of West African States).

The program has allowed AID to transfer significant resources to a priority sector in francophone West Africa following AID regional policy directives. While sub-projects approved under the loan often had minor regional significance they usually were high on the list of national livestock priorities and should achieve their stated objectives. A large number of good livestock projects which should have a significant effect on livestock production and marketing were designed and executed with minimal direct AID administrative involvement in this program.

Finally, although program management has proved fitful and loan disbursement has been slow, lessons have been learned. A clearer understanding of AID implementation procedures now exists at the ELC, the Entente Fund, and in the member states. The proposed second livestock program has been designed in a way which should minimize loan implementation problems in the future.

Loan Implementation Schedule

	CAP	ACTUAL
1. Loan Authorization	Feb. 1971	Feb. 1971
2. Loan Signature	March 1971	May 1971
3. Fulfillment CPs 1st Tranche	June 1971	Feb. 1972
4. ELC Approval Protocols	Sept. 1972	Feb. 1974
5. Fulfillment CPs 2nd Tranche	Sept. 1972	March 1974
6. Final Commitment Sub-Loans	June 1973	May 1975
7. TDD for AID Loan	August 1974	Nov. 12, 1976 (projected)

B. Project Description

Summary

This sectoral program supports major initiatives on the part of the Entente Fund and its member states to increase the efficiency and productivity of livestock production in the Entente region, to foster increased regional cooperation and coordination in livestock production and marketing, and to support within the region a process of sectoral analyses which will serve as a continuing basis for policy and program refinement, evaluation and development.

This program deals with the livestock sector in the Entente states on a regional rather than a national basis. This regional approval contains certain advantages and certain disadvantages that must be understood in program design and evaluation. In 1970 the Entente member states created the Entente Livestock Community (ELC) which has since become, along with the Entente Fund, a forum for the debate of protocols designed to improve the regional marketing of meat and livestock among the Entente states. The Entente Fund has now agreed to use this same forum for debate, analysis and evaluation of policies and projects that have been or will be designed to improve the efficiency of livestock production in the Entente region. Thus, this regional approach to livestock sector programs should encourage a certain multiplier effect in the adoption of programs and policies which can best lead national governments towards the achievement of certain commonly agreed upon sectoral objectives.

A second advantage to the regional approach is that Congressional country limitations effectively preclude AID from providing bilateral assistance to 3 of the 5 member states of the Entente Fund (Ivory Coast, Togo, Benin).

A disadvantage to the regional approach is the limited sectoral influence this AID project can have on any of the 5 countries. The institutional capacity of the Entente Fund limits the levels of donor funding which can be effectively transfered by the EF to member states. Thus only $7.5 million in AID capital funds will be divided among the 5 member states over a 3-year implementation period; hardly a sufficient financial incentive in and of itself to induce major sectoral change.

The AID approach, therefore, is to provide several modes of mutually reinforcing development assistance (technical asst., training, regional meetings, research, etc.) which when coupled with counterpart inputs should in turn reinforce the value of the limited capital resources available for the program. Capital resources will be used for sub-projects which test various projectized approaches to achieving sectoral objectives. The results of the sub-project will be thoroughly evaluated and fed back into a continuing process of regional sectoral analysis. The results of this sectoral program will not be measured by major shifts in budgetary resources or in major institutional reorganization, but will be reflected in more subtle indicators of progress which reflect better understanding of the importance of small producers in increasing livestock efficiency and production is the member states and a greater appreciation of the value of increased regional cooperation and coordination in livestock production and marketing in West Africa.

1. Logical Framework

a. Sector Goal

The livestock sector goal for the Entente region is (1) to increase the availability of reasonably-priced animal protein for consumption within the region and (2) to augment the standard of living of those rural poor associated with livestock production. While the second goal reflects AID's Congressional Mandate and needs no justification in this document, the first goal requires some explanation.

The gap between demand for animal protein and its supply in the Entente region appears to be gradually expanding. A 1967 study financed by the Entente Fund, "Supplying Middle-West Africa with Meat", 1967 by SEDES, provided the first region-wide projections of meat supply and demand in the Entente region. The study indicated that without a major effort to increase livestock production and improve marketing, the meat deficit within the region as a whole would increase by more than 5 times between 1966 to 1980, from a deficit of 43,000 M.T. in 1966 to a deficit of 262,000 M.T. in 1980*.

*Meat deficit was defined as the difference between the projected regional demands and supply of meat at 1965 price levels.

Progress in increasing the supply of meat and the region's livestock sector productivity was interupted and seriously retarded by 1968-73 Sahelian drought. The sise of the region's composite cattle herd in 1973 is probably slightly below the size of the 1966 herd (see Table 5 on page 35). Meanwhile population growth in the region has increased at approximately 2.5% per year and economic growth especially in the Ivory Coast, Togo and neighboring Nigeria has strongly expanded the market demand for animal protein.

Although no aggregate statistics are available, it appears clear that per capita meat consumption is decreasing in the region with its greatest impact on those whose income level has not increased appreciably in recent years. As meat becomes more scarce and prices rise in urban coastal markets, the supply system pulls a greater portion of available meat to markets such as Abidjan and Lagos, leaving lesser quantities for consumption in the urban areas of the interior states and practically depleting the rural zones of animal protein. A major effort to increase livestock production in all states of the Entente region is urgently required. In addition concurrent actions are required to reduce losses in and improve the efficiency of the regional marketing system if the sector goal -- "to increase the availability of animal protein at reasonable prices" -- is to be achieved.

A basic indicator of goal achievement for the first goal - increased availability of reasonably priced animal protein - will be stable or increased per capita consumption of animal protein in the region. More detailed consumption studies will provide breakdowns of per capita animal protein consumption by income group. Measures of goal achievement for the second goal - improved standard of living of livestock producers - will include improvement in standards of living as reflected by economic and social indicators. Since such aggregate measures in Africa are fairly imprecise and often mask inequalities within and between economic and social groups, perhaps a more reliable indicator is the degree to which government strategies and projects are designed to increase livestock production by working through rather than around the rural poor. Although this indicator measures government "input" rather than "output" (results), it clearly will indicate the degree to which the AID/Entente program has encouraged the redirection of government programs towards dealing with the rural poor.

A basic assumption for achieving the sector goal is that participating governments will recognize the long-term economic and political benefits of increasing the productivity and standards of living of the rural poor. Until now

Entente governments have tended to prefer livestock development strategies and projects such as state ranches or production centers which place responsibility forproduction directly under government bureaucratic control. These projects generally have little or no effect on the productivity or income of the traditional herder. However, Entente-member governments have indicated to the project design team that they understand the development philosophy underlying the AID/Entente program and, further, are willing to pledge themselves to place increased emphasis on developing livestock sector strategies which improve the productivity of the small producer.

A second basic assumption is that appropriate livestock strategies and livestock-related technologies are available or can be devised to increase livestock production among the rural poor. In other words, do we yet have a package of livestock inputs or a list of proven interventions which can improve the livestock productivity of the rural poor? While not overly optimistic in this regard, several interventions (described in the technical soundness section) have proven reasonably successful and can serve as examples for Entente sub-projects. In addition, this program will fund a variety of small innovative activities and will be a valuable laboratory for testing new interventions designed to affect the sectoral target groups.

b. Project Purpose

One purpose of the program is to increase the efficiency and productivity of the livestock sector in the Entente countries while increasing the standard of living of small livestock producers. Increased sectoral emphasis will be placed on developing and testing sectoral strategies and specific interventions which can benefit larger numbers of small livestock producers. A second purpose of the program is to foster increased regional cooperation and coordination in livestock production and marketing in the Entente states and to support within the region a process of sectoral analysis which serves to provide continuing informationto be used in policy and program evaluation and development.

Increased efficiency and productivity in the livestock sector is a major objective of all Entente-member countries. As more fully discussed in Section III A, Economic Analysis, available data indicates that:

(1) the recent Sahelian drought is now being felt in reduced cattle off take and as an aggregate decline in the supply of beef from the Sahalian states;

(2) the superior purchasing power of the coastal countries is tending to draw more of thelimited supply of meat from urban markets in the interior countries and from rural areas to the richer coastal markets;

(3) the rural population with the slowest rate of increase in income, will be the ultimate losers in the allocation of supplies and their red meat supply may all but disappear;

(4) the livestock productive capacity of theSahel is limited by major ecological constraints. Even assuming a rapid reconstitution of the Sahelian herds, and a higher offtake from those herds, the Sahel will in the long-run supply a decreasing portion of the total regional demand for meat.

Entente-member states have placed increasing emphasis on improving productivity and efficiency in the livestock sector, as indicated by major increases in development budget expenditures in livestock (see Section III-A) and their interest in obtaining additional donor resources forlivestock production projects. As a reflection of their concern, the Council of Ministers of the Entente Livestock Community in January 1975 unanimously recommended that the second AID/Entente livestock sector program concentrate on increasing livestock production throughout the Entente region. Thus, while the first AID/Entente livestock project placed major emphasis on strengthening market and transport linkages between Entente states and funded several slaughterhouse and cattle trail projects, the second AID/Entente livestock project will encourage increased production and improved productivity while giving marketing and transport a second priority ranking.

To reduce both the short-term and long-term meat deficits, increased attention must be given to the production of appropriate livestock in the Guinean and Sudanian zones of West Africa. The program will support increased efficiency and productivity in <u>all</u> of the Entente states. In the short-run it is clear that alternative sources of protein such as small small ruminants, poultry and pigs, which mature more quickly than cattle, and which are traditionally raised in the Guinea and Sudanian zones, can play a major role in the supply of animal protein.

In supporting this first project purpose the participants in this sectoral program will, by means of loan and grant signature, agree to support the following common sectoral objectives:

(1) to increase the efficiency and productivity of the livestock sectoral in the Entente states and in doing so to place increased emphasis on the development and testing of low-cost technological improvements which can benefit small livestock producers and in developing systems through which livestock services in

the member states can provide these technological improvements to large numbers of small livestock producers at acceptable costs to government; and

(2) to increase the production of alternative sources of animal protein (small ruminants, poultry, pigs) as a means to augment the supply of animal protein which can be readily purchased by consumers at low-cost. Progress in relation to this purpose will be measured in terms of (a) the degree to which government programs reflect greater understanding of the importance of small producer in the livestock sector (number of projects designed to affect this target group; trends in government-supported research; specializations in which government cadre are trained, etc.) and (b) the degree to which government programs support increased production of alternative sources of animal protein.

The second purpose of the program is to foster increased regional cooperation and coordination in livestock production and marketing in the Entente States and to support within the region a process of sectoral analysis which serves to provide continuing assistance for policy and program refinement, evaluation and development. The Entente Fund and the Entente Livestock Community (ELC) have since 1971 played critical roles in the design, negotiation and implementation of several major regional protocols concerned primarily with improved regional marketing of livestock and meat. Given the region's increased interest in livestock production these regional organizations have been asked by member states to play a greater role in promoting dialogue, cooperation and coordination in livestock production policies and projects within the region while not neglecting to further improve the regional marketing of livestock and meat.

In supporting this second project purpose the participants in this sectoral program will, by means of loan and grant signature, agree to support these common sectoral objectives:

(1) to improve regional livestock marketing channels which facilitate the effective movement of livestock and meat between the Entente states and to fully implement existing regional agreements (protocols) and

(2) to endeavor to promote improved regional cooperation and coordination in the development of livestock policy within the Entente states.

Progress in relation to this purpose will be measured in terms of (a) the degree to which existing regional protocols have been fully implemented and new protocols investigated and (if appropriate) approved, (b) the number of livestock marketing and transportation projects linking member states which have been designed and implemented, and (c) the degree to which periodic regional meetings have been institutionalized as the locus for discussion of alternative livestock sector strategies and projects, the evaluation of project funded intervention, and the review and discussion of the results of sectoral research within the region.

A major assumption for achieving the project purpose is that Entente member-states will continue to find regional cooperation in the livestock sector in their mutual self-interest. Despite certain differences in political philosophy between Entente governments, the design team found keen interest in regional livestock cooperation in all Entente-member states. There is no indication that any of the member states intend to separate themselves from the ELC or the EF. It is more likely that the scope of regional livestock organizations in West Africa will expand over the next 4 years with the fusion of the ELC and the CEAO (Economic Community for West Africa). A fusion of this nature would link Senegal, Mali and Mauritania to the Entente states and would probably be a positive step towards even broader regional coopeation (including Nigeria and Ghana) in West Africa.

Outputs

The project has been designed so as to produce a series of mutually reinforcing outputs which will contribute toward achievement of the overall sector objectives. If achieved, these outputs together will represent a cohesive whole which is substantially greater than the sum of the individual outputs

1. A major output will be the design, implementation and evaluation of sub-projects which will test the viability of various means to achieve sectoral objectives. Approximately 4-6 loan funded and 3-5 grant funded sub-projects will be financed from the $4.5 million in loan funds and $3.0 million in capital grant funds made available by AID and from host government counterpart funds.

Grant funds may be used for projects in Niger, Upper Volta and Benin, the region's poorest countries. Loan funds will be sub-loaned by the Entente Fund for all projects in Ivory Coast and Togo and for Benois projects which yield returns sufficient to fully amortize a sub-loan. Funding levels were determined after a thorough AID review of a list of sub-projects proposed for AID/Entente funding by Entente-member countries, and represent a conservative appraisal of the Entente Fund's capacity to design and approve such projects within the time-frame of the project.

Sub-projects must meet AID/Entente Fund sub-project eligibility criteria outlined in Section II.E.3. These criteria ensure, inter alia, that sub-projects will be designed to primarily affect the sector target group - the small livestock producers, and will encourage the marketing of livestock and meat between Entente-member states.

In order to ensure an equitable geographical distribution of project funds, no more than 33% of project funds will be alloted to any single Entente-member-country.

The sub-projects will explore various means to achieve sectoral objectives and will be carefully evaluated by the Entente Fund on a periodic basis with evaluation results discussed at regional meetings.

2. Technical Assistance

The loan I evaluation indicates that the timely submission of sub-projects and rapid disbursement of sub-project funds will require a considerable degree of AID/Entente technical assistance to member countries to ensure adequate sub-project design and technical assistance in revising sub-project submissions which are deemed deficient. To avoid the design pitfalls of the first AID/Entente program, AID will fund the services of a livestock production specialist who will work with FAC-funded specialists at the EF and the ELC. This specialist will be specifically responsible for coordinating Entente project design assistance to member countries. The Fund will also have at its disposal 40 man months of short-term U.S. and African consultants to assist in specific sub-project design. These consultants may also be called upon to assist in developing or implementing regional protocols. It is anticipated that this team will participate in the design or re-design of approximately 10 projects over the first 3 years of the program. Approximately 7 of these sub-projects will be funded under the second AID/Entente livestock project and 3 more may be available for funding under subsequent Entente Fund or donor projects. Thus, the technical assistance is of sufficient magnitude to develop a shelf of livestock projects supporting sectoral objectives - a shelf that could be funded by other donors, host governments, or possibly AID at a later date. This team need not participate in the design or re-design of all sub-projects. In several Entente countries UNDP and FAC have indicated a willingness to design sub-projects for Entente funding and this cooperation will be strongly encouraged. In other countries such as the Ivory Coast, national organizations are often capable of designing acceptable livestock projects without AID or Entente assistance.

3. Training

All too often key livestock service personnel in the Entente states are lacking or have only limited training in the theory and practice of livestock production, range management, agricultural economics, management/administration, and project design. Several governments have requested USAID scholarships for practical training programs in the above subject matter. Coordination of these training requests and the design of appropriate training programs in the U.S. and in Africa is a responsibility welcomed by the Entente Fund. Training in the U.S. will be from 8 to 24 months duration and training programs will be individually tailored stressing the practical application of theoretical concepts with emphasis upon subject matter which supports the sectoral objectives of the program. Practical training in African institutions will also be eligible for USAID funding. It is anticipated that up to 35 Africans from Entente-member country Livestock Services will receive training over a 4 year period -- 20 in the U.S. and 15 in Africa.

4. Research

A major objective of this program is to encourage a continuous process of sectoral analysis within the Entente region. This process will consist:

a) the bringing together in a descriptive manner of existing knowledge about the sector, its performance and its relationship to other sectors of the economy in the Phase I CRED report;

b) Identification of sector development problems and of subject matter areas for which analysis, data and information are lacking. From this an array of particular micro-analyses required to provide answers to key sectoral questions canbe prepared and orders of priority for micro-studies established;

c) the conduct of a series of partial analyses in accordance with the priorities established. Analyses will be carried out by 5 field researchers in the Ivory Coast, Upper Volta, and Niger with host government assistance;

d) based on field research 2 broader sub-sectoral studies dealing with livestock production systems and livestock marketing systems along with feed-back from sub-project evaluations, alternatives policies and investment programs will be delineated and discussed by the participating organizations. The Center for Research on Economic Development (CRED), at the University of Michigan has already begun a research program of this nature with AID financial assistance and Entente Fund and Entente member-state cooperation.

5. Annual regional meetings of Entente member states to discuss livestock sector objectives

Under the auspices of the Entente Fund, and the Entente member states, AID and other donors will be invited to meet on an annual basis to review livestock sector objectives in the Entente region, to discuss the interim results of livestock sector research (supported under this project and under other funding), to review the results of sub-project evaluations, and to consider ways in which regional cooperation and coordination can be improved in the livestock sector within the Entente states.

6. Implementation of Protocols

A final project output is the full implementation of ELC livestock protocols approved over the past 4 years. Four protocols (statistics, animal health, customs, and regulation of professions) were conditions precedent to disbursement of the second tranche of the AID Entente Livestock loan. Three additional protocols have been approved by the ELC Council of Ministries. These include grading of meat, grading of livestock and cattle trails. National level implementation of a signed protocol generally consists of the following steps: (1) publication of the protocol in the Official Journal of the nation; (2) preparation and formal approval of the "application decree" for the protocol; (3) supervision to ensure that the regulations of the "application decree" are being followed by the responsible government service. Some of the protocols require complex bureaucratic actions such as the provision of cattle "passports" to herders and eventual collection of those passports at the final marketing point of the animals. The ELC with French technical assistance will continue to provide assistance to member governments to facilitate the implementation of the protocols and may propose additional protocols or amendments to approved protocols as deemed necessary by the member states. Short-term U.S. technical assistance may also be directed, as required, to assist in the full implementation of the protocols.

A key assumption for achieving project outputs is that close working relationships, especially in the area of sub-project design, can be established and maintained between Entente staff and member-country livestock service officials. This will require more vigorous use of ELC and EF technical specialists than occurred under the first loan and a great deal of sensitivity on their part to host country prerogatives.

A second assumption is that Entente member-states will respect their pledge to fully implement regional protocols within reasonable time frames. Delays have occurred in the implementation of certain protocols and progress has been slow. Initial protocols signed in July, 1971, have not yet been fully implemented in some states. On the other hand, the customs protocol which calls for a decrease in import and export tariffs by 10% by January 1, 1976 has already been enacted by several states. There is no indication that delays in protocol implemenation are due to conscious government decisions; they are most likely due to bureaucratic inefficiencies.

Table 3

Technical Assistance Plan

(in U.S. dollars)

		FY 76	FY 77	FY 78	TOTAL
1.	**Project Management**				
	a) Project Manager: Livestock specialist for three years at $60,000 p.a.	$120,000	0	60,000	180,000
	b) African Advisor for training and statistics at ELC	12,000	8,000	4,000	24,000
2.	Subproject Design and Implementation				
	40 person months	105,000	105,000	70,000	280,000
3.	Training of African personnel				
	a) 20 trainees in U.S. or other Code 941 countries	50,000	100,000	50,000	200,000
	b) 15 trainees in Africa and/or seminars/conferences	15,000	30,000	15,000	60,000
4.	Equipment for ELC	20,000	0	0	20,000
		322,000	243,000	199,000	764,000
5.	CRED Research (University of Michigan)				
	Entente Livestock Sector analysis and assistance in project design. FY 75 funding of $120,000 already authorized.	178,000	237,000	65,000	480,000
6.	TOTAL	500,000	480,000	256,000	1,244,000

d. Inputs

i) Capital Assistance

Capital assistance consists of a $4.5 million loan to be sub-loan to Entente member states and a $3.0 million capital grant which will be sub-granted to member states. Sub-project approval criteria, sub-loan terms, procurement regulations and an illustrative list of sub-projects are described below.

In order to encourage geographic distribution of project funds, no one Entente-member country may receive more than 33% of total project funds ($7.5) or approximately $2.5 million.

ii) Technical Assistance

AID will provide a technical assistance grant for a three-year period. AID's funding will be complemented by an annual Entente Fund contribution from the Fund's Development Intervention Budget. After the three-year AID grant, technical assistance will be financed by the interest spread accumulating from reflows to the Entente Fund from Entente Livestock Sector Loans I and II.

AID technical assistance will consist of the following elements:

1. Project Management

a) A livestock production specialist who will work under Entente Fund direction in Abidjan for the first three years of the project. He will be responsible for coordinating EF and ELC project design activities and will assist those organizations in the review of sub-project proposals. He will also assist in establishing agendas for the annual meetings of the Entente-states to discuss livestock sector objectives.

b) An African Statistics/Training officer at the ELC. Until March, 1975 AID funded a full-time expatriate statistics specialist at the ELC. AID has encouraged gradual Africanization of the various Entente organizations for several years to no avail. The EF and ELC have now agreed to replace the expatriate statistical advisor with an African who will also assist in the management of the training program described above. AID will finance a portion of this person's salary over 3 years on a descending scale (100% first year; 66% second year; 33% third year). The ELC will solicit candidates for the position in member countries, hoping to attract a veterinarian or an agronomist with at least 5 years practical experience. He will then receive supplemental training in statistics in the U.S., and in collaboration with AID/OIT will visit potential training sites in the U.S. and learn AID training and documentation procedures.

2. Sub-Project Design and Implementation

Short-term consultants for project feasibility and design studies, amounting to 40 man-months (assuming 4 man-months for each of 10 sub-project designs). The livestock production specialist and the Entente Fund will have recourse to these technical services as needed. The EF will prepare scopes of work for consultant services in collaboration with the Entente-member government where the project will be designed. The EF will contract for needed services or ask AID to do so. In most cases consultants will work in close collaboration with host country officials.

3. Training of African Personnel

Practical training will be provided for Livestock Service staff of Entente member countries in the U.S. or Africa in subject matter such as livestock production, range management, agricultural economics, management/administration, and project design. Up to 35 Africans will be trained over a 4 year period (20 in U.S., 15 in Africa).

4. Equipment for the ELC

AID will furnish the ELC with 2 office machines essential to the efficient functioning of the office. A new photocopy machine similar to one now used at the U.S. Embassy in Ouagadougou will be provided. A machine provided by AID in 1972 has not functioned properly in the Voltan heat and must be replaced. (The U.S. Embassy at Ouagadougou experienced similar problems with a machine of the same brand and has since replaced it). A collator is also required for the preparation of period ELC reports. At present the whole ELC staff must assemble to manually collate these reports.

iii) CRED Livestock Research Project

The Center for Research on Economic Development (CRED) at the University of Michigan has recently undertaken an extensive study of the livestock sector in the Entente countries. This research will be carried out in collatoration with African research institutes and national ministries. The Centre Voltaique de Recherche Scientifique (CVRS) and SAED in Upper Volta will collaborate with CRED on research activities. The Director of Planning for ORD's and the Director of Livestock in Upper Volta have also pledged their support and collaboration. The Ivory Coast will collaborate through the Centre Ivoirien de Recherche Economique et Sociale. Niger will also participate in carrying out a study on pastoral livestock production.

The purpose of the CRED livestock research project is to

a) to provide policy makers with an analytical framework that will facilitate decision making in the livestock sector; and

b) to assist the Entente Fund, member states and AID in program design and evaluation through test applications of the preliminary analytical framework.

To achieve the project's overall objectives, the following research activities shall be conducted:

1) description, analysis, and evaluation of the production and marketing sub-systems, including the resource base;

2) development of a comprehensive analytical framework for the livestock sector based on the sub-system studies;

3) field research to gather information and test hypotheses specified in earlier stages of the project;

4) analysis of livestock's role in the region's overall economic development;

5) test applications of preliminary versions of the analytical framework to identify critical points of intervention and, in cooperation with AID and host governments, to assist in design and evaluation of fundable development projects.

The CRED research project will contribute to the implementation of the Entente Livestock Sector II project both directly and indirectly. Indirectly, the research will contribute to a better overall understanding of the livestock sector in the Entente Region. Livestock production and marketing form an interrelated system spanning the five Entente States and several of their neighbors. Planned interventions at any one point in the system should be guided not only by consideration of that one point, but also by an understanding of how changes at that point affect the rest of the system and, likewise, how the rest of the system contributes to determining outcomes at the point of intervention. In addition, plans for new programs and policies need to take into account the resource base, which must be considered as an integral part of the system.

iv) Other Donor Inputs

Technical Assistance

As noted above FAC and UNDP indirectly support the Entente livestock program by bilaterally funding project feasibility and design studies which often are submitted by Entente-member states for AID/Entente funding. In addition FAC continues to fund three long-term livestock specialists at the ELC (veterinarian, marketing specialist, international trade specialist) and the EF agriculture specialist (Mr. Gurgand), who undertook major management responsibility for the first AID/Entente Livestock program. FAC indicates that these technicians will remain in their present roles for the foreseeable future with the possible exception of the international trade specialist.

E. Contributions of Participating Countries and Institutions

A primary contribution of participating countries to this program is the provision of funds for the operating budgets of the ELC (approximately $120,000 annually) and the Entente Fund. Assessments are proportioned among Entente-member countries based on their financial and economic status.

The participating governments will also finance at least 25% of all loan funded sub-project costs and 10% of all grant-funded sub-project costs during the period of AID financing of sub-projects (limited to 3 years). They will then assume responsibility for all continuing costs of sub-projects after AID assistance terminates.

The participating governments will provide qualified candidates for training in areas related to sectoral objectives. They will participate in periodic regional planning/coordination meetings convened to discuss the program objectives and to consider recommendations for programmatic changes which will flow from the evaluation of pilot interventions (sub-projects) and program-related research. They will endeavor to design and implement additional projects for donor or national funding which will continue the movement towards the achievement of sectoral objective and will continue to support the regional objectives of the Entente Livestock protocols and will work through the EF and the ELC to improve regional cooperation and communication within the livestock sector.

The Entente Fund's financial contribution to the program will consist of annual contributions from the Fund's development budget. This contribution will amount to approx. $68,000 (CFA 15 million) in CY '76, CFA 20 million in CY'77 ($100,000) and CFA 25 million ($132,000) in CY'78, Entente Fund monies will be used to complement AID technical assistance in the furtherance of project objectives. In addition as in the Entente African Enterprises project, the fund will assume administrative costs such as office space, regional meetings and travel expenses.

The Entente Fund will also solicit the support of other donors in providing financial and technical assistance directed towards the livestock sector and will utilize the reflows from program sub-loans to finance the future costs of technical assistance which will have as its purpose the promotion of the sectoral objectives of this program.

2. BORROWER AND PARTICIPATING INSTITUTIONS

A. The Borrower and Administering Agency - The Entente Fund

The Borrower and Grantee is the Mutual AID and Guaranty Fund of the Council of the Entente (the Entente Fund), the economic arm of the Council of the Entente, established in 1966 by the Governments of the Ivory Coast, Niger, Upper Volta, Benin and Togo. In recent years the Entente Fund has become an economic development institution which has served as a major vehicle for channeling AID assistance to the five Entente countries. The principal objectives of the Fund are: a) to promote economic development and integration of the region; b) to develop specific projects and obtain assistance from donors; c) to provide a Guaranty Fund to encourage investments in the member states; and d) to foster increased trade, commerce and investment between the Entente countries and their neighbors.

The 1966 convention creating the economic and development arm of the Entente Fund provides for a Secretariat headed by an Administrative Secretary. The policy of the Presidents of the five member countries has been to have a small, well-knit, and technically competent staff under the direction of an experienced African with broad knowledge of the field of economic development and finance. It has intentionally avoided creating a large" unwieldy organization, with the result that staff time is used almost exclusively on the direct development and implementation of projects at the regional level.

At the present time the Administrative Secretary is assisted by a staff of five donor-financed advisors, four French and one American. These specialists advise on management" budgetary control and finance, agriculture and agronomy, project engineering, and economic development planning. Responsibility for each current program is assigned to the appropriate advisor. The entire staff is available for work on any specific project, thereby providing expert coverage for economic, financial, technical and engineering aspects of projects. For specific development projects undertaken by the Entente Fund, special personnel are recruited on a contract basis. These personnel are not considered full fledged staff members of the Fund, because they deal exclusively with the project for which they are recruited.

Several specialized institutions have also been set up by the Fund in agriculture, livestock, public works, economic integration and trade expansion, telecommunications, transport, tourism and industry. (See Section III. D. for a financial analysis).

B. The Entente Livestock Community (ELC)

The Conseil Economique des Betails et de la Viande (Entente Livestock Community) was formally created in May, 1970 by the Chiefs of the five Entente member states. The objective of the ELC is "to promote in common in a regional framework the production and trade in livestock and meat". (See Appendix II.A for Convention creating ELC). The charter of the ELC is composed of the Convention and a series of agreements on protocols concerning: a) technical cooperation; b) trade; c) payment; d) financing; e) harmonization of national legislation regarding customs, fiscal policy, professions or trades, animal health or sanitation, and bank credit. Nine such agreements have been approved to date.

The supreme organ of the Community is a Council of Ministers, although final authority rests in the joint decisions of the Entente Chiefs of State. The Council of Ministers is composed of two representatives from each state, one of which is responsible for animal production and health, the other for trade and economic affairs. The Council meets twice yearly.

An Executive Secretariat, located at Ouagadougou, is responsible for preparing all directives for Council action and for executing the directives approved by the Council. The Secretariat is divided into four sections, each typically headed by an expatriate advisor: 1) animal production and herd health (Dr. Garcia - FAC); 2) trade and transport (Mr. Arnal - FAC); 3) information and statistics (formerly Mr. Balmir, USAID, now vacant); 4) regulation and taxes (Mr. Loridon - FAC).

The ELC annual budget is in effect determined by the Entente Fund since the Fund provides 95% of its resources. The 1975 budget totaled approximately FCFA 20 million or about $100,000. See Section III.D.2 for financial analysis including ELC budgets for 1973-1975.

C. National Institutions

Experience in the first AID/Entente livestock program illustrates that a complex of national institutions in the 5 Entente states participate in a program such as the one proposed herein. Potential sub-projects are usually submitted to the AID/Entente programs by national Ministries of Livestock, Planning, or Rural Development. Sub-loan agreements are signed by these same institutions with Ministry of Finance concurrence. Sub-project implementation may be the responsibility of the Ministry of Agriculture, the Livestock Service, a parastatal institution such as SODEPRA, (Societe pour le Developpement de Production Animale in Ivory Coast), a regional development organization such as CARDER (Benin) or ORD (Upper Volta), or even a Ministry of Scientific Research (Ivory Coast). While it would be difficult to describe many or most of these potential participating national institutions herein, the assiduous reader can find a discussion of most of the relevant institutions in Niger and Upper Volta in the CWR DAP. In addition the project design team prepared livestock sector analyses for Ivory Coast, Togo and Benin which are attached as Appendix I of this document. The administrative and financial capacity of participating national institutions to implement each individual sub-project will be carefully reviewed by the Entente Fund prior to sub-project approval.

3. SUB-PROJECT APPROVAL CRITERIA

Appraisal and approval of individual sub-projectswwill be the responsibility of the Entente Fund. EF/ELC regulations for use of the first AID loan including criteria for sub-project approval are included in Appendix II.E. In addition, AID has elaborated strict sub-project criteria for the present project. These criteria are discussed below. AID will approve all sub-projects involving more than $1.0 million in AID funds. (See Section IV.A.). AID will also review the consistency of all projects with beneficiary criteria at the project identification stage.

A. Sub-Project Eligibility Criteria (See also Section III.B.2, p.46)

1. Production Sub-Sector

Livestock Production projects which increase the productive capacity of large numbers of livestock producers and which increase the income of the rural poor are eligible. "Livestock" in this context includes cattle, sheep, goats, pigs, chickens, and any other animals which are included within the statutory purview of the Entente Livestock Community. Fish are excluded from ELC purview. Examples of sub-projects eligible for financing under this criteria include animal fattening by small farmers; animal traction; state-managed production centers which place primary emphasis on extension and outreach activities; sedentarization or resettlement activities for herders; financially sef-liquidating animal health projects (no major recurrent costs beyond the duration of the project); department-level extensive livestock production programs; animal breeding; and production credit programs when demand is clearly above the nature and capacity of the AID Entente Enterprises program. Examples of projects not eligible for financing include ranches or livestock production centers which do not place primary emphasis on extension and outreach activities and/or which will not have a major direct impact on large numbers of livestock producers.

2. Marketing/Transport Sub-Sector

Projects which facilitate the efficient marketing of livestock or meat between Entente States are eligible for financing under this program. Acceptable projects include but are not limited to cattle trails, entry posts, and livestock transport schemes. Projects not eligible for financing include slaughterhouses and butcher credit schemes in the coastal countries and marketing/transport projects which facilitate the internal commerce of livestock or meat in the coastal countries. This definition of eligible projects is necessarily imprecise and subject to interpretation. Upon receipt of initial project documentation, the EF solicit from AID an opinion whether the objectives of the proposed sub-projects are consistent with the criteria outlined in para A1 and A2. In cases where the Entente Fund is not certain whether a project is still eligible for financing after final design, it will be encouraged to request an opinion from AID.

3. <u>Duration of AID/Entente Funding</u>

The AID/Entente project will provide sub-project funding for no more than three years in accordance with AID disbursement regulations. Complementary financing necessary for the proper implementation of a sub-project must be assured by the host government prior to sub-project approval. Also the host government must pledge to provide or be responsible for obtaining follow-on financing (beyond the duration of AID/Entente financing) which may be necessary to ensure achievement of sub-project objectives. It is anticipated that several sub-projects will be of an experimental nature with a duration of no more than 3 years. Longer-term projects in Niger and Upper Volta could be financed under AID bilateral programs in these countries.

B. <u>Standards for Sub-Project Feasibility</u>

Proposed sub-projects which meet the above criteria will be reviewed to determine their technical, economic, and financial feasibility based on accepted standards. Sub-projects will also be assessed as to their likely environmental impact and the degree to which they affect the status of women members of the livestock industry. The capacity of the host government to implement properly the proposed sub-project will also be closely assessed. In some cases, especially in countries where trained local technicians are in short supply, it may be necessary for the EF to contract for expatriate technical assistance to assist in the management of a specific sub-project.

C. <u>Relationship to AID Bilateral Livestock Programs</u>

AID is presently designing bilateral livestock programs in the two Entente-member countries which are located in the Sahel: Niger and Upper Volta. In order to ensure general consistency in AID livestock programs funded bilaterally and through the Entente in these countries, during its initial review of a proposed sub-project in Niger and Upper Volta, the Entente Fund will request an opinion from REDSO as to whether the proposed project is consonant with AID bilateral livestock program activities.

4. <u>Illustrative List of Sub-Projects</u>

Over the past 12 months Entente member states have submitted 9 projects for possible funding under a second AID/Entente livestock program. In discussions with government officials and other donors in the five Entente states, the AID project design team identified several additional projects which may later be submitted for funding. The following is an illustrative list of sub-projects which, after initial review by the design team, appear to fall within the priority investment criteria described in Section II.C.1 <u>or might be re-designed</u> to meet those criteria. These activities have not yet been reviewed as to their technical, economic, financial or administrative feasibility, and in many cases will probably require major design attention from Entente Fund personnel. Some of these projects may, upon more detailed analysis, prove to be unfeasible. It is assumed that approximately seven to ten of these projects will be funded under the present program. The sub-projects are described in more detail in Appendix IV.

Grant Funding	Estimated Cost ($ millions)
Niger:	
1. Dosso Mixed Farming/Multiplication Center	0.50
2. Reconstitution of herds through improved nutrition	1.00
3. Poultry Production	.35
Upper Volta:	
1. Cattle Trails in the Central Region	0.50
2. Anti-Parasite Campaign	1.00
3. Peasant Animal Fattening in the Valley of Kou	0.35
4. Center for Port Production	0.20
*Benin:	
1. Extension of FAO Animal Traction Program	1.50
2. Atacora Region Project	1.00
Total Grant Funding	6.40

Loan Funding	
Ivory Coast:	
1. Northern Entry Posts (second phase)	0.90
2. Pastoral Zone Development (with better justification)	1.50
3. Zebu Center	0.50
4. Pork Multiplication Center	1.25
Togo:	
1. Small Ruminants	1.50
2. Mixed Farming	1.00
Benin	
1. Production Center for Animal Traction in Northern Benin	1.00
Total Loan Funding	7.75

*Portions of these projects in Benin may be loan funded.

NOTE: No single country may receive more than 33% of total project funds, or $2,500,000. Therefore not all of the projects cited for Ivory Coast may be funded.

5. TERMS OF SUB-LOANS

Sub-loans will bear an interest rate of up to 3½% during the grace period, and 3½% during the repayment period. Grace periods will be for 10 years and repayment periods will be for 30 years except for exceptional circumstances when the sub-project clearly generates sufficient revenue to pay for itself over a shorter time frame.

SOURCE/ORIGIN PROCUREMENT

A. Procurement of Commodities

The CAP for the first AID/Entente livestock sector loan estimated that about 15% of the $6. million loan or approximately $1.0 million would be used for the foreign exchange costs of sub-projects. In fact the foreign exchange component of approved sub-loans has totaled slightly over that amount -- $1,136,000. Most foreign exchange expenditures were for the import of construction materials such as structural steel, metal fencing, trail markers, and slaughterhouse equipment. The more extensive nature of the second AID/Entente program with less emphasis on costly infrastructure and more emphasis on the provision of services to large numbers of livestock producers should reduce the FX component of the total program. It is therefore estimated that approximately 10% of the capital program or $750,000 will be used for U.S. Code 941 procurement.

Vehicles will be required in the implementation of some subprojects. AID experience with U.S. vehicles in the Entente region demonstrates that such vehicles are of utility strictly under urban driving conditions, and even there, maintenance facilities are inadequate and result in long delays for spare parts. Therefore, under the rough rural driving conditions which prevail in the Entente region, U.S. vehicles are of minimal utility. A waiver is requested in Section IV.F of this document for $200,000 to finance vehicle procurement from U.S. Code 935 countries.

The remainder of project funds will be used to finance local currency financing for livestock projects in the Entente countries. A waiver will be requested for grant funds to provide for local currency financing, and for U.S. Code 941 financing, since these forms of financing constitute the major needs of the least developed countries and the most severely affected countries which are members of the Entente Fund.

B. Procurement of Technical Services

Technical services for both subproject design and implementation will be required throughout the life of the project. Such services will be financed from the technical assistance grant as well as from sub-project funds. Since qualified French-speaking American technicians are limited in number and may be fully absorbed in fulfilling the long-term personnel requirements of several new AID bilateral livestock projects in Senegal, Mali, Mauritania, Niger, Upper Volta, Chad and North Cameroon, it is proposed that limited Code 935 porcurement for subprojects related long-term technical services be authorized. AID, through REDSO/WA, may grant this waiver if 1) the Entente Fund cannot support the cost from its own technical assistance contribution of at least $68,000 per annum; and

2) the Entente Fund has demonstrated that it has conducted a search for technical assistance from U.S. Code 941 procurement sources for a period of no less than three months. This search will commence with advertisements in appropriate U.S. and African newspaper and periodicals, including the Commerce Business Daily, the Small Business Circular, the New York Times, the Herald Tribune and the Wasll Street Journal, as well as technical journals oriented towards the specific talent required.

C. Shelf Item Procurement

The following definition will be applied to imported shelf items: fundable under the project: Items which are normally imported and kept in stock, in the form in which imported, for sale to meet a general demand in the country for the item, are eligible for AID local currency financing, so long as :

1) They do not contain components from other than free world countries;

2) No single shelf item procurement transaction involves more than the local currency equivalent of $3,000 and;

3) The total purchase value of all such transactions shall not exceed $1,600,000 in local currency equivalent.

III. PROJECT ANALYSIS

A. Economic Analysis

1. Introduction

Livestock in the Entente region performs a number of economic functions for producers, farmers, urban residents and governments:

a) For primary producers (pastoralists), stock raising is an efficient means of converting large areas of pasture into food and energy in the form of milk and meat. Secondarily, it is a source of cash income through sales of live animals, carcass and meat, and by-products.

b) For some farmers, the livestock used as draft animals are an expansion of the productivity of their labor; they provide a source for animal traction and manure essential in maintaining soil fertility and expanding crop output.

c) For some farmers, livestock represent a potentially profitable investment and a hedge against crop failure as on-farm feeding of young animals increases marketable value.

d) Among certain ethnic groups in the region, livestock have a socio-religious value and provide means of meeting an infinite variety of socio-economic obligations.

e) For urban dwellers, and the rural populace to a lesser extent, meat is a major source of protein. Thus the delivered price of that meat is of constant concern. Probable future price increases in meat as demand increases will undoubtedly be a political issue in certain areas.

f) For governments in the Sahelian region, livestock represents an extremely important source of export and foreign exchange earnings. Livestock has constituted 35-50% of Voltan and 15-20% of Nigerian export earnings in recent years. In addition, revenues from livestock are a key component of a very narrow tax base.

2. Long Term Trends in the Livestock Sector

The post war period through 1968 was a period of rapid growth in livestock numbers and in the proportion of the livestock population marketed annually throughout

West Africa. This growth was made possible by a period of extremely favcrable rainfall which pushed the grazing zone north by as much as 200 kilometers in some areas. In addition, mass vaccination campaigns and development of permanent water supplies in underutilized areas contributed to growth throughout the sudano-sahelian region. Simultaneously, the demand for meat was growing rapidly in urban and coastal zones, increasing the flow of livestock through marketing channels from the interior states of Niger, Upper Volta, Mali and Mauritania to markets in the Ivory Coast, Togo, Dahomey, Ghana and Nigeria.

By 1968, at the beginning of the drought period, most observers expressed concern that the rangelands and pastures were dangerously overstocked. The less favorable rainfalls of the drought period, and the near failure of rainfall in 1972/73 in the Sahelian zone, reduced forage growth and was directly responsible for the catastrophic losses of livestock which were reported. Losses were greatest among calves and immature stock. The resultant gap in the cattle population pyramid will significantly limit the number of animals reaching maturity and market age for the next two to four years. It will affect the cattle birth rate for a longer period. Ironically, with the reduction in grazing pressure and more favorable rainfalls of the previous season, cattle numbers are again increasing rapidly because more grass is available.

Most observers are again concerned that livestock numbers will quickly reach levels in the sahelian zone where population will be controlled by periodic drought/starvation cycles at a high cost in land degradation and suffering. In any event, it is not probable that the long term livestock populations and meat production from the sahelian zone will far exceed that of the 1966-1968 period without major changes in the traditional livestock production system. See Tables 3 and 4 for cattle population of Entente region.) In order to meet the growing demand for animal protein in the region, it will be necessary to increase livestock production in other climatic zones and to stimulate the efficient production of small ruminants, chicken and fish, all of which could become relatively cheap sources of protein for the local populace.

3. Current Production Levels

The size of the aggregate livestock herd in the Entente region and the productivity of that herd (rate of offtake and slaughter weight) clearly reflect the disastrous Sahelian drought (see tables 4 and 5). Major herd losses in Niger and to a lesser extent Upper Volta have been only partially compensated for by the marginally increased size of the coastal herds. The Entente herd in 1975 is only slightly above 1966 levels.

The Sahelian drought represents an enormous economic loss to the cattle raising population of the Sahel. Eliot Berg 1/ describes 3 aspects of this loss:

"(1) smaller herd size means a smaller flow of current income, mainly because milk supplies are much lower and the sale of animals in exchange for millet may involve higher real cost to the stock-raiser who now has a smaller herd and changed structure; (2) loss of cattle involves reduction in income-generating assets (capital stock). The wealth of herds has thus been gravely diminished; (3) the drought had a series of longer-term effects: it caused generalized feeding deficiencies, increased fractures, reduced fertility, induced higher abortion rates, and reduced survivan rates of calves. All of this may have effects on the productivity of herds. It will surely mean difficulties in reconstituting them. Specialists say that when high rates of death occur, herd structures are transformed. This has undoubtedly happened in some areas. And almost everywhere, the post drought generation of calves is extremely small in number. This will make itself felt in 1977 and 1978, in a scarcity of reproducing animals."

Recent decisions by Sahelian governments to restrict export of livestock to coastal areas (Niger and Mauritania closed their borders in May 1975), clearly indicate government policy emphasis on reconstitution of their herds and a desire to protect domestic consumers against rapid meat price increases. While these measures may be lifted at the end of the current dry season, they demonstrate government willingness to forego export revenues in order to: 1) maintain and eventually increase national herd size; and 2) guarantee a supply of meat for domestic consumption.

1/ The Recent Economic Evolution of the Sahel, Eliot Berg, April 3, 1975, Center for Research on Economic Development, University of Michigan.

Table 4 : Entente Region: Cattle, Sheep/Goat Population Estimates 1966 (a) and 1975 (b)

COUNTRY	CATTLE (thousands)		SHEEP/GOATS (thousands)	
Entente Countries	1966	1975	1966	1975
Ivory Coast	305	490	1,400	1,800
Togo	165	275	1,200	1,296
Dahomey	526	690	1,100	1,280
Upper Volta	2,340	2,500	3,800	4,100
Niger	4,200	3,200	7,950	7,223
SUBTOTAL	7,536	7,155	11,750	15,699
Mali	4,500	4,000	10,100	10,000
Mauritania	—	1,900	—	6,000
Nigeria (north)	7,200	--	20,000	--
Ghana	530	--	2,000	--
SUBTOTAL				
TOTAL REGION				

(a) SEDES, Approvisionnement en Viandes de l'Afrique, Centre West, 1969.

(b) National and team estimates.

Table 5 : **Size of Cattle Herds, 1966-1973**
(thousands of head)

	1966	1967	1968	1969	1970	1971	1972	1973	% "loss" 1973/1972 2/
Chad 1/ 3/	4,400	4,500	4,500	4,500	4,500	4,600	4,700	3,000	37
Mali 3/	-	4,800	4,800	4,900	5,000	5,300	5,000	3,300	34 4/
Mauritania 3/	-	2,400	2,400	2,600	2,600	2,500	2,300	1,600 5/	30
Niger	4,000	4,100	4,200 6/	4,000	4,000	4,100	4,200	2,700 7/	36 7/
Senegal	2,400	2,500	2,500	2,500	2,600	2,700	2,500	2,200	25
Upper Volta	-	2,400	2,400	2,500	2,700	2,500	2,600	2,200	15 8/

1/ Until 1973, ECA Statistical Yearbook 1973.

2/ See Statistical Appendix Table II.

3/ All 1973 estimates of herd size (and hence herd loss due to the drought) come from Fonds Europeen de Developpement, Situation Actuelle de l'Elevage dans le Sahel, 1974. Where different estimates exist they are noted in footnotes. The Mauritanian estimate is however from more recent Mauritanian Government publication, Bilan de la Secheresse. The FED estimate for herd size in Mauritania in recent years seems particularly casual, and differs from all available estimates. The FED gives the cattle population of Mauritania as 2,300,000 in 1968, declining to 1,460,000 in 1972, and to 800,000 in 1973.

4/ This is the FED estimate. They proceed to say that the true "loss" will probably be in the neighbourhood of 25% when all livestock return from their foreign pasturages.

5/ The 30% loss estimate comes from RIM, Bilan de la Secheresse (1974). FED estimate is 800,000 head out of a 1972 herd of 1,460,000.

6/ There are significantly conflicting estimates among different sources on the 1968 herd size. The common figure cited is 4,500,000. But this is not used here because the 4,100,000 is more reasonable-looking, and is the figure used by the Ministry of Rural Economy.

7/ This estimate from the FED 1974 Survey is lower than many others. For example, the 1973 Statistical Report of the Direction de l'Elevage gives a cattle loss of 2 million head between 1972 and 1973, or over 50% of the herd.

8/ Probably the most knowledgeable observer of these matters in Upper Volta estimates the loss at 7-8%, in addition to normal losses. M. Garcia, Evaluation des Pertes sur le Betail dues a la Secheresse en Haute Volta. C.E.B.V., Rapport de Mission, Fev.-Mars 1974.

Governments of coastal states in the Entente region (as well as Nigeria and Ghana), shocked by the effect of the drought on the meat supply upon which their populace had become more and more dependent, have recently begun to encourage increased livestock production within their boundaries. Livestock investments have been afforded higher priority in government development investment budgets. Programs in the coastal states generally aim to increase domestic production by: 1) encouraging migratory Fulani herders who had come south due to the drought to remain in the coastal states; 2) encouraging increased cattle production among traditional livestock producers; 3) establishing state-operated ranches and cattle production centers; and 4) stimulating increased production of alternate sources of meat such as small ruminants, chickens, and pigs. These programs have, as yet, had only a minor effect on livestock numbers and meat supply in the coastal states, but potentially could plan an important role in supplementing the limited supply of meat imported from the Sahel. The size of the 1975 livestock herd in the Entente region (including major non-Entente member suppliers) is estimated in the following table.

Table 6
Livestock Herds in 1975
(000s of animals)

	Cattle	Sheep	Goats	Pigs	Poultry
Dahomey	690	640	640	400	3000
Ivory Coast	490	900	900	185	6000
Niger	3200	2063	5160	2	7100
Togo	275	657	639	560	1915
Upper Volta	2500	1600	2500	150	10640
Sub-Total	7155	5860	9839	1297	28655
Mali	4000	5000	5000	?	12500
Mauritania	1900	3000	3000	0	2700
TOTAL	13,055	13,860	17,839		43,855

D. Current Demand

The consumption of meat in the Entente region can be approximated by a review of official or reported slaughter statistics, although considerable slaughter, especially in rural areas, is unreported and not reflected in this data. Some experts estimate that as much as 50% of total slaughter is unreported.

Table 7
Reported Slaughter in Member States - 1973
(000s)

	Cattle	Sheep	Goats	Pigs
Dahomey	29	9	9	10
Ivory Coast	123	15	26	7
Niger	84	122	411	1
Togo	23	20	21	10
Upper Volta	82	42	187	12
TOTAL	341	208	654	40

The Nigerian market, with a reported slaughter of 1.5 million head of cattle in 1973, and a normal (1970-72) slaughter of about 900,000 head, is, of course, the giant consumer of meat in the region, constituting a market almost three times as large as the entire Entente market. The 1973 slaughter figures (especially when expressed as numbers of animals) are probably abnormally high because large numbers of immature or drought-weakened animals were sold for slaughter by herders under duress because of the drought. Preliminary estimates for 1974 indicate slaughter declined somewhat below 1973 levels in both interior and coastal countries. In 1975 there have been further declines as herders attempt to reconstitute their herds to their former size by holding their animals off the market. Therefore prices have risen by up to 50% in meat markets. The resulting penury of meat has led Sahelian governments to institute measures to guarantee that whatever meat is available for slaughter will be consumed in domestic markets. Although government border policing is generally weak and only partially effective, prices for meat in the coastal countries have continued to rise rapidly.

Rising prices in coastal markets, especially urban areas such as Lagos and Abidjan, reflect in part the shortage in meat supply. However, they also reflect increased effective demand. In Nigeria, where the wages of government workers were more than doubled in early 1975, the resultant increase in demand for meat contributed to the sharp increase in the price of meat not only in Nigeria but also in Niger. Steady population growth (2.5-3% annually) and rapid economic growth in the Ivory Coast and Togo have also led to an increased demand for meat in those countries. As a result meat consumption is increasingly restricted to middle and upper income consumers. Per capita consumption of beef, lamb and mutton has fallen. For example, estimated per capita consumption of beef declined from 8.28 kg. in 1970 in the Ivory Coast to 6.29 kg. in 1974. Low income consumers have either shifted consumption to cheaper source of animal protein such as fish (kg. per capita in the Ivory Coast increased from 17.76 in 1966 to 28.41 in 1974) and/or have been forced to limit their animal protein intake. While beef, mutton or lamb have no inherent nutritional advantage over fish and in fact may be a less efficient means of transforming vegetable matter into protein, fish supply from both inland and oceanic sources is also limited. There are reports that both sources are being over-fished at present.1/

A further indication of supply/demand relationships in the region is that the Ivory Coast reportedly has recently imported 1,000 tons of beef from France at $1,000/ton. This meat is temporarily available from French price maintenance programs. While this subsidized price is highly competitive in Abidjan at present, a continuous supply from France would be at several times this price and would necessitate a significant outflow of precious foreign exchange from the region.

On the basis of currently available data, it is impossible to estimate accurately future demand for red meat in the West African market. The rate of demand growth is a function of the rate of growth in real income and urbanization, the price of meat, the price of substitutes and other factors. The future allocation of available

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1/ By statute, the ELC does not deal with fish production programs.

supplies between major demand centers such as Lagos, Abidjan and Niamey is also difficult. Supply projections are perhaps even more speculative with future rainfall being an important unknown variable. Nonetheless, rising prices and actions designed to lower the cost of marketing, increases in the efficiency of production and lower production costs are expected to result in a favorable climate for supply expansion. In the absence of more detailed region-wide baseline studies and production/consumption data over time, one cannot accurately project future supply, demand and price levels in either the Entente countries or the wider West African production and marketing region.

Although subject to interpretation, the available data indicate that:

1. The recent drought is now being felt in reduced cattle offtake and as an aggregate decline in the supply of beef from the sahelian states;

2. The superior purchasing power of the coastal countries is tending to draw more of the limited supply of meat from urban markets in the interior countries and from rural areas to the richer coastal markets;

3. The rural population, with the slowest rate of increase in income, will be the ultimate losers in the allocation of supplies and their red meat supply may all but disappear;

4. The livestock productive capacity of the Sahel is limited by major ecological constraints. Even assuming a rapid reconstitution of the Sahelian herds, and a higher offtake from those herds, the Sahel will in the long run supply a decreasing portion of the total regional demand for meat.

A substantial supply deficit will develop unless the coastal countries are prepared to invest in the efforts necessary to increase domestic meat production and unless Upper Volta and Mali can substantially expand livestock production in the higher rainfall Sudanian zones.

To rectify this situation, all available means will need to be used to increase meat production in the Entente regions. This should include:

1. Improved management of pastures and livestock in the Sahelian and Sudanian zones, peasant livestock fattening projects to increase carcass weight at slaughter, cattle trails and marketing infrastructures to reduce weight loss between the producer and the consumer, improved animal health programs to reduce calf mortality, etc. This management should take into account the problem of overgrazing, and make efforts to solve this problem.

2. Increased small ruminant production through improved animal health, animal husbandry and marketing interventions (production of small ruminants can be effected more rapidly than that of cattle and so may warrant a priority in some countries).

3. Increased production of poultry and pigs in areas where feed can be produced.

4. Increased "production" or catch of fish, perhaps through fish culture interventions.

5. Increased cooperation between Entente member states and their neighbors to minimize barriers to trade and to improve regional livestock marketing and transport patterns.

6. Increased government priority to the livestock sector including more substantial budget allocations to the Livestock Services and to other government institutions which impact on the livestock sector.

5. Investment Requirements for the Livestock Sector

Entente state planning documents clearly show a higher investment budget priority for livestock than heretofore in the coastal states and continued emphasis on livestock development in the Sahelian countries.

Given the disadvantaged economic status of the Entente states - only the Ivory Coast has a per capita income level over $170 (1972 figures) and all except Togo are listed as MSAs (most seriously affected by the rise in petroleum and fertilizer prices) - major donor assistance is essential to finance these investment projects. The Ivory Coast 1975-1980 plan now being finalized indicates a substantial increase in the level of livestock investment over the $30 million level in the 1970-75 plan. Although the Ivory Coast is the richest of the Entente states ($424 per capita), most of its investment budget still must be financed from donor assistance.

Upper Volta livestock sector investment for the 1972-76 plan period is set at about $20 million as compared to $5 million in the 1967-1970 plan. In 1974 all capital investments had to be financed by donors.

Niger's new development plan (1976-1980) which is not yet published reportedly indicates that financing needed for livestock development projects over the next 5 years will total $85 million of which $12 million has already been obtained from donor sources. All capital investment expenditures in Niger are externally financed.

No development plan is available in Dahomey, however, discussions with Ministry of Plan and Ministry of Livestock officials indicate that rural development and development of the northern and central regions of Dahomey (the key livestock zones) are of highest priority. Dahomey has submitted several livestock projects (totalling $5 million) for AID/Entente financing. All capital investments in Dahomey will probably continue to be donor financed ($24 million in 1972).

Until recently, Togo was able to import sufficient meat from the sahelian countries at low prices to balance domestic production deficits and had developed no clear national livestock development strategy. Recent discussions with government officials and the large number of project proposals submitted for AID/Entente financing indicate that Togo now intends to upgrade livestock as a national development priority. Projects submitted to the Entente Fund alone total $8.5 million and a review of projects submitted to other donors indicates a level of capital investment between $25-30 million over the next 4 years. In recent years donors provided approximately 70% of the Togolese investment budget. However, increased Togolese phosphate revenues should enable Togo to finance a larger portion of their investments in the future.

In summary, investment requirements for the livestock sector in the Entente states over the next 4-5 years roughly total about $175 million of which only a small portion (in the Ivory Coast and Togo) can be domestically financed. While many of these investment "ideas" may not prove feasible after further study and although other donors will play a major role in financing sector requirements there is clearly a need for large scale AID capital transfers to the livestock sector in the Entente region. The level chosen for capital resource transfer under this project ($7.5 million) was not limited by the need for the funds but by a realistic assessment of the administrative and project design capabilities of the Entente Livestock Community and the Entente Fund.

Cost-Benefit Analysis and Beneficiary Analysis

A cost-benefit analysis for this sector project would be extremely difficult to compute since a) sub-projects to be financed under the project (and their internal rates of return) are not known, and b) the benefits of increased regional cooperation cannot be quantified without considerable research. However, sub-project approval guidelines (Section II.B.3) require that sub-projects to be approved for AID financing must be judged economically feasible using accepted donor standards. Donor standards generally require that the project internal rate of return exceed the opportunity cost of capital in the country where the project will be implemented (usually estimated at approximately 12% in West African projects).

Similarly an estimate of the total number of project beneficiaries under these circumstances would be of a most general nature. However the project's target population is clearly indicated in the sub-project approval guidelines: production projects must increase the production of large numbers of producers and increase the income of the rural poor. Thus the primary beneficiaries of the project will be large numbers of traditional livestock producers because large numbers of modern livestock producers do not exist in the Entente region.

Secondary beneficiaries will be meat consumers who will benefit from the increased availability of low cost meat in the region's markets. As outlined above, without increased livestock production in all countries of the region, price rises for meat will increasingly make meat a luxury food consumed only by upper and middle classes and will decrease the level of meat, and therefore protein, consumption of the urban and rural poor.

B. Technical Analysis

1. Livestock Production Systems and Patterns in the Entente Region

The Entente Region includes a complete north-south cross section of the ecological and climatic zones of the greater West African region. Livestock and crop production patterns have developed in response to climatic factors (rainfall and rainfall distribution), physical factors (soils, water, elevation, land use potential), economic factors (profitability, markets, availability of inputs), and social factors (population density, established husbandry patterns, inter-tribal relationships, land tenure). Development programs and strategies take into consideration the wide variability between zones.

The major differences in conditions render generalization, including program guidelines, difficult. In addition, there are differences in levels of medium and upper level manpower availabilities and in national development priorities. Country specific descriptions are included in the CWR Development Assistance Paper.

Within the Entente region three primary livestock production patterns can be identified. Migratory (pastoralist) production patterns predominate in arid grassland areas of the semi-desert, Sahelian, and Sudanian climatic/vegetation zones of Niger and Upper Volta. However, "pastoralist" producers may also either use seasonally or be resident in high rainfall grassland areas where crop production is marginal and human population is dispersed. "Pastoralist" is used here to imply that owners depend on cattle and other livestock for a major share of subsistence income. Pastoralists who do not have a more or less set pattern of displacement or transhumance are uncommon. Transhumance patterns tend to be long ard difficult, often exceeding 200 miles and crossing international boundaries. Movements are generally in a north/south direction from annual rainy season grazing areas in the Sahel and desert to dry season locations near permanent water sources frequently on seasonally flooded lands near lakes and rivers. Some migratory producers visit Guinean and derived Guinea-savanna zones on a seasonal basis. During the recent drought period, many became semi-permanent residents as far south as northern Ivory Coast, Ghana, Togo and Dahomey.

Households depend upon their animals for a major share of subsistence income from the consumption and sale of milk and cattle for slaughter. Housing is of temporary construction and families purchase a major share of starchy staple foods needed from crop farmers but may grow some food crops near rainy season camp sites. Tribal affiliation is usually different from that of agriculturalists. The problems of evolving the migratory production systems in ways which will preserve the range resources are extremely complex and involve only partially understood technical, economic and social constraints.

A semi-migratory production pattern is dominant in the Sudanian Zone where rainfall levels and distributions are more favorable for crop production. This zone includes much of Upper Volta and the northern regions of Dahomey, Togo and the Ivory Coast. Most of the cattle are owned by groups which traditionally have owned livestock (most commonly Fulani). Non-Fulani owners typically confide their cattle to Fulani herdsmen for grazing.

In areas of dense cultivation, herds may leave the village during the crop growing season, returning after harvest to graze crop residues and fallow lands leaving again to spend the hot season (February-May) near permanent water sources or on seasonally flooded lands.

Where cultivation is less intense, herds graze fallow lands near the village during the rainy season and when forage or water become limited, they are moved short distances to dry season grazing areas within 20-50 miles of the owners' village. Depending on the area, owners may employ herdsmen on a cooperative or share-of-the-product basis, but cattle typically return to the village daily during the rainy season. In the Sudanian and Guinean zone, families of both traditional cattle owning groups and agriculturalists grow most of their own food requirements, but cash crops (usually cotton or groundnuts) may complement milk and livestock sales as sources of family subsistence income. Because some owners both grow crops and own livestock, ox-cultivation, and in limited areas, small scale livestock feeding or fattening are important.

Sedentary production, whereby herds need not be sent on transhumance, occurs locally near permanent water sources in the Sudano/Sahelian zone, but is the rule in the southern Sudanian, Guinea Savanna and Forest zones. Some owners of ploughing oxen and some small scale cattle feeders could also be described as sedentary producers. Because of the prevalence of riverine and savanna species of tse-tse fly and the danger of contracting trypanosomiasis, cattle in these zones are usually of the trypano-tolerant breed types.

The zone of semi-migratory and sedentary livestock production extends in a wide belt across West Africa and includes most of the dry land farming areas where sorghum and millet are the food crops. Because zones of migratory and semi-migratory production overlap, the two groups often compete for available grazing and water supplies with resultant disputes over crop damage by livestock and access to water. Separate development activities may thus be required for the two forms of land use. Mixed farming including the use of male animals for traction followed by fattening before final sale for slaughter appears to be profitable and is spreading in these zones.

2. Availability of appropriate technologies

The nature of the AID/Entente livestock sector project (with 7-10 sub-projects) does not call for an in-depth review of the appropriateness of a single technology which will be tested or applied in the course of the project. Obviously, a large number of technical interventions will be funded under this project - interventions which will vary significantly due to differences in climatic zones, target livestock production system (migratory, semi-migratory or sedentary) and host government policy and sub-project implementation capacity. Each proposed sub-project (containing one or a series of technical interventions) will be thoroughly examined by the highly skilled and experienced technical specialists of the EF and the ELC. As described in Section II.B.3, technical feasibility and host-country management capability are among the criteria for sub-project approval.

On a more general level, however, one must ask if we can be reasonably confident that there is a series of technical interventions which have been proven feasible under similar circumstances in the past and which can be used to increase the productivity of large numbers of livestock producers in the Entente region. Can we be sure that the state of the livestock production art is such that AID monies will be profitably employed? The discussion which follows indicates that there are a number of proven technologies or interventions which can be financed under this project and suggests other newer technologies which might be tested.

a. Interventions in Livestock Production

Mixed Farming

The positive inter-relationship between crop production and livestock production has been successfully demonstrated in several areas of West Africa. Farmers in parts of northern Dahomey, Upper Volta, Mali, Senegal and southern Chad have found that the use of animal traction, often followed by fattening of oxen before final sale for slaughter, is both profitable and ecologically sound. Basic ingredients for successful mixed farming often include agricultural credit (for the purchase of oxen and plows); training in the use of oxen; the availability of forage and inexpensive crop by-products (for final fattening); and a marketing/transportation system which allows fattened animals to be marketed without major loss of weight. Animal traction and peasant livestock fattening projects have been strongly recommended for many regions of West Africa by agriculture specialists 1/ and should be a primary thrust of the AID/Entente project.

Sheep and Goats

Several donors are now developing projects which will increase production of sheep and goats in the Entente region. Sheep and goats, as well as other small ruminants, are seen as a means to rapidly increase meat production

1/ For example, see FED: Etude sur la Situation Actuelle de d'elevage dans les pays du Sahel et des mesures de Savvegarde a envisager. February 1974.

in the region during the medium-term beef deficit period occasioned by the drought. Sheep and goats are traditionally raised in villages in the Guinean and Sudanian zones but have suffered from inattention by Livestock Services officials and villagers alike. Recent research at the Centre pour Recherche Zootechnique (CRZ) at Bouake , Ivory Coast and by IEMVT (a French animal health organization) have demonstrated simple animal health measures which can decrease sheep and goat mortality significantly and which can be easily taught to villagers by Livestock Service personnel. Techniques of sheep finishing have been thoroughly researched at the Hann laboratory near Dakar. These techniques, when combined with improved husbandry and marketing procedures should enable villagers to respond rapidly to rising demand for sheep and goats in urban markets and should also encourage greater rural consumption of animal protein in the form of sheep and goats.

Poultry

Poultry production is important in many regions in the Entente. However, modern poultry, usually sold dressed at a higher price per kg. than red meat, is now used only in the privileged market. Apart from meat production there is a substantial demand for eggs both for the mass market and the privileged market. It is possible to improve rural breeding stock by introducing cocks and suppressing the cocks of traditional breeds. However, if the poultry get too much "modern" blood they are not sufficiently "rustic" to withstand West African conditions. Several countries, including the Ivory Coast, Togo and Dahomey, have small-scale poultry production schemes which could be expanded through AID/Entente financing and which could encourage the development of small and medium-sized poultry enterprises relying on locally produced feeds and protein supplements.

Feed Production

In the last 5 year plan the Ivory Coast called for an increase in grain fed livestock. This requires a program of maize production, drying and storage of soybean production. The PC program in Dahomey provides a small farm model of grain drying and storage which enables farmers individually or in groups, to dry and store maize which can be used for human or animal consumption. The potential of the Guinean and Forest Zones for maize production and for production of manioc and yams, which can also be used in animal feeds, far exceeds the needs for human consumption.

Soybeans are grown in the forest zone of the Cameroons as a necessary break in the rice rotation. Their production is thus technically feasible but commercialization may require drying and storage facilities. One of the existing technologies of detoxifying the beans by heat (either from direct heat or from forcing the material through a die under pressure) will have to be used before the beans are fed.

Pig Production

Once a feed industry is built up providing a low cost ration, modern pig production becomes easy to promote. The technology is already established and the breeding stock available. There are substantial production units (over 1000 head a year output) in several places in West Africa. In the Sudanian region grain supply has been too expensive to feed to pigs (conversion rate of 1 kg. of live weight from 4 to 5 kg. of feed).

Many pigs are now being raised on brewers grains, the residue from brewing beer industrially or by traditional methods. Under traditional management protein is picked up as the pigs root around the village. This permits the pigs easy access to human faeces and so completes the life cycle of parasites that live in both the pig and man. Enclosing the pigs and feeding them a balanced ration, while producing healthier pigs, may raise the cost of production to an uneconomic level in some areas. Because the price of pork is highest in the coastal markets, it is there that, given a supply of grain or feed roots, modern pig production is expected to be profitable.

Self-Liquidating Animal Health Interventions

The time has arrived in many areas when producers are prepared to pay the cost of drugs and vaccines and contribute to the cost of their delivery once the value of the drug or vaccine has been demonstrated. Thus, a project expanding the availability of certain veterinary services can be initially financed by a donor and after 2-3 year demonstration period become self-financing. (A successful example is an anti-parasite project in the Malgache Republic.) In view of the government difficulties in increasing Livestock Service operating budgets, payment for service appears to be the major way to expand animal health services in the medium term.

Integrated Livestock Projects

In those countries with relatively strong, decentralized government development agencies such as Upper Volta (ORDs) and Dahomey (CARDERs), department level integrated livestock projects encompassing several of the above interventions may be appropriate. The regional nature of this administrative structure is well suited to coordinate an intensive program of diverse livestock operations including range management and to link livestock and agricultural activities.

Livestock Development in the Sudano-Guinean Zone

As the tsetse fly retreats in the Sudanian Zone increasing numbers of herders have used the Sudano-Guinean Zone and the south of the Sudanian Zone with the Zebu cattle, especially during the recent drought, either making larger transhumant movements or becoming nearly sedentarized in this zone. Such a zone is found between Sikasso (Mali), Bobo-Dioulasso (Upper Volta) and Korhogo (Ivory Coast). In this type of an environment relatively free from Glossina morsitans, Zebu cattle appear to thrive. The sedentarized Peul are quick to make arrangements to graze farm lands and crop residues in the dry season and usually live at peace with the farmers.

In other areas in this zone and even further south it is possible with suitable trypano-tolerant breeds and crosses, and with regular dipping or spraying against ticks and biting insects, to maintain herds of cattle. This is sometimes done by the local farmers and sometimes by Fulani herders whom they employ.

If the use of the land can be controlled, research (e.g. at CRZ, Bouake) is beginning to show how pasture can be improved. Brush killers and seeding improved forage species look like a profitable combination. In low-lying land (bas fonds) not used for crop production, Brachyaria mutica can be planted to provide green grass during the dry season.

The techniques of control of insect and tick diseases, with suitable breeds and crosses, together with pasture improvement and land use control provide a profitable technical package for development of sedentary herders or mixed farmers. The forage can be used for cow herds, milk production, growing or finishing cattle, as well as for draft oxen and finishing oxen before final sale for meat.

b. Marketing/Transport Interventions

After the animal has been produced and/or finished it must be taken to its point of slaughter and marketed at a fair price. In general, the marketing system ensures that the producers get a competitive price. However, at times it is necessary to group animals of uniform quality and to seek a market; this is especially true of finished animals which cannot be walked far to market without considerable loss in weight. Grouping producers to move their cattle to market in trucks may be necessary as part of small unit feeding programs.

To maintain the weight of the traditional trade cattle, it has been economically feasible to develop systems of cattle trails with water supply ever 25-30 km. and with holding areas at critical points.

A major improvement could be made in the Mali, Upper Volta, and Ivory Coast livestock marketing channels if cattle were not required to wait for months in the densely populated zones around railway stations in Ouagadougou and Bobo-Dioulasso and Ferkessedougou waiting for empty freight cars. Not only would cattle arrive with less weight loss but there would also be fewer conflicts between drovers and farmers. In some markets road and rail transport play a big role, in others the traditional trek routes are still the least costly, even allowing for weight losses. Trucking and the railroad often cause serious losses, which could be avoided with proper loading, crush bars, and careful handling.

Veterinary posts at the frontiers of coastal countries remain a necessity in order to reduce the risk of introducing disease in the local herds from contact with imported trade cattle.

It is expected that several of these proven interventions - such as cattle trails and entry posts - will be appropriate for AID/Entente financing. Other marketing/transport proposals, especially those dealing with improvements in rail or truck transport must be reviewed with great care to determine their economic and technical feasibility.

In summary, technologies are generally available for small ruminant and non-ruminant production projects with initial 3 year donor inputs. Similarly, activities in the marketing/transportation sub-sector can often be based on successful past experience. The Entente organization and participating governments will be encouraged, however, to conceptualize, design and test new activities which one hopes will be even more successful in increasing the productivity and income of large numbers of livestock producers in the Entente region. Through periodic high level meetings, technical gatherings, and training programs the Entente Livestock Community can play a major role in translating research results into project ideas for application on a pilot scale.

3. Environmental Assessment

AID policy determinations on Environmental Aspects of Development Assistance indicate that with respect to international institutions or LDC intermediate credit institutions (which is the role of the Entente Fund in this project), environmental assessment is not required in those cases where the financial commitment cannot be directly related to a specific activity or program for which AID has the unilateral right to control expenditures. In these cases AID should work with intermediate credit institutions and recipient governments to develop common policies, strategies and procedures for addressing the environmental aspects of development.

It is the judgement of the design team that the net effect of sub-projects which will be financed under the project will have a positive environmental impact in the sense that they will improve quality of life in the region, increase the availability of animal protein, improve herd health, and will encourage better animal husbandry techniques. However some sub-projects may, in their initial formulation, contain elements which might lead to negative environmental effects. During the project, the AID funded project manager will alert host government planners and Entente livestock specialists as to the potential dangers of ecological deterioration in livestock interventions and will ensure that no sub-project is approved by the Entente Fund which clearly will have major unfavorable environmental effects. (See Environmental Assessment Guidelines Manual, of September 1974.)

C. Social Analysis

1. Socio-Cultural Feasibility

The socio-cultural feasibility of livestock interventions such as those likely to be financed through this project depends first on an understanding of the existing social landscape in a sub-project area and secondly on a determination whether the proposed intervention will be socially acceptable and produce what may be called "positive" social disruption. It is assumed that all interventions on a social landscape hope to cause "disruption" or change. How certain can one be that sub-projects approved by the Entente organizations will be socially feasible?

Information on the sociology of livestock production systems in West Africa is scattered and incomplete. Donors and African governments alike know little of the social landscape in which they attempt to affect change. Through micro-studies concentrating on small numbers of livestock producers (for example, studies of a nomadic tribe or a village socio-economic system) one can glimpse the social factors which influence the success or failure of development projects but one must be wary of generalizing these findings across a heterogeneous region dotted with micro-environments, ethnic groups, and varying social relationships.

One cannot be sure that livestock interventions which have proved technically and socially feasible in one area of West Africa will be successful in another. In order to encourage the fullest possible understanding of the socio-cultural implications of AID/Entente sub-projects, an African or expatriate sociologist or applied anthropologist will be included on project design teams funded through the project. One of the tasks of these specialists will be to determine, as fully as possible within the design period, whether the sub-project will produce "positive" social disruption or change. A second task will be to suggest how to minimize "negative" social disruption.

In general sub-project interventions should encourage the following kinds of change, which on a macro-level, we view as positive. Sub-projects are likely to link the traditional livestock producer, whether migratory or sedentary, more closely to the market economy. Such a step is deemed necessary if the incomes of traditional producers are to rise.

Certain sub-projects will encourage a more symbiotic relationship between crop production and livestock. Animal traction and peasant cattle fattening projects represent for farmers a potentially profitable investment in terms of long-range crop production and soil fertility. They also represent a hedge against crop failure as on-farm feeding of young animals can provide the farmer with additional capital stock. Certain projects such as cattle trails should decrease social conflict between herders and farmers because feed and water will be assured on established cattle routes and fewer cattle will invade cropland in search of forage.

A third positive social change should be increased government sensitivity to and concern for the interests of small livestock producers. This is likely to occur as government officials become convinced through project successes that small producers, rather than being an obstacle to economic growth, can and should become a vital element in the growth process.

2. Social Spread Effects

Substantial social spread effects should result from the project. Spread effects will occur on a local and a regional level. On the local sub-project level, many interventions will be carried out on a pilot basis and will serve as demonstrations for future replication in nearby areas. Also most sub-projects will be located in relatively disadvantaged areas, for example, the northern regions of Dahomey, Togo and the Ivory Coast, and should have positive backward and forward linkage effects on the economies of those regions. Finally within the broader context of the Entente region, communication of sub-project accomplishments through ELC technical meetings and meetings of the Entente Council of Ministers should encourage replication in other parts of the region.

3. Beneficiaries, Income Distribution and Employment

As described more fully in Section II.B.3, AID/Entente sub-project approval criteria require that project interventions provide primary benefits to large numbers of livestock producers, i.e. the traditional producers and the rural poor. Sub-projects approved using these criteria will obviously encourage more equitable income distribution and should also provide many more rural employment opportunities than do large-scale ranches and government production centers presently favored by many government planners.

In sum, this AID/Entente project could be described as a fund of monies designed as a financial carrot to encourage governments to develop livestock strategies and design projects which will have primary impact on large numbers of livestock producers. This approach is in direct contrast to livestock development strategies found at present in most Entente countries which, through large intensive "modern" livestock projects tend to discount both the productive and distributive benefits to be gained by working with traditional producers. Our strategy by its very nature accepts the risk of direct socio-cultural disruption by encouraging change in traditional production patterns, but is clearly a more satisfactory approach than the "benign neglect" approach fostered by ignoring traditional producers and attempting to modernize the livestock sector without their participation. The latter approach historically has led to an increasingly dualistic society with its attendant inequities and often has resulted in direct political confrontation and violance.

4. The Role of Women in Livestock Production

In the African nucleai or extended family unit, a division of labor between the sexes is common. For example, men typically undertake the heavy labor of field preparation, including plowing, while the women do a larger share of crop cultivation. Men do a larger share of work related to cash crop production while women, who have responsibility for feeding the family, do the greater share of work in the cultivation of harvesting of food crops. Income from the sale of "surplus" food crops is retained by the women for family petty cash needs while income from the export/cash crop is used for major family expenditures.

A comparable division of labor is common in pastoralist households. Men are responsible for grazing and herd management and control the income from the sale of animals--the cash crop. Women milk the animals, use what is needed to feed the family, and are free to sell or barter the surplus for food and small petty cash needs. Women also are responsible for food crops produced by the family.

In sedentary livestock production systems in the Guinean and Guinea-Sudanian zones village women often are responsible for the care of dwarf breeds of sheep and goats. These animals are often slaughtered for local consumption or are sold when the family is in need of cash.

Clearly the sub-projects financed by the AID/Entente livestock project will need to be designed with the role of women clearly in mind. For example, resettlement or sedentarization of pastoralists in new areas, both those with cattle and those who lost cattle in the drought, will require attention to assisting families, particularly the women, in learning agricultural production skills and proper diet balance using non-milk sources of protein. Sub-projects in the Guinea zone which attempt to increase the production of small stock including poultry may require extension agents to work primarily with women. Also, if the per capita availability of meat protein continues to decline in rural areas as more village livestock are sold for cash in urban areas, extension activities should be designed to help women produce and prepare a nutritionally balanced diet for their families. Such programs could be promoted as part of department-level "regional" integrated livestock improvement projects. AID, thorugh the actions of the AID-funded project manager, will encourage the Entente Fund and member governments to design sub-projects and training programs in ways that will further enhance the participation of women in livestock production and in government livestock institutions.

D. Financial Analysis

1. The Entente Fund

a) Sources of Funds

The operations of the Entente Fund are funded predominantly from two source categories: (1) capital contributions from member states and (2) loans and grants from foreign donors.

Since the establishment of the Entente Fund Secretariat in 1966, the member governments have made annual contributions for the constitution of a capital guaranty fund. The annual contributions are as follows:

Ivory Coast	FCFA 500,000,000	(77.0%)
Upper Volta	42,000,000	(6.5%)
Niger	42,000,000	(6.5%)
Dahomey	42,000,000	(6.5%)
Togo	24,000,000	(3.5%)
Total	650,000,000	(100.0%)

Capital contributions fram member states total 650 million FCA annually. At the end of 1975, these contributions amounted to about $27 million. This capital is held in reserve as security for the guaranties granted by the Fund, and is retained in two Paris banks. According to the Fund's statutes, potential guaranties are limited to ten times the capital. This capital may not be used for other purposes. Interest received on these capital deposits as well as commissions for guaranties finance the operating budget of the Entente Fund.

Other donor assistance is extended to the Entente Fund for specific project activities to be carried in the Entente countries. Development Loans and grants have been accorded the Entente Fund by the French Aid and Cooperation Fund (FAC), Canada, European Development Fund (FED) and AID. FAC assistance has been in the form of grants. AID represents the major source of foreign donor assistance. AID has provided $25 million in four prior loans and is presently considering capital projects amounting to $22.5 million. In addition, AID has provided several grant contributions for technical assistance. Other assistance from the French and Canadian governments is made on direct country to country basis, although some of this activity may be managed by the Entente Fund. Table F lists all donor developments activities financed through the Entente Fund since 1971.

b) Uses of Funds

At the present time, the guaranty fund of the Entente Fund has guarantied 19 projects, including several for Entente housing in member states, an Entente livestock building in Ouagadougou, a villa in Dahomey, a hotel in Niger, several warehouses, sanitation facilities in Lome, agricultural equipment and four factories in Niger and Upper Volta. These quaranties have been accorded directly to beneficiaries such as Entente governments, Chambers of Commerce, and state-owned enterprises (See Appendix III).

These outstanding guaranties amount to about $9.3 million, despite the Fund's authorized capacity to guaranty up to ten times its capital, or $300 million. Thus, the Entente Fund has a large guaranty capacity (over $290 million) which could be used to encourage investments in the Entente region. A joint study by the Entente Fund and AID under the auspices of the African Enterprise project may encourage the use of this untapped resource in relation to African enterprises.

The operating and development budgets of the Entente Fund are financed by the return on the investment of the guaranty funds managed by the Entente Fund. This budget totalled FCFA 578.5 million or $2.6 million in 1974 and is expected to exceed 860.6 million FCFA ($3.9m) in 1975 (See Table I). This substantial operating budget could permit the Fund to participate in a wide variety of regional economic activities. However nearly all the development activities undertaken by the Fund are for specific programs and are financed by external donors. Thus, the substantial budget of the Fund is used primarily to cover the salary of the administrative secretary and local personnel at the Fund (e.g. secretaries and chauffeurs) and other operating costs including substantial travel and publicity. All of the technical advisors at the Fund are donor-financed. The Entente Fund has agreed to substantially increase the amount of development budget funds available for this livestock program. The fund will provide a minimum of CFA 15 million ($68,000) in CY 1976, CFA 20 million (100,000) in CY 1977 and CFA 25 million ($133,000) in CY 1978.

The development interventions of the Entente Fund amounted to FCFA 66.6 million in 1974 or 11.5% of the operating budget. These funds were primarily devoted to tourist projects (nearly 50% of funds) and the Fifteenth Anniversary of the Fund, where each country was given a sum of money to use as it wished. A breakdown of the use of these funds is as follows:

Activity (1974)	Amount (in million FCFA)
Tourism	16.7
Tourist Hotels	13.5
XVth Anniversary of Entente Fund	16.3
African Enterprises	10.0
Livestock Project	4.2
CERFER	1.8
Maison de l'Afrique in Paris	2.5
Ecoles Nationales d'Administration	1.6
Total	66.6

During 1974, the Fund sustained an operating surplus of over FCFA 225 million, representing 39% of its annual budget, or nearly four times the amount spent on the development activities described above.

c) Overall Financial Capacity

Owing to the underutilization of its resources, both budgetary and capital (for guaranty funds), the Entente Fund is perhaps the most financially sound organization in francophone Africa. With an ann ual contribution from member states of $3 million, total assets of $30 million, and conservative development and guaranty policies, the Fund undergoes minimal risk. Its operating budget of 578.5 million FCFA ($2.8 million) in 1974 covered all operating expenses while sustaining a surplus of over a million dollars. This surplus is expected to be carried over unused to the 1975 operating budget. The operating budget grows proportionately with annual increases in capital contributions, which are guarantied by member states for at least three more years, and will probably be renewed. Thus it is difficult to imagine financial problems other than excessive liquidity in the near future.

2. Entente Livestock Community (ELC)

The operating budget of the ELC is financed largely by the Entente Fund. ELC expenses have decreased slightly over the past three years and appear to have have levelled off at about $100,000 per year, or 20,000,000 CFA francs. Expenses reached a high point of 20 million F CFA in 1973. The apparent decline in the operating budget of the ELC is due to the fact that until April, 1974, the budget includes rent for office space and housing. After this date, the Entente Fund's building and housing were completed, and therefore exempt from the budget. The ELC also benefits from in-kind contributions of technical personnel, equipment and commodities furnished by FAC and AID. Expenditures cover personnel costs, utilities, vehicle maintenance and travel expenses. A budget statement for the ELC from 1973 - 1975 is reproduced in Table 7.

J. Loan Repayment Prospects

The Entente Fund, as the borrower, is primarily responsible for repayment of the loan portion of this project. Its extremely solvent financial status leaves no doubt that the loan will be serviced in a timely manner. The Loan will be jointly and severally guaranteed by the member states of the Council of the Entente who are each also responsible for repayment to the Entente Fund of individual sub-loans made to them. Project sub-loans are limited to the Ivory Coast, Togo and Dahomey; while projects in the Sahelian countries of Niger, Upper Volta (and in some cases Dahomey) will be grant funded.

The Ivory Coast has demonstrated a remarkable growth capacity since independence. Its GNP growth rate has averaged 7.5% in real terms through the 1960s and 6% since 1970. Reserve holdings in July 1974 totalled $66 million, the highest level in the Entente region. Although Ivorian economic success may be dampened somewhat due to the increased costs of petroleum products (the Ivory Coast is an MSA), its balanced and diversified economy complemented by excellent financial management capacity should allow it to maintain a reasonable growth rate in the foreseeable future and to meet its relatively heavy debt repayment schedule (debt service was 10.4% of exports earnings in 1972).

From 1968 to 1973 the GDP of Togo grew by 55% or by almost 8% per annum in current terms, while per capita GDP grew to $180 in 1973. Togo's balance of payments are buoyed by the high price of government produced phosphate which should offset the expected decline of cocoa prices through 1980. International reserves jumped from $37.9 million in 1973 to $47.3 million in September 1974. Togolese debt service requirements are acceptable at 9.6% of exports (1972).

The PRP, reflecting past AID policy, recommended loan funding for sub-projects in Dahomey. However a review of recent economic trends and prospects for future growth (see CER DAP) indicates that softer aid terms are appropriate for Dahomey. Therefore, only sub-projects which yield returns sufficient to fully amortize a sub-loan will be loan-funded under this project. Other sub-projects will be eligible for grant funds. Provisional 1972 data (the latest available) indicates that significant deterioration in the balance of payments from 1971 to 1972 (-$0.2 to -$7.1 million). International reserves, however, have held steady from late 1971 through November 1974 and now total $30.2 million. Although Dahomey has benefitted from major foreign assistance (especially from FAC and FED), Dahomey's debt service ratio is quite low at 6.1%. Per capita GDP was only $103 in 1972. It is difficult to predict future trends in the economy, given the importance of re-exportation in value-added contributions to GDP and the lack of information on future government economic policy. Much may depend, however, on increased government political stability and the ability of government agencies to improve their provision of services.

In summary, the small level of loan funds ($4 million) made available under this project should have minimal effect on the debt service burden of the Ivory Coast, Togo and Dahomey. The Togolese and Ivorian economies are expected to continue to expand at acceptable rates and financial management in both countries is competent. While Dahomey's economic future is harder to predict, small levels of loan funds are likely to be transferred to Dahomey and only under circumstances that would assure the government project revenue with which to repay the sub-loan.

Maintenance of Value Provision

The Entente Fund will repay the laon portion of the project in U.S. dollars. The member governments will repay the Entente Fund in CFA francs. However, the Entente Fund passes on the burden of maintaining the value of the repayments to the member governments by requiring that all payments in CFA francs be made in the dollar equivalent as calculated at the time the payment is requested. Thus the Entente Fund is fully protected as regards the maintenance of the value of the loan.

4. Recurrent budget analysis of implementing agencies

The excellent financial status of the Entente Fund and the Entente Livestock Community (see para D.1. above) leaves no doubt that those organizations will have sufficient recurrent budget resources to provide technical services to Entente member states once AID resources are disbursed.

Experience under the first AID/Entente Livestock sector project indicates that a number of national institutions often become involved in the implementation of sub-projects. These may include the Rural Engineering Service ("Genie Rurale"), the Livestock Service, financially autonomous para-statal organizations such as SODEPRA in the Ivory Coast, and regional development agencies such as the Voltan ORDs whose recurrent budgets are supported directly by the Ministry of Finance and donors. A traditional recurrent budget analysis, therefore,

Table 8

Entente Livestock Community Income Statement

	1973	1974	1975
		RECEIPTS	
Grant from Entente Fund	25,518,000	9,960,000	19,030,000
Diverse Receipts (e.g. sale of vehicles)	650,000	300,000	1,200,000
American Aid		In Kind	
French Aid		In Kind	
Bank balance	2,000,000	1,700,000	0
Provisions for Amortization	-	9,600,000	-
TOTAL	28,168,000	21,560,000	20,230,000
		OPERATING EXPENDITURES	
Personnel	9,890,000	8,010,000	8,900,000
Material	18,278,000	11,050,000	8,830,000
Interventions	-	2,500,000	2,500,000
TOTAL	28,168,000	21,560,000	20,230,000

cannot be meaningfully undertaken on a project of this nature. Adequacy of government financial support, however, will be a major factor considered in the review of individual sub-projects submitted for AID/ Entente funding.

As indicated in Section II.B.3, AID/Entente standards for sub-project approval require that AID funding for sub-projects be limited to no more than three years. Host governments must pledge to provide or be responsible for finding follow-on financing once AID/Entente funds are fully disbursed. Although many sub-projects will be of a short-term experimental nature, some sub-projects will require more than three years of financing before project objectives are fully achieved or the project becomes self-financing. In some cases, follow-on financing may be provided by other donor agencies.

5. Use of Reflows

Following accepted Entente Fund practice, AID loan funds will be sub-loaned to member governments at 3½% interest during the grace period and 3.5% interest during the loan repayment period. However, the AID loan will be repaid over a 40 year period (10 years grace, 30 years repayment); while EF sub-loans may in some cases be repaid over a shorter time frame. Under the first AID/Entente project, the sub-loan grace period varied from 2-7 years and the repayment period from 15-25 years. (See Table 2 on page 6 of PP). Sub-loan repayments are to be used by the Entente Fund for technical assistance as well as for reloans in the livestock sector. Resources available for EF use under the first project are indicated in Table 8. As indicated in Table 8, the Entente Fund will have approximately $5.3 million available for use between 1978 and 2002. Reflows from Entente Livestock II sub-loans will also be used by the Entente Fund for technical assistance and reloans in the livestock sector.

6. Financial Summary of Project

The financial plan for the project is summarized in Table 9.

TABLE 9

ENTENTE LIVESTOCK SECTOR I

REFLOWS TO ENTENTE FUND (in thousand dollars)

Year	Cumulative Reflows	2nd Round* Loans	Repayment 2nd Round	3rd Round* Loans	Repayment 3rd Round	4th Round* Loans
1976	12.17					
1977	70.87					
1978	187.12					
1979	340.27	300.00				
1980	530.62					
1981	879.33	500.00	22.0			
1982	1178.04		44.0			
1983	1476.75	500.00	102.8			
1984	1589.46		161.6			
1985	1702.17	300.00	257.2			
1986	1814.88		352.8	300.00		
1987	1927.59	300.00	470.4			
1988	2040.30		588.0		22.0	
1989	2153.01		727.6		44.0	
1990	2265.72	300.00	867.2	500.00	66.0	
1991	2357.48		1006.8		88.0	
1992	2428.29		1168.4	300.00	146.8	
1993	2499.10		1330.0		205.6	
1994	2522.76	300.00	1491.6	300.00	286.4	
1995	--	$2,500.00	1610.8		367.2	300.00
1996			1730.2	300.00	470.0	
1997			1796.2	$1,700.00	572.8	
1998			1811.7		697.6	300.00
1999			1797.0		917.42	
2000			--		999.26	
2001					1057.14	
2002					1107.85	500.00
2003					1116.61	$1,100.00
2004					1121.37	
2005					1091.33	
2006					--	
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						
2023						

*Repayments to AID are made from each successive relending cycle, and are finished by the year 2013. The revolving fund, however, continues to function from repayments. Terms from reloans are 2 years grace and 20 years repayment at 2% and 3% p.a. respectively.

Table 10

FINANCIAL PLAN

SUMMARY COST ESTIMATE AND FINANCIAL PLAN
(Million $)

USE	AID FX	AID LC	ENTENTE FUND AND HOST COUNTRY FX	ENTENTE FUND AND HOST COUNTRY LC	OTHER DONORS FX	OTHER DONORS LC	TOTAL
1. Capital Assistance							
Sub-Project Financing	$0.750	$6.750		2.500 f/	$1.000	$1.000	$12.000
2. Technical Assistance							
a. Long-term technical staff (expat.)	.180 a/				.640 b/		.820
Long-term technical staff (African)		.024 c/		.012			.036
b. Short-term consultants (40 mm)	.280						.280
c. Training (in U.S.) (20 for 160 mm)	.200 d/						.200
Training (in Africa) (15 for 120 mm)		.060 e/					.060
d. Equipment	.020						.020
e. ELC operating budget				.480 g/			.480
f. CRED livestock research ($120,000 in FY 1975)	.320	.160					.480
g. EF development budget				.200			.200
TOTAL	$1.750	$6.994		$3.192	$1.640	$1.000	$14.576

FOOTNOTES

a) $60,000 for 3 years

b) 4 FAC advisors to EF and ELC for 4 years

c) Salary in descending scale over 3 years plus initial training costs

d) At $1,250/mm for short-term non-academic training

e) At $500/mm for short-term non-academic training

f) Host country contribution to sub-project costs, estimated at 25% of total costs.

g) ELC operating budget over 4-year period provided by Entente Fund

PART IV. IMPLEMENTATION ARRANGEMENTS

A. Analysis of Administrative Arrangements

1. Responsibility for Project Implementation

Responsibility for implementing the project rests with the Entente Fund, the Entente member governments and AID. The Entente Fund as the Borrower is responsible for overall project management and as such will be AID's principal counterpart for the project.

The Fund will carry out the following major project implementation functions:

a) Borrower and guarantor. The EF is responsible for ensuring that the conditions of the loan and grant agreements are fulfilled and is responsible for overall project management.

b) Approval of sub-loans and sub-grants to Entente member states. The EF will have final approval authority for all sub-projects. It will solicit AID's opinion that the proposed sub-projects are consistent with sub-project approval criteria and AID bilateral programs. It may solicit the opinion of the ELC on the feasibility of proposed sub-projects.

c) Monitoring and evaluation of sub-projects. The EF with the occasional assistance of the ELC will be responsible for monitoring progress in sub-project implementation on a regular basis and will carry out evaluations of all sub-project activities in accordance with the evaluation plan described below (see Section IV.C). It will also provide or coordinate assistance requested by member governments to resolve problems of sub-project implementation.

d) Assistance to member governments in sub-project identification, design and/or revision. The EF, with occasional ELC technical support, will assist member governments in identifying sub-projects which might meet sub-project approval criteria and in designing sub-projects in accordance with AID/Entente standards. It will also assist in re-designing projects submitted for project funding but which do not meet approval criteria. The EF may call upon U.S. short-term technical assistance to assist in sub-project identification, design and/or revision and will contract directly for those services or may ask to have AID do so using funds made available through this project. The University of Michigan livestock research team will assist the Fund, as necessary, with sub-project development as this conforms to the terms of the University's research contract.

e) Financial Management and Procurement. The EF will be responsible for overall project financial management. The Fund will review RFPs and major contracts for the procurement of goods and services necessary for sub-project implementation and will assist governments in expediting U.S. procurement.

f) Semi-annual Report. The EF will prepare semi-annual reports for AID summarizing the status of sub-project activities and training elements, and other such information as AID may request including environmental statements and provisions for the role of women.

g) Annual meetings of the EF. With assistance as required from the ELC, will be responsible for organizing and convening annual meetings of the participating organizations to review progress towards the achievement of sectoral objectives, to review the results of research and sub-project evaluations and to discuss means by which sector cooperation and coordination within the region can be improved.

h) Promote and facilitate regional cooperation in the livestock sector. The ELC will provide assistance to member governments in implementing regional livestock protocols approved by the Council of Ministers; will prepare and assist in implementing additional protocols which may be deemed appropriate by the Entente member states; will collect and disseminate livestock sector statistics; and will assist the EF in determining ways through which increased regional cooperation can be established.

i) Training. The ELC will assist the Entente Fund in the management of the AID/Entente participant training program. It will assist in soliciting requests for practical livestock training in the U.S. or Africa from member governments and/or private institutions in the region; in setting up training programs in the U.S. and Africa; will approve candidates for training based on a training plan approved by AID; in preparing all necessary documentation required by AID and participating training institutions for training programs; and in conjunction with AID and the EF will periodically evaluate the success of the training program.

Entente member governments

a) Sub-project implementation. Each Entente member government is responsible for identification, design and implementation of AID/Entente sub-projects in its national territory. It may request assistance from the EF as necessary to ensure rapid and efficient project identification, design, revision and implementation.

b) Training. Governments will assist the Entente Fund in the selection of candidates for training under the AID/Entente program, will pay their salaries during the training period and will place the trained national in a postion where he can fully utilize his training experience.

c) Loan Guarantee. Repayment of the loan to the EF will be jointly and separately guaranteed by the Member States.

AID

The responsibilities of AID in the implementation of the project include:

a) Early in the development of each potential sub-project, the Entente Fund will request AID comments on the sub-project. AID comments will consist of 1) a determination that the sub-project criteria as set forth in Section III.A.1&2. are respected, and 2) a determination that the sub-project is consistent with AID bilateral projects. AID comments will be transmitted to the EF by REDSO, based upon comments from Regional Development Office in Niamey, the Country Development Officer in Upper Volta, and country representatives in Togo and Dahomey. These field comments will be transmitted to REDSO through RDO/Niamey. AID will be responsible for formal approval of sub-project feasibility only when AID financing exceeds $1.0 million.

b) Monitoring and Evaluation. AID's major rôle in project implementation will be to monitor project progress, to participate in periodic evaluations with the other project implementation organizations and to generally facilitated timely project implementation. Based on the experience of the first AID/Entente livestock sector project, AID may be called upon to provide assistance in translating procurement specifications from French to English standards and in facilitating U.S. procurement of goods and services (including training services).

c) Provision of technical services. AID will assist the EF in recruiting a livestock production specialist/project manager and provide assistance to the EF in locating and contracting short-term U.S. livestock specialists for sub-project design.

2. Capacity to Carry Out Assigned Roles

a. The Entente Fund

The Entente Fund operates under a Secretariat headed by an experienced African Administrative Secretary. Under the direction of the Administrative Secretary is a small, technically competent staff provided by FAC and AID. This staff provides expert coverage in a variety of technical and managerial fields. The Fund appears to function effectively and to be fully qualified professionally and by statute to assume effective implementation of the project. With the additional technical assistance provided by AID under this project, the EF will have the personnel, experience and financial capacity to handle capably the programming and financial aspects of this project. The technical assistance provided by AID should avoid the problems of the first AID/Entente livestock project which, at the EF level, resulted from the limited time the EF agricultural advisor could devote to the project. With the addition of the U.S. livestock specialist to the EF staff, closer and more frequent contact with Entente member governments and with the ELC should occur.

The main responsibility for the Entente Livestock project will be delegated to the AID-funded livestock specialist who as project manager will work under and benefit from the experience of the agricultural advisor and the Administrative Secretary. Project financial management will be the continued responsibility of a U.S. - funded advisor to the Entente Fund, who has successfully handled similar responsibilities for several other AID/Entente projects.

b. The Entente Livestock Community (ELC)

The ELC operates under the direction of a Council of Ministers which meets twice a year and includes representatives of Entente member states. The ELC is managed by a Voltan Executive Secretary. ELC technical staff until recently consisted of three experienced French-funded livestock specialists (animal production/health, marketing/transportation and economics) and an AID-funded statistics specialist. As a first step towards Africanizing the technical staff of the ELC, an African veterinarian or agronomist will be recruited to replace the AID statistician and after a period of training will be responsible for statistics and training activities of the ELC.

The ELC has done a commendable job in advancing regional livestock cooperation over the past four years under difficult circumstances and continues to assist member governments in the implementation of livestock protocols. Delays in protocol approval cannot be attributed to the ELC but have been the consequence of the reluctance of governments to relinquish a degree of their national sovereignty. The ELC can also be commended for having appraised proposed sub-projects for the first AID/Entente livestock project in a highly competent technical manner.

The major ELC deficiency revealed by the AID evaluation of the first project relates to the organization's lack of aggressiveness in promoting the AID/Entente project, and in assisting member governments in sub-project design, revision and implementation. In an attempt to improve management of the second AID/Entente project, responsibility for overall project management has been shifted to the Entente Fund.

The EF project manager will have primary responsibility for encouraging and facilitating the identification and design of potential sub-projects and for project liaison with national government officials. He will be able to call in short-term specialists to assist governments in project identification and design and will also continue to call on ELC technicians to assist in that task.

In summary the ELC appears to be fully capable of continuing to promote and facilitate regional cooperation in the livestock sector and to assist in the management of the AID/Entente training program. National governments are now less reluctant to accept Entente assistance in sub-project identification, design and revision. This was clearly implied to the AID project design team in May, 1979. Therefore, the ELC can now play a more energetic role in overall project implementation.

c. Entente member governments

All of the functions of the EF, ELC and AID in this project with the exception of provision of capital, reflect an assessment of the need to assist Entente-member governments in one element or another of international development of livestock sector strategies and in the identification, design or implementation of national livestock projects. Basic responsibility for the full process remains, of course, with national governments and project success will depend in large part on the degree of Entente-national government cooperation and the ability of the Entente organizations to bolster weak links in the national sector strategy-project design-implementation system.

How well did national governments perform in the design and implementation of sub-projects funded under the first Engente/AID livestock sector program? In general , the AID evaluation revealed that their problems were more acute when dealing with project design that with project implementation. Entente government capacity to design livestock projects in accordance with donor standards is severely limited. Livestock Service staffs are small in size and usually fully occupied with the day to day problems of the Service. Ministries of Plan or Rural Economy often assist in the preparation of livestock sector strategies but lack technical expertise (and manpower) to design specific technical interventions. The accepted pattern for project design in the region usually involves expatriate assistance - either resident French advisors or short-term donor-funded project design teams. While the influence of resident advisors in the region has decreased in recent years, especially in Niger and Benin, short-term design teams or technical consultants are still welcome throughout the region if they agree to work under the close supervision of government officials.

The project will reinforce the design capabilities of Entente member governments in three ways: first, short-term technical specialists will be made available to assist governments in the design of potential sub-projects which may have been identified with the assistance of the AID/EF project managers. In some cases, these specialists will be supplied by FAC and UNDP under their bilateral assistance programs. Second, EF and ELC technicians can assist governments in re-designing proposed sub-projects which have been judged marginally unacceptable during EF technical review of submissions. Thirdly, the technical skills (including design skills) of 35 government officials will be upgraded through project funded training in Africa or the U.S.

Sub-project implementation under the first AID/Entente project has encounted delays common to development projects in all sectors of activity in West Africa and should not be overly critisized. Disbursement of funds, once sub-projects were approved, has been at acceptable rates. Delays were often due to poor project design. For example, the Togolese Genie Rural had to re-design a Cattle Trails project when it was discovered that the original FAC study had been completed without the contractor visiting the project area. Other delays can be traced to confusion over differences in standards for Europen and American commodities. To date, governments have prepared RFPS, reviewed bids, awarded and supervised contracts satisfactorily. As a precautionary measure during the second project the EF will continue to monitor the preparation of bid documents and the awarding of major contracts.

While national governments have performed sub-project implementation tasks reasonably well under the first AID/Entente project, additional skills will be required of them in the second project. Many of these sub-projects will be extensive livestock production projects or demonstration projects as contrasted with the infrastructural orientation of the earlier sub-projects (markets, cattle trails, slaughterhouses).

Technical specialists may be required to manage certain of these projects. When qualified nationals are not available, expatriates will be needed. In the Ivory Coast, Togo and Benin Livestock Service cadre are sufficiently well-trained and numerous to leave little doubt that they could be made available by their governments to manage priority projects. Qualified Livestock Cadre in the Sahelian countries of Upper Volta and Niger are more limited in number. Entente Fund monies will be utilized, therefore, in certain cases to finance the services of expatriate livestock specialists who will assist in the sub-project management. If qualified U.S. or African specialists are not available, Code 935 procurement of technical services by the Entente Fund may be required to ensure proper sub-project implementation.

Sub-projects financed under the second AID/Entente project may also differ from earlier sub-projects on length of duration. By their very nature, extensive livestock production activities may require long gestation periods before large numbers of producers are affected and project objectives are realized. National governments, therefore will have to budget expenditures to continue these sub-projects beyond the period of AID/Entente funding until sub-project fruition. Prior to EF sub-project approval, governments will be required to pledge their continued support to the specific sub-project after AID/Entente funding ends. While this pledge cannot be enforced by the EF "post-facto", non-compliance by a country would lead to EF reticence to fund projects in that country under future programs.

d. AID

The locus of AID responsibility for monitoring this project must be clearly identified in order to avoid confusion on the part of the EF, ELC and participating governments. Given the primary project management role of the, EF, AID project monitoring responsibilities will be located in Abidjan at REDSO/WA. A REDSO project officer will maintain regular contact with the Entente Fund and will call upon other REDSO staff (livestock specialist, engineer, lawyer, contract officer, procurement officer) to assist in the resolution of problems that arise.

The USAID office in Ouagadougou will be REDSO's liaison with the Entente livestock Community and will relay information on ELC problems, issues, requests, etc. to Abidjan where joint AID/EF decisions will be made.

The USAID Regional Development Office in Niamey will be responsible for EF and REDSO contacts in other Entente capitals (Lome, Cotonou, and Niamey), and will remain in contact with government livestock officials and will communicate problems of sub-project design and implementation to REDSO and EF for prompt action.

AID will assist the EF to identify and contract a livestock production specialist who, working under the direction of the Administrative Secretary of the EF, will be the EF project manager. AID will also assist the EF in locating and contracting U.S. and African short-term consultants to assist in sub-project design.

B. Implementation Plan

1. Responsibility and Mechanisms for Implementation

The Entente Fund, as the Borrower/Grantee will be responsible for overall project management. Its functions and the functions of the ELC and Entente member governments in project implementation are discussed above. The mechanisms for project implementation are detailed below.

a) Technical Assistance

1. Logistic Support for Project-funded Personnel.

Logistic support for the AID-funded livestock specialist/project manager will mirror the division of responsibilities AID and the EF maintain for the African Enterprises project manager. AID will provide salary, housing, utilities costs, and travel outside the region. The EF will provide an office, secretarial and general logistic support, and funds for work-related travel within the Entente region.

Short-term consultants will be provided as necessary. Logistic support will be provided by the EF for regional travel, and by Entente member governments when designing specific sub-projects.

The African statistician/training officer at the ELC will be provided housing by the ELC which will also be responsible for other necessary logistic support. AID will contribute to the officer's salary over three years on a 100% - 66% - 33% scale. AID will also pay training expenses for this officer in the U.S., international travel and English language training.

2. Technical Assistance - Training Plan and Operations.

Short-term (up to 9 months) training in the U.S. and Africa will be provided to 35 persons from Entente member states. In addition, the EF will finance training in Code 935 countries. The ELC in consultation with national governments will prepare a project training plan based upon the skills requirements of national livestock services and related institutions. The ELC training officer will then visit the U.S. to set up, in conjunction with AID/OIT, training programs which meet regional needs. Trainees will be selected from candidates proposed by Entente member governments or institutions based on criteria established by the ELC and approved by AID.

b) Capital Assistance

1. Disbursement Procedures.

Following final EF approval of a sub-project and signature of a sub-loan or sub-grant agreement between the EF and the recipient country, the EF will request AID to issue a Letter of Commitment to finance the projected dollar costs of the sub-project and to issue a DRA to finance local costs. Reimbursement by AID for local cost and dollar expenditure will follow procedures established under the first AID/Entente Livestock Sector project. Insofar as Section 110b. of the FAA applies to the project, sub-project disbursement for sub-grants financed by this project must be completed within 3 years of sub-grant signature.

2. Procurement

The project will finance local and foreign exchange costs of sub-loans and sub-grants to Entente member states. At least 10% of the capital program, or $750,000 will be used to finance imports from Code 941 countries. Up to $200,000 may be used to finance procurement from Code 935 countries of vehicles and spare parts. Code 935 procurement for technical services will also be allowed up to $200,000, subject to the conditions outlined in Section II.B.6 on page 29. The necessary waivers for procurement for both loan funds and grant funds are included in IV.F. below.

3. Implementation Schedule

The proposed implementation schedule is as follows:

1.	Project Authorization	March 1976
2.	Loan and Grant Agreements Signed	May 1976
3.	Livestock Production Specialist Contracted	July 1976
4.	Approval of Conditions Precedent to Initial Disbursement	July 1976
5.	Opening of First Letter of Commitment	August 1976
6.	Terminal Date for Insurance of Commitment Documents	May 1978
7.	Terminal Disbursement Date	May 1981

A Planned Performance Network Chart, detailed Implementation Schedule and indication of critical points will be finalized shortly after arrival of the EF project manager at post.

C. **Evaluation Plan**

Evaluation of this sectoral program will take place at two levels of programming. As noted above, the participating organizations shall meet on an annual basis to review and evaluate progress towards the achievement of sectoral objectives, the results of sectoral research and its implications for regional and national livestock sector policies and programs.

In addition the Entente Fund and AID will undertake annual evaluation of all sub-projects approved under the program. These annual evaluations will also review problems of program implementation and will recommend modification in implementation procedures where necessary.

Two years after approval of initial conditions precedent, AID,the Entente Fund and the member states will undertake a major evaluation of the program.This evaluation will include an assessment of the need for additional AID assistance to the livestock sector in the Entente region and the capacity of the Entente Fund to administer AID resources addressed to the objectives of Entente Livestock II, as well as the status of the protocols for the region.

These evaluations will include the provision to AID of all information and documentation relating to sub-projects as may be required by AID, including environmental statements, the role of women, the adequacy of sub-project criteria, the status of sub-projects in the process of implementation, and other information as required by AID.

In addition, the Entente Fund will submit a semi-annual report to AID on project accomplishment, the status of sub-projects in both the design stage and the implementation stage , the technical assistance provided under the project, and other such information as AID may require.

D. Conditions Precedent to Disbursement

1. The usual legal opinions and documentation establishing the validity of the obligations of the Borrower (the Entente Fund) and guarantors (the member governments) will be required.

2. A special condition precedent to initial disbursement will be AID approval of a program management plan prepared by the Entente Fund in consultation with the ELC and Entente member states. This plan will detail the responsibilities of the AID-financed project manager, the procedures under which sub-projects will be appraised and will describe EF plans for monitoring and evaluating project progress.

3. As a condition precedent to initial disbursement the EF will submit for AID approval specimen sub-loan and sub-grant agreements.

E. Special Covenants

1. The Borrower, the ELC and each of the Entente member states agree to place high priority on the full implementation of regional livestock protocols which have been approved by the ELC and to continue to promote regional cooperation in the livestock sector and among the Entente states.

2. The Borrower agrees to submit a plan for use of AID training funds based upon the skills requirements of National Livestock Services and related institutions within six months of the effective date of the Grant Agreement.

3. The Borrower agrees that all funds received from the Sub-borrowers as a result of obligations incurred under the project and income derived from such funds will be deposited in one or more special accounts. The Borrower agrees to use funds in the special accounts and income derived from such funds only for the debt servicing of the loan, and for general purposes in support of livestock and mixed farming activities by small producers in the member states of the Borrower. The above stated use of funds will apply to funds accruing under the first livestock loan, and may be jointly administered with funds accruing under the Food Production Project.

F. JUSTIFICATION OF WAIVERS FOR PROCUREMENT

1. Code 935 Procurement for Vehicles

Section 636(i) of the Foreign Assistance Act of 1961, as amended, prohibits AID from the purchase or long-term lease of motor vehicles unless such vehicles are manufactured in the United States. Section 636(i) does, however, provide that "... where special circumstances exist the President is authorized to waive the provisions of this section in order to carry out the purposes of this Act."

The Executive Committee for Project Review holds the opinion that one of the objectives of this Loan, which can be defined as the promotion of livestock production by small farmers and herders, including marketing, reflects special circumstances that justify the waiving of the above requirements of Section 636(i) and the source/origin requirements generally set forth in Chapter 2 of A.I.D. Handbook 15. Therefore, the Executive Committee recommends that a portion of the capital funds not to exceed $200,000 of total funds be waived from the requirement stipulated in FAA Section 636(i), and be eligible for Code 935 procurement. This project of loan funds would be used for the transportation needs of agricultural services only.

The Sahel drought emergency of 1974 demonstrated not only the importance of the transport and marketing sector in the Entente area, but also the predominance of large, foreign-dominated near-monopoly enterprises which control this sector. Attempts by AID to identify locally owned and operated enterprises through which to distribute emergency food shipments revealed the paucity of such enterprises, although small and medium trucking enterprises were mobilized under sub-contracts and informal arrangements to haul foodstuffs between distribution points to the extent possible.

While the worst of the drought is presently considered to be over, the continuing effort in economic development, particularly in the area of agricultural marketing and production, and the immense logistic requirements in moving agricultural inputs to farmers and in turn produce to markets, depends on the availability and prices demanded by private transporters. Agricultural producers and consumers will benefit to the extent that the marketing and input delivery mechanisms are improved through expanded transport service facilities, and to the extent that competition reduces the costs of transport and the accompanying monopoly power of expatriate transport enterprises.

The chief rationale for permitting the purchase of non-U.S. vehicles is the lack of availability for servicing and spare parts for U.S. vehicles in the region. AID's own experience with U.S. vehicles in the Sahel and coastal countries demonstrates that these vehicles are of utility strictly under urban driving conditions, and even then, spare parts availabilities are at an absolute minimum. The availability of the necessary maintenance and servicing facilities is of extreme importance in these countries, owing to the difficult driving conditions resulting from rough, rain-gutted roads which cause frequent breakdowns.

In addition to the "special circumstances" requirements of FAA Section 636(i), AID Handbook 15 establishes as a criterion for the waiver of AID's source requirements the nonavailability of an essential commodity from eligible sources. The Memorandum of Conversation regarding U.S. dealerships in vehicles in the Entente regions, attached as ANNEX I, confirms that U.S. manufacturers have indicated that they do not have outlets for U.S. vehicle dealerships and servicing in the Entente region, nor do they intend to establish such outlets in the foreseeable future.

The Executive Committee is intensely aware that transportation comprises a key bottleneck to small farmer service availability in the Entente countries. If the present loan is to promote small farmer livestock production, provisions must be made in the loan to allow waivers for FAA Section 636(i) and for Code 935 procurement, since vehicles in the Entente countries are supplied from Europe, owing to cost as well as repair and maintenance facilities. Therefore, the Committee recommends that the Administrator determine that special circumstances exist in this case that justify the procurement of non-U.S. manufactured vehicles for purchase by African rural development institutions in an amount not to exceed 2.7 percent of the present loan, or $200,000; and that the Administrator certify that exclusion of procurement from the source requested in this waiver would seriously impede attainment of U.S. foreign policy objectives and the objectives of the Foreign Assistance Program as regards the present loan.

2. Code 935 Procurement for Technical Services

As discussed in Section II C.2., one of the AID/Entente standards for sub-project approval is adequate host government capacity to properly implement the proposed sub-project. In cases where governments cannot supply the skilled manpower necessary to manage a sub-project which is otherwise feasible, the Entente Fund may insist that the government contract with expatriate technical specialists to assist in the management of the sub-project in question. This is most likely to occur in the manpower scarce Sahelian countries, but may occur in other Entente countries as well. For example, the dossiers describing the Government of Niger's two livestock multiplication projects (Dosso and Zinder) indicate that the centers would each be managed by an "Assistant d'elevage" due to the scarcity of more highly trained Nigerian livestock personnel. An "assistant d'elevage" with limited training, mostly confined to animal health activities, is clearly not qualified to manage a major livestock production project. In discussions with the project design team, the Government agreed that a more highly qualified expatriate might manage a multiplication center for the period of the AID/Entente investment providing on-the-job training for the "assistant d'elevage" who would later assume management responsibility. Under circumstances such as this, sub-project funds should be used to contract expatriate technical assistance.

French-speaking U.S. or African livestock technicians qualified for sub-project management positions are limited in number and may be fully absorbed in filling the long-term personnel requirements of several new AID bilateral livestock projects in Senegal, Mali, Mauritania, Niger, Upper Volta, Chad, and North Cameroon.

Therefore, in order to ensure that manpower-scarce governments can fully benefit from the project, it is proposed that limited Code 935 procurement for sub-project related long-term technical services be allowed. Requests for use of project funds for this purpose would be approved by REDSO/WA only after it had been determined that suitable U.S. or African personnel cannto be identified within a period of 90 days.

2. Local Currency and Code 941 Procurement for Grants

The Technical Assistance Grant and the Capital Grant include provisions for local currency financing and for Code 941 procurement, as stated in Section III.D.6 of the Project Paper. The Executive Committee for Project Review holds the opinion that both local cost financing and U.S. Code 941 procurement are essential for the utilization of these funds in accordance with the purposes of the Foreign Assistance Act, as reflected by the present project. Experience in the Sahel countries has demonstrated that U.S. procurement is of limited availability, and cannot respond to the full spectrum of development needs faced by those countries. The Entente countries as a group face the same development problems as the Sahel countries. Four of these countries are among the twenty-five least developed countries as identified by the United Nations. Another four of the Entente countries are cited as those countries which are most seriously affected by the dramatic rise of oil and those products derived from oil. It is the opinion of the Executive Committee for Project Review, that the tying of grant funds to U.S. procurement would render impossible the attainment of the purposes of the project. Therefore the Committee requests that a waiver be granted to untie the grant funds in the project from U.S. procurement, and make them eligible for local currency financing and U.S. Code 941 procurement. The Committee recommmends that 85% of capital Grant funds be untied in this manner, and that technical assistance grant funds be untied for local currency financing and Code 941 procurement.

H. NEGOTIATING STATUS

No special problems in the negotiation of the Loan and Grant Agreements and/or in reaching agreement on the implementation plan are foreseen.

I. ISSUES

None.

Annex A

Loan Authorization

AID-DLC/P-

A.I.D. Loan No.
Provided Under: Foreign Assistance Act Section 103
For: Entente Fund: Livestock Sector II

Pursuant to the authority vested in the Administrator of the Agency for International Development (A.I.D.) by the Foreign Assistance Act of 1961, as amended, (the Act) and the delegations of authority issued thereunder, I hereby authorize the establishment of a Loan pursuant to Section 103 of the Act to the Mutual Aid and Loan Guaranty Fund of the Council of the Entente States (the Borrower) by an amount not to exceed four and a half million U.S. dollars ($4,500,000). To provide necessary complementary financing the following grants will be approved by my signature of a separate Action Memorandum: (a) Capital Grant to the Entente Fund for an amount not to exceed Three Million U.S. dollars ($3,000,000); (b) Technical assistance grant to the Entente Fund for an amount not to exceed Seven Hundred and Sixty Thousand U.S. dollars ($760,000); (c) Research grant to the Center for Research in Economic Development (CRED); University of Michigan for an amount not to exceed Four Hundred and Eighty Thousand U.S. dollars ($480,000). The purpose of the Loan/Grant project for which these funds are authorized is to increase the efficiency and productivity of livestock production in the member states of the Borrower (Ivory Coast, Upper Volta, Niger, Togo, and Benin). To accomplish the foregoing, the Loan funds will be loaned to the Borrower, reloaned to the member states or the livestock development institutions thereof, and ultimately used to benefit the rural poor in the member states of the Borrower who are engagediin the production of livestock. The loan is subject to the follwwing terms and conditions:

1. Interest Rate and Terms of Repayment

(a) The Borrower shall, in United States dollars:

(i) repay the amount of the Loan to A.I.D. within forty (40) years, including a grace period of not to exceed ten (10) years;

(ii) pay to A.I.D. interest on the outstanding disbursed balance of the loan and on any interest accrued thereon at the rate of two percent (2%) per annum during the grace period and three percent (3%) per annum thereafter.

(b) The member states or Sub-borrowers shall, in CFA francs (or such other currency as is legal tender in the member countries of the Borrower):

(i) pay to the Borrower an amount equivalent to each country's share of the amount of the Loan within a period of not to exceed forty (40) years, including a grace period of not to exceed ten (10) years;

(ii) pay to the Borrower interest on the unrepaid principal and on any interest accrued thereon at an interest rate not to exceed three and a half percent (3½%) during the grace period, and up to three and a half percent (3½%) during the repayment period.

2. Other Terms and Conditions

(a) The Borrower's repayment of the amount of the Loan will be jointly and severally guaranteed by each of the five member states of the Borrower.

(b) Conditions Precedent to Disbursement:

1. The usual legal opinions and documentation establishing the validity of thedobligations of the Borrower (the Entente Fund) and guarantors (the member governments) will be required.

2. A special condition precedent to initial disbursement will be AID approval of a program management plan prepared by the Entente Fund in consultation with the ELC and Entente member states. This plan will detail the responsibilities of the AID-financed project manager, the procedures under which sub-projects will be appraided andwwill describe EF plans for monitoring project progress.

3. As a condition precedent to initial disbursement the EF will submit for AID approval specimen sub-loan and sub-grant agree--ments..

(c) Special Covenants:

1. The Borrower, the ELC and each of the Entente member states agree to place high priority on the full implementation of regional livestock protocools which have been approved by the ELC and to continue to promote regional cooperation in the livestock sector and among the Entente states.

2. The Borrower agrees to submit a plan for use of AID training funds based upon the skills requirements of National Livestock Services and related institutions within six months of the effective date of the Grant Agreement.

3. The Borrower agrees that all funds received from the Sub-Borrowers as a result of obligations incurred under the project and income derived from such funds will be deposited in one or more special accounts. The Borrower agrees to use funds in the special accounts and income derived from such funds only for the debt servicing of the loan, and for general purposes in support of livestock and mixed farming activities by small producers in the member states of the Borrower. The above stated use of funds

will apply to funds accruing under the first livestock loan and may be jointly administered with funds accruing under the Food Production Project.

(d) Based upon the justification set forth in Section F of Part IV of Project Paper AID-DLC/P- , I hereby conclude that exclusion of procurement from countries included in A.I.D. Geographic Code 935 would seriously impede attainment of U.S. foreign policy objectives and the objectives of the foreign assistance program. Such Code 935 procurement shall be limited to the transportation requirements essential to the success of Sub-projects, and to technical service requirements if Code 941 procurement cannot be identified within a reasonable time-frame. Code 935 procurement shall not exceed \$200,000 for the trans-portation-related requirements of Sub9projects, and will be determined on a case-by-case basis for technical services requirementz.

(e) Except as authorized in paragraph 2(b) above, goods and services financed undertthe Loan shall have their source and origin in countries included in A.I.D. Geographic Code 941 and the member states of the Borrower. Not less than ten percent (10%) of the amount of the Loan shall be used to finance goods and services of Code 941 source and origin.

(f) Based upon the justification set forth in Section B.6 of Part II of Project Paper AID-DLC/P- , the invoice value limitation on single transactions involving shelf items imported from Code 935 countries, as prescribed by paragraph 11B3, Chapter 11, AID Handbook 15, is modified as follows for purpose of the Loan:

(i) There will be a value limitation on shelf item procurement of \$3,000 per transaction.

(ii) The total amount of shelf item procurement financed under the loan shall not exceed \$1,600,000.

(g) The Loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

____
Administrator

____
Date

Drafted: AFR/DR/PDD: JPielemeier: dmb: 4/9/76
REDSO/WA: TCrawford

Clearances:	AA/AFR: SSScott	Date:
	AFR/CWR: DShear (draft)	Date: 4/9/76
	AFR/DP: RHuesmann (draft)	Date: 4/7/76
	AFR/DS: PLyman (draft)	Date: 4/7/76
	AFR/GC: TMuntsinger (draft)	Date: 5/7/76
	SER/FM: TBlacka (draft)	Date: 5/4/76
	PPC/DPRE: AHandley	Date:
	AA/PPC: PBirnbaum	Date:
	SER/COM: JHShollenberger (draft)	Date: 4/9/76

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(d) Based upon the justification set forth in Section F of Part IV of Project Paper AID-DLC/P- , I hereby conclude that exclusion of procurement from countries included in A.I.D. Geographic Code 935 would seriously impede attainment of U.S. foreign policy objectives and the objectives of the foreign assistance program. Such Code 935 procurement shall be limited to the transportation requirements essential to the success of Sub-projects, and to technical service requirements if Code 941 procurement cannot be identified within a reasonable time-frame. Code 935 procurement shall not exceed $200,000 for the trans-- portation-related requirements of Sub@projects, and will be determined on a case-by-case basis for technical services requirementx.

(e) Except as authorised in paragraph 2(b) above, goods and services financed underthe Loan shall have their source and origin in countries included in A.I.D. Geographic Code 941 and the member states of the Borrower. Not less than ten percent (10%) of the amount of the Loan shall be used to finance goods and services of Code 941 source and origin.

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	PPC/DPRE: AHandley	Date:
	AA/PPC: PBirnbaum	Date:
	SER/COM: JHShollenberger (draft)	Date: 4/9/76

ANNEX B
LETTER OF APPLICATION

CONSEIL DE L'ENTENTE

FONDS D'ENTRAIDE ET DE GARANTIE
BOITE POSTALE [illegible] - ABIDJAN
TÉLÉPHONE [illegible]

SECRÉTAIRE ADMINISTRATIF

ABIDJAN, LE 24 OCT. 1975 19

No 1248 S. A.

Le Secrétaire Administratif

OBJET : Requête pour l'Elevage.

à Monsieur le Directeur de REDSO
Ambassade des Etats Unis

A B I D J A N.

RECEIVED
30 OCT. 1975
REDSO/WA

Monsieur le Directeur,

Bien que la mobilisation des crédits mis à la disposition du Conseil de l'Entente pour le développement de l'Elevage ne soit pas encore achevée de nouveaux projets ont pu être identifiés.

D'après les estimations de nos différents experts les besoins financiers s'élèvent à quinze millions de dollars dont dix millions sous forme de prêt réservé aux pays cotiers et cinq millions à titre de subvention pour les pays les plus défavorisés.

Pour le prêt j'ai l'honneur de solliciter officiellement par la présente une augmentation de l'accord N° 698 H - 011 d'un montant de dix millions de dollars.

Pour tenir compte de l'état d'avancement des dossiers d'exécution la mobilisation des différents financements pourra se faire en deux tranches égales, le déblocage de la première devant être effectif dans les premiers mois de l'année 1976.

Les besoins en assistance technique évalués par vos experts devraient également être financés au début de 1976.

Assuré de votre précieux concours je pense que l'on pourra mettre à la disposition des Etats à partir du mois de Janvier 1976.

- Quatre millions et demi de dollars pour les sous prêts.
- Trois millions de dollars pour les subventions. et les crédits d'assistance technique.

Je vous en remercie d'avance et vous prie d'agréer Monsieur le Directeur, l'assurance de mes sentiments distingués.

FONDS D'ENTRAIDE ET DE GARANTIE DES EMPRUNTS CONSEIL DE L'ENTENTE

Paul KAYA.

TRANSLATION

Letter from Paul Kaya, Administrative Secretary, Entente Fund, to REDSO/WA Mission Director.

Conseil de l'Entente October 24, 1975

Subject: Request for Assistance for Livestock

Dear Sir:

Although the mobilization of the credits available to the Entente Fund for the livestock development of member countries has not been completed as yet, new projects have been identified.

According to the estimates of our various experts, the financial needs amount to fifteen million dollars, of which ten million in the form of a loan for the coastal countries, and five million under a grant for the most disadvantaged interior countries.

For the Loan, I hereby request formally an increase of the loan agreement No. 698-H-011 by an amount of ten million dollars.

In order to take into account the progress situation of the implementation dossiers, the mobilization of the various financing can be made in two equal tranches, the releasing of the first tranche to be effective within the first months of 1976.

The technical assistance requirements estimated by your experts should also be financed at the beginning of 1976.

With your precious assistance, I think that we can make the following available to the member states as from January 1976 :

-- Four and a half million dollars for sub-loans;

-- Three million dollars for grants and technical assistance credits.

Thanking you in advance, I send you assurances of my most distinguished sentiments.

Paul KAYA
Administrative Secretrary
Entente Fund

ANNEX C

ENTENTE LIVESTOCK SECTOR LOAN II

CERTIFICATION PURSUANT TO SECTION 611(e)

of the FOREIGN ASSISTANCE ACT OF 1961 AS

AMENDED

I, Albert R. Baron, Regional Development Officer for the Entente region, having taken into account among other things:

A. The existence of viable livestock development institutions in the Entente States, and the role which they can play in promoting a dynamic meat and poultry production program in their respective countries;

B. The requirement for additional sources of loan and grant funding if these livestock development institutions are to be in a position to encourage and foster an increased level of production in staple meat supplies;

C. The inclusion of provisions in the Plans of each of the countries for expansion of the livestock production sector and the promotion of small herders and farmers to provide increased meat and poultry produce to urban areas;

D. The importance which the Entente Fund in cooperation with the Member States accords to this program;

do hereby certify that in my judgment the Entente Fund and the Entente Member States have the financial capability and the human resource capability to implement, and effectively utilize the subject capital assistance project.

This jugment is based on the fact that :

1. The Entente Fund has agreed to make appropriate agreements with each of the Member States providing for criteria in accordance with its Loan Agreement with AID;

2. The cooperating institutions have at their disposition complementary financial and technical resources permitting them to undertake these expanded activities; and

3. The Entente Fund and the cooperating States wish to proceed with the development of their livestock production capacity.

Albert M Baron

Albert R. Baron
Director; RDO/Niamey
Niamey, Niger

AID 1025-3 (7-71)

LOGICAL FRAMEWORK MATRIX – PROP WORKSHEET

Summary	Objectively Verifiable Indicators	Important Assumptions
A.1. Goal 1) To increase the availability of reasonably-priced animal protein for consumption within the region. 2) To augment the standard of those rural poor associated with livestock production.	**A.2. Measurement of Goal Achievement** 1) Stable or increased per capita consumption of animal protein in the region. 2) Degree to which government policies are designed to increase livestock production by working through rather than around the rural poor.	**A.3.** [illegible] 1) Participating governments to recognize the long-term [illegible] benefits of increasing the productivity and standards of living of the rural poor. 2) Appropriate livestock [illegible] strategies and livestock-related interventions are available or can be devised to increase livestock production among the rural poor.
B.1. Purpose 1) To increase the efficiency and productivity of the livestock sector in the Entente countries while increasing the standard of living of small livestock producers. 2) To foster increased regional cooperation and coordination in livestock production and marketing in the Entente states and to support within the region a process of sectoral analyses which serves to provide continuing information to be used in policy and program evaluation and development.	**B.2. End of Project Status** 1) Government policies and projects reflect a greater understanding of the importance of the small producer in the livestock sector. (a) Increased number of projects designed to affect small producer target group. (b) Trends in government-supported research. (c) Government cadre trained in ways to affect small herder production. 2) Government policies and projects indicate greater government support to increased production of alternative sources of animal protein. 3) Existing regional protocols fully implemented and new protocols investigated and (if appropriate) approved. 4) Increased number of regional livestock marketing and transportation projects designed and funded. 5) Institutionalization of periodic annual meetings of EF for discussion of alternative livestock sector strategies and projects, review of results of sectoral research, etc.	**B.3.** [illegible] 1) Entente member-states will continue to find regional cooperation in the livestock sector in their mutual self-interest. **C.3.** [illegible] 1) Close working relationships can be established and maintained between Entente staff and member country livestock officials. 2) Entente member states will reject their pledge to fully implement regional protocols within reasonable time frame.
C.1 Outputs 1) The careful design of interventions (sub-projects) which will test the viability of various means to achieve sectoral objectives. 2) The funding, implementation and evaluation of sub-projects. Research 3) a. Review and synthesis of available information of major sector development problems. b. Field reserach studies to provide critical information relating to major sectoral development problems. c. Detailed sub-sectoral analysis of livestock production and livestock marketing in the Entente region with policy recommendations. (con't under D3 ——→)	**C.2. Output Indicators** 1) 10-13 intervention designed with EF/AID assistance or by other donors. 2) 4-6 loan funded sub-projects, 3-5 grant funded sub-projects, 2-3 projects funded by the donors. 3) a) CRED Phase I report b) 5-field research studies c) Final Phase of CRED research 4) Annual meetings sponsored by the Entente Fund. 5) 35 government officials provided practical training in livestock production, range management, ag economics, project design, etc. 6) Protocols concerning annula health, statistics, customs, and regulation of profession.	**D.3. C.1. Outputs (con't)** 4) Series of periodic meetings to discuss livestock policy issues within a regional form. 5) Training in member state livestock cadre in key disciplines. 6) Full implementation of livestock protocols. Inputs Technical Assistance, Research, Capital Assistance, Training, Equipment.

ANNEX E

Draft Project Description to be Used in Loan/Grant Agreement

Recognizing the limited progress achieved in increasing livestock production in recent years and the need to develop and test programs which can increase livestock productivity while providing substantial economic benefits to the large numbers of small livestock producers in the Entente states; and recognizing that progress toward developing regional linkages and coordination in livestock production and marketing in past years must be reinforced through expanded regional communication about and coordination of livestock strategies, the signatories (the Entente Fund, the Entente member states, and AID) hereby agree to support the following common sectoral objectives:

1. to increase the efficiency and productivity of the livestock sector in the Entente states and in doing so to place increased emphasis on the development and testing of low-cost technological improvements which can benefit small livestock producers and in developing systems by which livestock services in the member states can provide these technological improvements to large numbers of small livestock producers at acceptable cost to government;

2. to increase the production of alternative sources of animal protein (small ruminants, poultry, pigs) as means to augment the supply of animal protein which can be readily purchased by consumers at low cost;

3. to improve regional livestock marketing channels which facilitate the efficient movement of livestock and meat between the Entente states and to fully implement regional agreements (protocols) developed under the first AID/Entente Livestock Sector Loan;

4. to endeavor to promote improved regional cooperation and coordination in the development of livestock policy within the Entente states.

To help achieve these objectives AID, the Entente Fund, and the Entente member states agree to undertake the following actions:

a. to design, finance, implement and carefully evaluate a number of interventions (sub-projects) which will test alternatives ways to achieve objectives #1 and #2 above.

b. to design, finance, implement, and carefully evaluate a number of interventions (sub-projects) which will facilitate the efficient marketing of livestock and meat between the Entente states;

c. to meet regularly to discuss the interim results of these interventions, the results of projects with similar objectives funded from other sources in the member states and/or carried out in neighboring states with a view towards refining regional and national strategies which promote sectoral objectives;

d. to support and promote research efforts designed to analyze the constraints to achievement of the above objectives and designed to recommend policy changes which member states separately or collectively might take to facilitate the attainment of sectoral objectives;

e. to promote the training of cadre from Entente member states in order that they may be better prepared to design and implement, with reduced levels of donor technical assistance, policies and projects supporting the above objectives;

f. to fully implement existing regional protocols and to carefully study the benefits of (and approve and implement where appropriate) additional regional agreements which would facilitate the achievement of sectoral objectives;

g. to endeavor to promote improved regional cooperation and coordination in the development of livestock policy within the Entente states;

To promote the above objectives AID shall:

1. provide $4.5 million in loan funds and $3.0 million in capital grant funds to assist in financing interventions (sub-projects) which test the viability of various means to achieve sectoral objectives;

2. to provide technical assistance to facilitate the design and evaluation of sub-projects and to facilitate cooperation and coordination within the livestock sector of the member states;

3. to finance research activities designed to identify key constraints to the achievement of sectoral objectives for the region and to recommend actions which might be undertaken by the EF and its member states to alleviate these constraints;

To promote the above objectives the Entente member state states shall

1. finance at least 25% of all loan-funded project costs and 10% of all grant-funded sub-project costs during the period of AID financing of sub-projects and assume responsibility of all continuing costs after AID assistance terminates (after 3 years of the individual sub-projects of the program);

2. provide qualified candidates for training in areas related to the above sectoral objectives;

3. participate in periodic regional planning-coordination meetings convened to discuss the program objectives and to consider recommendations for programmatic changes which will flow from the evaluation of pilot interventions and project-related research;

4. endeavor to design and implement additional projects for donor or national funding which will continue the movement towards achievement of sector objectives;

4. continue to support the regional objectives of the Entente Livestock protocols and to work through the EF and ELC to improve regional cooperation and communication within the livestock sector.

To promote the above objectives the Entente Fund shall:

1. allocate CFA 15,000,000 of its development budget to provide financial support to the program in CY 1976 with a gradual increase in EF counterpart funding throughout the life of the project;

2. provide technical and administrative support to the program;

3. solicit the support of other donors in providing financial and technical assistance directed towards sectoral objectives;

4. utilize the reflows from program sub-loans to finance the future costs of technical assistance which will have as its purpose the promotion of the sectoral objectives outlined above..

The sectoral program shall consist of capital and technical assistance to livestock development institutions and small livestock producers in the Entente member states to support the above-named objectives.

a. The Borrower will relend AID Loan funds and grant AID capital grant funds to the member states or to the livestock development institutions thereof for sub-projects designed to increase the efficiency and productivity of livestock production by the rural poor. No single Entente-member country may receive more than 33% of total capital funds or $2.5 million.

b. Sub-projects eligible for financing under this program must have the following attributes:

1. Sub-Project Objectives

Livestock production projects which increase the productive capacity of large numbers of livestock producers and which increase the income of the rural poor, marketing/transport projects which facilitate the efficient marketing of livestock or meat between member states.

2. Duration of AID/Entente Funding

AID funding requested for no more than 3 years. Complementary financing required for proper sub-project implementation during this period must be assured by the host government prior to sub-project approval. The host government must pledge to provide or be responsible for obtaining any follow-on financing (beyond the duration of the AID/Entente funding) which may be necessary to ensure achievement of sub-project objectives.

3. Sub-Project Review

Sub-projects must be demonstrably feasible based upon accepted technical, economic, and financial standards and host governments must demonstrate their capacity to properly implement sub-project activities. Sub-projects will also be assessed as to their likely environmental impact and the degree to which they affect the status of women members of the livestock industry.

4. Relationship to AID Bilateral Livestock Programs

Proposed sub-projects in Niger and Upper Volta must be consonant with AID bilateral livestock program activities in their countries as determined by AID.

c. Sub-Project Approval Procedures

Except for sub-projects when total costs exceed $1,250,000 for which AID shall retain final approval authority, appraisal and approval of individual sub-projects will be responsibility of the Entente Fund based upon the sub-project approval criteria described above. However, upon receipt of initial sub-project documentation the Entente Fund will solicit from AID an opionion whether the objectives of the proposed sub-project are consistent with the criteria outlined in paragraph b.1 above and, if the project is proposed for Niger or Upper Volta, whether it is consonant with AID bilateral livestock program activities in those countries.

d. The Borrower will use the funds generated from the reloans, and from the income accrued thereon, which may be in excess of the amounts required for debt servicing of the Loan, for reasonable administrative and overhead costs relating to livestock programs in the Member States, for the provision of technical assistance in support of livestock production by the rural poor, and for the purpose of further reloans to the Member States in accordance with Section (a) above. Eligible technical assistance shall include appropriate sponsorship of contractors for the purposes of livestock project development and evaluation, training of livestock extension agents and veterinarians, and the provision of such other means of assistance as the Borrower may determine to be appropriate to bring about an increase in livestock and livestock-related production by the rural poor.

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UNCLASSIFIED

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

PROJECT PAPER

Proposal and Recommendations
For the Review of the
Development Loan Committee

ANNEXES
AFRICA REGIONAL - Entente Livestock II

AID-DLC/P-2155

ACTION : AID UNCLASSIFIED

INFO : AMB DCM CHRON 01MAY75 0915 recd

P R [illegible] APR 75

FM SECSTATE WASHDC

TO [illegible] AMEMBASSY ABIDJAN PRIORITY 3544

INFO [illegible]/AMEMBASSY NIAMEY 2917

RUFJCC/AMEMBASSY OUAGADOUGOU 8202

[illegible]/AMEMBASSY LOME 7554

RUTACU/AMEMBASSY COTONOU 6585

BT

UNCLAS STATE 100800

OC
MD
JC
JJ

AIDAC

E.O. 11652:N/A

SUBJECT: ENTENTE LIVESTOCK II PRP

1. THE SUBJECT PRP WAS REVIEWED BY AFRICA BUREAU EXECUTIVE COMMITTEE FOR PROJECT REVIEW (ECPR) ON FEBRUARY 27, 1975. ECPR FOUND PRP WELL PREPARED AND APPROVED IT AS BASIS FOR PREPARATION OF PP SUBJECT TO FOLLOWING ADDITIONAL GUIDELINES:

A. COMMITTEE ACCEPTED RECOMMENDATION THAT PROGRAM IMPLEMENTATION PER SE (I.E., DEVELOPMENT OF SUB-PROJECT CRITERIA, AND REVIEW/APPROVAL SUB-PROJECTS) WILL BE THROUGH ENTENTE FUND; HOWEVER, THE ENTENTE LIVESTOCK COMMUNITY SHOULD CONTINUE TO RECEIVE LIMITED TECHNICAL ASSISTANCE, AS REQUIRED, FOR IMPLEMENTATION OF PROTOCOLS ADOPTED UNDER FIRST LOAN.

B. COMMITTEE DISCUSSED THOROUGHLY AND ACCEPTED CASE FOR REGIONAL FINANCING OF SUB-PROJECTS IN UPPER VOLTA AND NIGER ON BASIS THAT RESOURCES WILL BE REQUIRED FOR ACTIVITIES WHICH ECONOMICALLY AND TECHNICALLY SOUND BUT, THOUGH CONSISTENT WITH NATIONAL AND REGIONAL SECTORAL PRIORITIES, DO NOT FIT WITHIN FRAMEWORK OF PROPOSED AID BILATERALLY FUNDED LIVESTOCK PROGRAMS IN THESE TWO COUNTRIES. IN

ADDITION, THE COMMITTEE ACCEPTED THE PRINCIPLE THAT PHASE II SUB-PROJECT SELECTION CRITERIA WILL REQUIRE, IN ADDITION TO NORMAL ECONOMICS AND TECHNICAL FEASIBILITY STANDARDS, CONSISTENCY WITH NATIONAL AS WELL AS REGIONAL SECTORAL DEVELOPMENT NEEDS RATHER THAN FURTHERANCE OF INTEGRATION OF LIVESTOCK POLICIES, INSTITUTIONS AND FACILITIES AMONG THE ENTENTE COUNTRIES.

C. FUNDING LEVEL, FOR PLANNING PURPOSES, REMAINS AT DOLS 15 MILLION (DOLS 10 MILLION LOAN AND DOLS 5 MILLION CAPITAL GRANT FOR CAPITAL GRANTS TO SAHEL COUNTRIES PLUS TA AND TRAINING PROVIDED THRU EF). THIS IS A MAXIMUM FIGURE, AND DRAFTERS OF PP SHOULD FEEL FREE PROPOSE SMALLER AMOUNTS IF IDENTIFICATION VIABLE SUB-PROJECTS AND CONSIDERATION OF FD 57 CONCEPTS SO DICTATE. AID/W WOULD EXPECT AN EXAMINATION OF DISBURSEMENT RECORD OF THE FIRST LOAN TO BE ASSURED THAT A SECOND LIVESTOCK LOAN IS TIMELY AND THAT THERE IS DEMONSTRATED ABSORPTIVE CAPACITY TO WARRANT THE AMOUNT PROPOSED.

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D. IT WAS AGREED THAT CEILING OF 50 PER CENT (I.E., N.d.

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DOLS 5 MILLION) SHOULD BE PLACED ON LOAN FUNDS COMMITTED TO SUB-PROJECTS IN ANY ONE PARTICIPATING COUNTRY.

E. DESIGN TEAM AND ENTENTE FUND SHOULD DEVELOP THE FOLLOWING FOR INCLUSION IN PP: (1) PLAN FOR UTILIZATION OF THE FUNDS TO THE EXTENT POSSIBLE SPECIFIC SUB-LOAN PROPOSALS SHOULD BE DESCRIBED, (2) SUB-PROJECT APPROVAL CRITERIA. (WITHIN THESE CRITERIA, THE ENTENTE FUND SHALL HAVE AUTHORITY TO REVIEW/APPROVE SUB-PROJECTS.)

F. THE FOLLOWING ANALYSIS SHOULD BE CARRIED OUT IN PREPARATION PP: (1) ANALYSIS LIVESTOCK SECTOR IN ENTENTE COUNTRIES, WITH EMPHASIS ON BRINGING ASSESSMENTS FOR COASTAL COUNTRIES UP TO LEVEL SUPPLIED IN DAP FOR SAHEL COUNTRIES; (2) FINANCIAL ANALYSIS OF DEBT SERVICING CAPACITY OF THE COASTAL STATES; (3) ANALYSIS OF ADMINISTRATIVE CAPACITY OF ENTENTE FUND AND LIVESTOCK SERVICES OF ENTENTE STATES. THIS ANALYSIS SHOULD ALSO HIGHLIGHT TRAINING REQUIREMENTS TO BE FUNDED UNDER THE AID/EF PROGRAM; (4) EVALUATION PREVIOUS LOAN AS TO: A) SUB-PROJECTS, B) IMPACT OF PROTOCOLS, C) EFFECTS OF OTHER CONDITIONS PRECEDENT AND D) POSITIVE ACCOMPLISHMENTS TO DATE; (5) PP SHOULD MAKE CLEAR WHAT PART, IF ANY, OF NEW LOAN WILL BE FOR INFRASTRUCTURE PROGRAMS AND WHAT PART FOR SUB-LOANS TO PRIVATE INDUSTRY. IF LOANS OF LATTER TYPE ARE PLANNED, PP SHOULD SPELL OUT PROPOSED SUB-LOAN INTEREST RATES AND JUSTIFICATION THEREOF.

2. WITH RESPECT TO THE PROPOSED GRANT AND SUB-PROJECTS TO BE GRANT-FUNDED, GC/AFR ADDS A QUALIFICATION AND CONCERN AS TO WHETHER THE QUESTION OF COMPLIANCE WITH FAA SECTION 611(A)'S REQUIREMENT FOR ENGINEERING AND OTHER PLANS AND FIRM COST ESTIMATES PRIOR TO OBLIGATION OF FUNDS, AND APPROPRIATION ACT SECTION 135'S REQUIREMENT FOR AID APPROVAL OF TERMS OF CONTRACTS AND CONTRACTORS ON CAPITAL PROJECTS, HAS BEEN OR WILL BE CONSIDERED IN CONNECTION WITH DESIGN OF THE SUBJECT PROJECT.

3. ECPR MINUTES, ISSUES PAPER, AND PRP HAVE BEEN POUCHED TO ADDRESSEES. PRP AS SUBMITTED BY REDSO/WA UNCHANGED. JOHN PIELEMEIER OF AFR/DS (LEADER) AND CONSULTANTS BILL MORRIS AND JOHN FERGUSON COMPRISE DESIGN TEAM. STATE PROVIDES TEAM'S ITINERARY AND SCHEDULE. KISSINGER

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ANNEX G

CHECKLIST OF STATUTORY CRITERIA

In the right-hand margin, for each item, write answer or, as appropriate, a summary of required discussion. As necessary, reference the section(s) of the Capital Assistance Paper, or other clearly identified and available document, in which the matter is further discussed. This form may be made a part of the Capital Assistance Paper.

The following abbreviations are used:

FAA - Foreign Assistance Act of 1961, as amended.

FAA, 1973 - Foreign Assistance Act of 1973.

App. - Foreign Assistance and Related Programs Appropriation Act, 1974.

MMA - Merchant Marine Act of 1936, as amended.

BASIC AUTHORITY

1. FAA § 103; § 104; § 105; § 106; § 107. Is loan being made

a. for agriculture, rural development or nutrition;	Yes. The loan will increase the amount of animal protein available in the region and will encourage the rural poor to improve livestock production.
b. for population planning or health;	
c. for education, public administration, or human resources development;	

d. to solve economic and social development problems in fields such as transportation, power, industry, urban development, and export development;

e. in support of the general economy of the recipient country or for development programs conducted by private or international organizations.

COUNTRY PERFORMANCE

Progress Towards Country Goals

2. FAA § 201 (b) (5), (7) & (8); § 208

A. Describe extent to which country is:

(1) Making appropriate efforts to increase food production and improve means for food storage and distribution.	Each of the Member States is implementing projects to increase food production and has placed a high priority of agricultural development.
(2) Creating a favorable climate for foreign and domestic private enterprise and investment.	All of the Member States have a liberal policy for the promotion of private enterprise and are encouraging both foreign investors and national entrepreneurs.
(3) Increasing the public's role in the developmental process.	The Member States are cognizant of the necessity to mobilize the mass of people in overall development programs. As a result, considerable efforts are being made in the educational area and in a wide variety of rural development projects at the village level.

(4) (a) Allocating available budgetary resources to development.	The Member States are allocating budgetary resources to development to the maximum extent possible.
(b) Diverting such resources for unnecessary military expenditure (See also Item No. 20) and intervention in affairs of other free and independent nations.) (See also Item No. 11).	The level of military expenditures in the Member States is limited to that required to assure internal order and stability. See I.E.2 this Annex.
(5) Making economic, social, and political reforms such as tax collection improvements and changes in land tenure arrangements, and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiative, and private enterprise.	5. The Member States generally have programs concerned with the more efficient control of government spending, the formation of a more equitable tax base, and more effective tax collection. Reasonable progress is being made as far as stability, freedom of expression and of the press, and as indicated above important programs are being carried out to train the people to productively assist in economic development.
(6) Willing to contribute funds to the project or program.	6. The Member States are providing as much support as possible to the sector within their limited fiscal means.
(7) Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.	7. The countries are attempting through the building of a resource base by increasing export crops, through regional development programs, and agricultural projects at the village level, to effectuate economic and social reforms for the improvement of living standards.

B. Are above factors taken into account in he furnishing of the subject assistance?

Treatment of U.S. Citizens and Firms.

3. FAA § 620 (c). If assistance is to government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) debt is not denied or contested by such government?	3. None to our knowledge.
4. FAA § 620 (e) (1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?	4. Not to our knowledge.
5. FAA § 620 (o); Fishermen's Protective Act. § 5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing vessel on account of its fishing activities in international waters,	5. No.
a. has any deduction required by Fishermen's Protective Act been made?	N/A

b. has complete denial of assistance been considered by A.I.D. Administrator? — N/A

Relations with U.S. Government and Other Nations

6. FAA § 620 (a). Does recipient country furnish assistance to Cuba or fail to take appropriate steps to prevent ships or aircraft under its flag from carrying cargoes to or from Cuba?

6. No, except two vessels of Ivory Coast Registry called at Cuban ports in September, 1974. No sub-loan agreement to the Ivory Coast will be approved under the Loan Agreement until either 1) the Ivory Coast has taken appropriate steps pursuant to the provision of FAA Section 620 (a)(3), or 2) a waiver is obtained pursuant to FAA Section 664.

7. FAA § 620 (b). If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement?

7. Yes.

8. FAA § 620 (d). If assistance is for any productive enterprise which will compete in the United States with United States enterprise, is there an agreement by the recipient country to prevent export to the United States of more than 20% of the enterprise's annual production during the life of the loan?

8. It is not expected that any enterprise financed under this project will compete with U.S. enterprise.

9. FAA § 620 (f). Is recipient country a Communist country?

9. No.

10. FAA § 620 (i). Is recipient country in any way involved in (a) subversion of, or military aggression against, the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or aggression?	No.
11. FAA § 620 (j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction, by mob action, of U.S. property?	No.
12. FAA § 620 (l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, inconvertibility or confiscation, has the A.I.D. administration within the past year considered denying assistance to such government for this reason?	There is an AID Guaranty Agreement between the United States and each of the Member States.
13. FAA § 620 (n). Does recipient country furnish goods to North Viet-Nam or permit ships or aircraft under its flag to carry cargoes to or from North Viet-Nam?	No.
14. FAA § 620 (q). Is the government of the recipient country in default on interest or principal of any A.I.D. loan to the country?	No.

15. FAA § 620 (t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?	15. No.
16. FAA § 620 (u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget?	16. To the best of our knowledge, the Member States are up to date on their U.N. dues, assessments, and other obligations.
17. FAA § 481. Has the government of recipient country failed to take adequate steps to prevent narcotics drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully?	17. No.
18. FAA, 1973 § 29. If (a) military base is located in recipient country, and was constructed or is being maintained or operated with funds furnished by U.S., and (b) U.S. personnel carry out military operations from such base, has the President determined that the government of recipient country has authorized regular access to U.S. correspondents to such base?	18. There are no such bases in the Member States.

Military Expenditures

19. FAA s 620 (s). What percentage of country budget is for military expenditures? How much of foreign exchange resources spent on military equipment? How much spent for the purchase of sophisticated weapons systems? (Consideration of these points is to be coordinated with the Bureau for Program and Policy Coordination, Regional Coordinators and Military Assistance Staff (PPC/RC).)

19. The average percentage of the Member States budget devoted to military purposes is approximately 10%. Most military equipment is provided through French assistance. Very little is purchased with the countries' foreign exchange.

Conditions of The Loan

General Soundness

20. FAA s 201 (d). Information and conclusion on reasonableness and legality (under laws of country and the United States) of lending and relending terms of the loan.

20. The loan has a 10 yr. grace period with interest at 3%. These rates are reasonable and legal under the laws of the recipient countries and the United States.

21. FAA s 201 (b) (2); s 201 (e) Information and conclusion on on activity's economic and technical soundness. If loan is not made pursuant to a multilateral plan, and the amount of the loan exceeds $100,000, has country submitted to A.I.D. an application for such funds together with assurances to indicate that funds will be used in an economically and technically sound manner?

21. The project is technically and economically sound. See Part III of PP. Yes.

22. FAA s 201 (b) (2). Information and conclusion on capacity of the country to repay the loan, including reasonableness of repayment prospects.

22, See Part III of PP.

23. FAA s 201 (b) (1). Information and conclusion on availability of financing from other free-world sources, including private sources within the United States.

23. The resources provided under this project are required and are in addition to those provided from other free world sources. Several donors are participating in the overall development of the Member States, and AID has agreed to consider this specific project. Private financing for this project is not available.

24. FAA s 611 (a) (1). Prior to signing of loan will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the United States of the assistance?

24. Yes, see part III of PP.

25. FAA s 611 (a) (2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of loan?

25. Additional legislative action may be required as part of the approval and implementation of effective regional protocols among the Member States. Necessary legislation for Loan I protocols was approved in a timely manner and no delays are foreseen for new protocols which may be approved during this project.

26. FAA s 611 (e). If loan is for Capital Assistance, and all U.S. assistance to project now exceeds $1 million, has Mission Director certified the country's capability effectively to maintain and utilize the project?

26. Yes. See Annex C.

Loan's Relationship to Achievement of Country and Regional Goals

27. FAA s 207; s 113
Extent to which assistance reflects appropriate emphasis on; (a) encouraging development of democratic, economic, political, and social institutions; (b) self-help in meeting the country's food needs; (c) improving availability of trained manpower in the country; (d) programs designed to meet the country's health needs;

27. a. The project is directed towards ensuring that traditional livestock producers play a greater role in the economic development process and benefit from the fruits of national economic and social development. b. The project is directed to increased production and marketing of meat and livestock through the Entente region. c. The project includes training in specialized skills relating to the livestock sector. d. N/A

(e) other important areas of economic, political, and social development, including industry; free labor unions, cooperatives, and Voluntary Agencies; transportation and communication; planning and public administration; urban development, and modernization of existing laws; or (f) integrating women into the recipient country's national economy.

e. Sub-projects may include assistance to livestock cooperatives and herders associations. Other sub-projects will improve the transportation system for marketing livestock in the region.

28. FAA § 209. Is project susceptible of execution as part of regional project? If so why is project not so executed?

28. The project is a regional project.

29. FAA § 201 (b) (4). Information and conclusion on activity's relationship to, and consistency with, other development activities, and its contribution to realizable long-range objectives.

29. See Part II. B.

30. FAA § 201 (b) (9). Information and conclusion on whether or not the activity to be financed will contribute to the achievement of self-sustaining growth.

30. As indicated throughout the PP, this project will contribute to expanded production and economic growth especially in the least developed zones of the participating African states.

31. FAA § 209; Information and conclusion whether assistance will encourage regional development programs.

31. This loan and grant are being made to the Mutual Aid and Loan Guaranty Fund of the Council of the Entente States, a regional organization representing the five Member States of Ivory Coast, Togo, Dahomey, Niger and Upper Volta. Regional cooperation is assured by this organization, and regional projects are eligible for assistance is presently being furnished to the countries by UN organizations and several projects are being implemented on a multilateral basis pooling the resources of various donors through the Entente Fund.

32. FAA s 111. Discuss the extent to which the loan will strengthen the participation of urban and rural poor in their country's development, and will assist in the development of cooperatives which will enable and encourage greater numbers of poor people to help themselves toward a better life.	32. Sub-projects will directly assist the rural poor to increase their productivity and income.
33. FAA s 201 (f). If this is a project loan, describe how such project will promote the country's economic development taking into account the country's human and material resources requirements and relationship between ultimate objectives of the project and overall economic development.	33. See Part III. A and Part IV. A.
34. FAA s 281 (a). Describe extent to which the loan will contribute to the objective of assuring maximum participation in the task of economic development on the part of the people of the country, through the encouragement of democratic, private, and local governmental institutions.	34. Sub-projects will probably include several demonstration/extension activities which will encourage large numbers of small livestock producers to participate more broadly in economic development; sometimes through local cooperatives.
35. FAA s 281 (b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.	35. Through emphasis on regional cooperation to promote self-help initiatives for the large number of persons employed in the livestock sector.

36. FAA § 201 (b) (3). In what ways does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities?	36. See Part III. A.
37. FAA § 601 (a). Information and conclusions whether loan will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.	37. It will stimulate international trade and commerce through improved regional cooperation and elimination of articicial trade barriers. The stimulus to production and commercialization of livestock will open new avenues of competition and help eliminate the monopolistic pricing and trading practices. The project will improve the technical efficiency and commercialization of the livestock sector.
38. FAA § 619. If assistance is for newly independent country, is it furnished through multilateral organizations or plans to the maximum extent appropriate?	38. The Member States gained their independence in 1960. Assistance under the present loan amendment is to be furnished through the Entente Fund a multinational organization.

Loan's Effect on U.S. and A.I.D. Program

39. FAA § 201 (b) (6). Information and conclusion on possible effects of loan on U.S. economy, with special reference to areas of substaitial labor surplus, and extent to which U.S. commodities	39. This project will have no negative effects on U.S. areas of labor surplus. On the contrary, at least 10% of project capital funds and most technical assistance funds will be used to procure goods and services in the U.S.

and assistance are furnished in a manner consistent with improving the U.S. balance of payments position.

40. FAA § 202 (a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources.

40. For the livestock sector, there may be private sector beneficiaries, but no specific funds are programmed for specific private end users. At least 10% of the financing will be from private sources in Code 941 countries. The remainder will be used to finance procurement from local private sources.

41. FAA § 601 (b). Information and conclusion on how the loan will encourage U.S. private trade and investment abroad and how it will encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

41. The project will demonstrate the value of U.S. commodities and services in the livestock sector in Member countries and should make them more open to initiatives by U.S. private enterprise in the sector.

42. FAA § 601 (d). If a capital project, are engineering and professional services of U.S. firms and their affiliates used to the maximum extent consistent with the national interest?

42. The project will not finance physical construction of major facilities suitable for use of U.S. engineering and construction services. Where specialized assistance is needed, U.S. experts may be provided under project financing. All small local construction will be by construction contractors in the Member states.

43. FAA § 602. Information and conclusion whether U.S. small business will participate equitably in the furnishing of goods and service financed by the loan.

43. For inputs into the Member States, AID's standard small business advertising requirements will be met.

44. FAA § 620 (h). Will the loan promote or assist the foreign aid projects or activities of the Communist-Bloc countries?

44. No.

45. FAA § 621. If Technical Assistance is financed by the loan, information and conclusion whether such assistance will be furnished to the fullest extent practicable as goods and professional and other services from private enterprise on a contract basis. If the facilities of other Federal agencies will be utilized, information and conclusion on whether they are particularly suitable, are not competitive with private enterprise, and can be made available without undue interference with domestic programs.

45. Technical assistance from U.S. sources will be provided by U.S. private firms and personal services contracts.

Loan's Compliance with Specific Requirements

46. FAA § 110 (a); § 208 (e). In what manner has or will the recipient country provide assurances that it will provide at least 25% of the costs of the program, project, or activity with respect to which the Loan is to be made?

46. Loan compliance applicable not applicable to a regional project such as this.

47. FAA § 112. Will loan be used to finance police training or related program in recipient country?

47. No.

48. FAA § 114. Will loan be used to pay for performance of abortions or to motivate or coerce persons to practice abortions?

48. No.

49. FAA § 201 (b). Is the country among the 20 countries in which development loan funds may be used to make loans in this fiscal year?

49. In view of the regional character of the proposed AID assistance, the loan falls outside this limitation and is classified as an African Regional project.

50. FAA § 201 (d). Is interest rate of loan at least 2% per annum during grace period and at least 3% per annum thereafter?

50. Yes.

51. FAA § 201 (f). If this is a project loan, what provisions have been made for appropriate participation by the recipient country's private enterprise?

51. The project is a sector loan/grant.

52. FAA § 604 (a). Will all commodity procurement financed under the loan be from the United States except as otherwise determined by the President?

52. Yes. Commodity procurement will be restricted to Code 941 countries and the Member States.

53. FAA § 604 (b). What provision is made to prevent financing commodity procurement in bulk at prices higher than adjusted U.S. market price?	53. All commodities will be procured in Code 941 and local countries. Standard AID loan procurement regulations will apply.
54. FAA § 604 (d). If the cooperating country discriminates against U.S. marine insurance companies, will loan agreement require that marine insurance be placed in the United States on commodities financed by the loan?	54. Yes.
55. FAA § 604 (e). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity?	55. Yes.
56. FAA § 604 (f). If loan finances a commodity import program, will arrangements be made for supplier certification to A.I.D. and A.I.D. approval of commodity as eligible and suitable?	56. Not applicable.
57. FAA § 608 (a). Information on measures to be taken to utilize U.S. Government excess personal property in lieu of the procurement of new items.	57. The standard excess property provision will be included in the loan agreement.

58. FAA s 611 (b); App. s 101. If loan finances water or water-related land resource construction project or program, is there a benefit-cost computation made, insofar as practicable, in accordance with the procedures set forth in the Memorandum of the President dated May 15, 1962?

58. Not applicable.

59. FAA s 611 (c). If contracts for construction are to be financed what provision will be made that they be let on a competitive basis to maximum extent practicable?

Sub-loan agreements will require that construction contracts be made on a competitive basis to the maximum extent possible.

60. FAA s 612 (b); s 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the United States are utilized to meet the cost of contractual and other services

60. There are no U.S. owned excess currencies for the region. U.S. contributions to the project are in excess of the financing capabilities of the Member States in the livestock sector.

61. App. s 113. Will any of loan funds be used to acquire currency of recipient country from non-U.S. Treasury sources when excess currency of that country is on deposit in U.S. Treasury?

61. No.

62. FAA s 612 (d). Does the United States own excess foreign currency and, if so, what arrangements have been made for its release?

62. There are no U.S. owned excess currencies in the region.

63. FAA s 620 (g). What provision is there against use of subject assistance to compensate owners for expropriated or nationalized property?	63. Standard loan provisions will apply.
64. FAA s 620 (k). If construction of productive enterprise, will aggregate value of assistance to be furnished by the United States exceed $100 million?	64. No.
65. FAA s 636 (i). Will any loan funds be used to finance purchase, long-term lease, or exchange of motor vehicle manufactured outside the United States or any guaranty of such transaction?	65. No.
66. App. s 103. Will any loan funds be used to pay pensions, etc., for military personnel?	66. No.
67. App. s 105. If loan is for capital project, is there provision for A.I.D. approval of all contractors and contract terms?	67. Not applicable.
68. App. s 107. Will any loan funds be used to pay UN assessments?	68. No.

69. App. s 108. Compliance with regulations on employment of U.S. and local personnel. (A.I.D. Regulation 7).

69. The project complies fully with Regulation 7.

70. App. s 110. Will any of loan funds be used to carry out provisions of FAA s s 209 (d)?

70. No.

71. App s. 114. Describe how the Committee on Appropriations of the Senate and House have been or will be notified concerning the activity, program, project, country, or other operation to be financed by the Loan.

71. AID Congressional Presentation for FY 76.

72. App. s 601. Will any loan funds be used for publicity or propaganda purposes within the United States not authorized by Congress?

72. No.

73. MMA s 901. b; FAA s 640 C.

(a) Compliance with requirement that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed with funds made available under this loan shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.

73. a) Yes

(b) Will grant be made to loan recipient to pay all or any portion of such differential as may exist between U.S. and foreign-flag vessel rates?

b) No.

74. Section 30 and 31 of PL 93-189 (FAA of 1973). Will any part of the loan be used to finance directly or indirectly military or paramilitary operations by the U.S. or by foreign forces in or over Laos, Cambodia, North Vietnam, South Vietnam, or Thailand?

74. No.

75. Section 37 of PL 93-189 (FAA of 1973); App. s. 111. Will any part of this loan be used to aid or assist generally or in the reconstruction of North Vietnam?

75. No.

76. App. s 112. Will any of the funds appropriated or local currencies generated as a ult of AID assistance be used for support of police or prison construction and administration in South Vietnam or for support of police training of South Vietnamese?

76. No.

77. App. s 604. Will any of the funds appropriated for this project be used to urnish petroleum fuels produced in the continental United States to Southeast Asia for use by non-U.S. nationals?

77. No.

Appendix I.A

Ivory Coast Livestock Sector Analysis

June 1975

page

Prepared by Dr. Willford Morris, Pudue University, for AID/W, July 1975.

IVORY COAST

I. Economic Setting and Livestock Sector

A. Introduction

The Ivorian livestock sector has one of the greatest potentials for expansion of any in Francophone West Africa. Traditionally a large consumer of meat, with reported livestock slaughter rising until 1974, Ivory Coast depended heavily on imports from Mauritania, Mali, and Upper Volta.

Although the rate of economic growth (GDP) has been of the order of 8-10% over the last decade much of the advantage of this growth has been lost to the consumer due to inflation. The per capita disposable income less savings has remained almost constant; this probably disguises the fact that the south has gained economically more than the north. The per capita disposable income in the North, like that in the interior countries in West Africa has declined in real terms. However, the price of meat had also declined in real terms until the second quarter 1975. The real price of the dietary stapels has changed relatively little.

Ivory Coast differs from the other franxophone West African countries in that it has:

1. -more trained personnel in the livestock sector, both African and expatriate.
2. -a willingness to use expatriates.
3. -superior planning capability
4. -an effective and in depth agricultural research system, with a large livestock production research station, now geared into a research program to increase production.
5. -an active plant breeding and selection program which has contributed to grass fourage breeding and selection.
6. - a four year agricultural college, which will soon have the capability of graduating "agronomes" without sending them abroad for the third cycle (5th year).
7. -an established university including faculties of social sciences and economics.
8. -an infrastructure for agricultural development with many succesful programs, albeit mainly in industrial crop production in the forest zone.

9. -a substantial potential for the production of animal feeds (maize, roots and soybeans).

However, in the past the livestock sector, probably due to the substantial supply of cheap imported livestock and beef, has received very little budgetary suoport for its development. Only in recent months (April - May 1975) has the supply-demand situation been such that prices in the African market have risen rapidly and consumption has declined. This is expected to lead a crash program for the development of the livestock sector. Given the capabilities at the disposition of the GOIC, positive results can be expected.

For these reasons, the Ivorian livestock sector is interesting and its performance in the next 5 and 10 years is expected to blaze a trail which could be followed by other countries in the regional with forest, guinean or sudanian zones.

a) Population

There has never been a census of the Ivorian population as a whole. Estimates of the population in 1970 were:

5,100,000	in the 1970-75 Plan
4,980,000	Sedes 1969 (based upon the same population as the Plan in 1965)
4,310,000	FAO Annual Statistics

These can be projected to give alternative estimates of the 1975 population* respectively as:

6,000,000	Plan (+3.3%/year)
5,800,000	Sedes (+3.0%/year)
4,876,000	FAO (+2.5%/year)

The annual rate of increase of 3.3% used in the plan is made up of 2.3% natural increase plus 1% migration. The IBRD Special Report on Employment suggest that the natural increase will rise to 2.9% in the decades of the 1970's and 80's due to decline in mortality rates.

There is a question on the rate of migration into the Ivory Coast in the next decades, due to increased Voltan migration to Gabon to work on the construction of the railroad and to Guinea where high wages are now offered to farm workers in the modern sector. Estimates and projections for rural and rural population are given in Table 1.

Table 1 Ivory Coast: Urban and Rural Population Projection (000 head)

	1970*	1980*	1985*
Abidjan	516	1130	1510
Forest zone towns	558	1120	1490
Savanna zone towns	318	580	650
All urban	1390	2830	3650
Forest zone rural	1763	2270	2560
Savanna zone rural	1507	1420	1350
All rural	3270	3690	3910
Total	4660	6520	7560

*These estimates are for the "de facto" population, i.e. those present, rather than "de jure" Ivorians.

b) Agriculture (including livestock sector and forestry).

The development of Ivorian agriculture in the decade of the 1960's was uniformly satisfactory; that is food crops, meat and fish production advanced more rapidly than the growth in population and the industrial and export sectors responded well to development investment. (Table 2)

Table 2 Change in the Value of Production

	Value in fcfa 1960	1965	1970	Annual increase %
Agriculture, foods	36,295	43,263	48,054	2.85
Agriculture, industrial and export	22,357	33,262	49,963	8.3
Forestry	7,253	16,709	23,500	12.5
Livestock and hunting	3,586	3,937	5,565	4.5
Fishing	2,218	2,974	3,700	5.25
Total	71,709	100,145	129,882	6.12

However, the national data do not disclose the disparity in the development between zones. The forestry, palm oil, coffee, and cocoa production all take place in the forest zone. The development in the guinean and sudanian (savanna) zones was less satisfactory and was accompained by a decline in population. Cotton production in these zones increased markedly and there was some investment in irrigated rice production.

In the plan of 1970-80 the following problems were identified:

1. dominance of coffee production in spite of efforts to diversify agriculture.

2. regional disparities in development between the richer south and central areas and the poorer north and west.

3. domestic demand for certain foods, especially rice and meat advancing more rapidly than production, with the gap between domestic production and consumption of meat increasing continuousły.

4. Despite the increase in growth in the sector as a whole, labor supply has not so far become limiting because of the migration of foreign workers. In the forest region the high levels of income permit the use of hired immigrant workers. However, the

supply is not unlimited, wages will continue to increase, and conditions of work will have to be continually improved.

5. In the savannah region at present there is general under-employment in agriculture but it is declining rapidly with the development of rice and cotton production. Seasonal bottlenecks in labor supply are appearing in some regions and the lower level of income in the savannah does not permit hiring immigrant workers. Mechanization is the only way to resolve this constraint; especially for seed bed preparation and cultivation to remove weeds.

6. Most interventions in agriculture have been entrusted to "para public" organizations specializing in one or more crops. In the savannah, where a rotation of several different annual crops is followed, the peasant has to deal with a series of extension agents from the dirrerent organizations, leading to wasted effort and an inability to promote a reform of the whole system of production.

7. Serious deficiencies appear in the domestic crop marketing system. Margins are often excessive and the producer is discouraged by periodic inability to market his product.

8. In forestry the rapid rate of development threatens the future of this national resource, with reserves in several species becoming low.

The major lines for development in the 1970 plan were:

1. reduction as far as possible in the regional disparities in income levels.

2. increase the money income of the mass of the pesantry by improving productivity.

3. improve the quality and quantity of the diet.

4. lead the peasant to participate in his own development.

5. provide a better outlook for young people in farming (economically and socially) to reduce the reual exodus.

6. improve the living conditions of the rural world by installation of social and cultural infrastructure.

Quantitative goals include:

1. increase in the growth of the value of the agricultural and live stock sectors by 3.7% a year from 1970-75 and 3.9% from 1975-80. In fact, although agriculture did not perform at this rate in the 1960's (growth rate was 2.85%/year), the livestock sector exceeded this rate (4.3%).

2. The first supply was planned to be increased at a rate of 13.5% a year from 1970-75 and 10.1% a year from 1975-1980.

3. An increase in the livestock sector output was proposed by increase in the production of maize and soybeans as feed grains. The maize, which has traditionally been grown in the forest zone and to a lesser extent in the guinean zone, is to be produced in the sudano guinean (savanna) where there are two rainy seasons. It will preceed cotton in the rotation.

The planned production of maize and its disposition are shown in Table 3. In fact, this program has hardly been started. The GOIC is having difficulty in deciding whether to grow the maize industrially* or to encourage peasants to produce it. The drying and storage problem is considerable and the GOIC proposes to install large scale units in 1975-1980 for this purpose.

The necessary adjunct of producing soybeans is also planned but it does not seem likely to bear fruit until near 1980, if then.

The pr posed use of maize flour as a dilutant of bread flour has not been tried on the consumer. It is probable that using a white or yellow grain sorghum would be more acceptable. If maize is not used as a dilutant of bread flour production of the target for use as feed grain will be more easily met.

Table 3 Ivory Coast: Corn demand and planned supply 1965, 1970 and 1975 (m. tons)

	1965	1970	1975	1980
Food grain consumption				
urban	9,300	15,000	23,000	31,000
index	100	161	243	330
rural	161,000	177,000	195,000	214,000
index	100	110	121	133
Total	170,300	192,000	218,000	245,000
Industrial use				
feed grain 1/	3,000	5,000	12,500	30,000
flour			22,500 2/	32,000 2/
Total	3,000	5,000	35,000	62,000
Export	2,700	3,000	3,000	3,000
Total consumption	176,000	200,000	256,000	310,000
Losses and seed	24,000	21,000	23,000	26,000
Planned production	200,000	221,000	279,000	336,000

1/ To be used as a dilutant, 15-20%, in bread flour.
2/ For the development of the livestock sector maize production is of direct importance and other crops (including sugar cane and rice) of indirect importance as byproducts.
*IBRD studies of Ivorian farm machanization show that costs exceed returns at present.

The GOIC has been put in touch with CIAT (by REDSO/WA) to discuss the use of cassava in feeding of livestock. This could provide a less costly and more easily produced carbohydrate feed, but with a more intense problem of protein supplementation. Ground cassava chips are currently being included in pig and poultry rations.

GOIC also proposes to use molasses for feeding cattle in feed lots and for pig production; they are being informed of the work of Preston (formerly in Cuba, now in Mexico) on this technology.

B. Livestock Economy

The past performance of the livestock sector, and the import of livestock and meat are shown in Tables 4 and 5. Projections are made for domestic production for 1980 and 1985.

Table 4 Ivory Coast: Domestic Livestock Production

Cattle	1966		1972		1974	
	Taurin	Bovin	Taurin	Bovin	Taurin	Zebu
Herd size	267,000	38,000	365,000	60,000	371,550	65,000
Assumed Offtake %	13	12.1	10	10	10	10
Offtake, Head	34,700	46,000	36,500	6,000	37,155	6,500
Av carcass wt. kg	77	115	100	150	100	150
Carcass wt. tons	2,680	530	3,650	900	3,715	975
Offats (at 25%) tons	670	132	915	225	924	243
Total tons	3,350	662	4,565	1,125	4,644	1,219
Total beef tons	4,012		5,690		5,863	

(f/kg carcass) at 130 f/kg to producer 420 millions

Sheep/Goats	1966	1972	1973	1974
Herd size	1,400,000	1,800,000	1,679,000 1/	1,700,000
Assumed offtake	30%	25%	25%	25%
Offtake, head	420,000	450,000	419,987	
Av carcass wt, kg	10	10		
Carcass wt, tons	4,200	4,500	4,200	
Offats (at 25%) tons	630(offat 15%)	1,125	1,051	
Total tons	4,830	5,625	5,251	5,317

at 135f/kg lw 567 millions

Pigs	1966		1972		1974	
	Traditional	Modern	Traditional	Modern	Traditional	Modern
Estimated herd	80,000	20,000	90,000	20,000		
Estimated offtake%	60	80	60	75		
Assumed offtake, head	48,000	16,000	54,000	15,000	111,685	19,691
Av carcass wt, kg	25	50	25	60	25	60
carcass wt, tons	1,200	800	1,350	900	2,792	1,181
offals at 10% tons	120	80	135	90	195	83
Total	1,320	880	1,485	990	2,988	1,264
Grant Total	2,200		2,475		4,252	

Mod 90f lw 130fcarc
Trad 70f lw 100fcarc
220 millions

Poultry	1966		1972		1974	
	Traditional	Modern	Traditional	Modern	Traditional	Modern
Estimated head	6,000,000		8-9 million	1,058,000		
Offtake	100-120%					
Av carcass wt	1 kg					
Carcass wt. tons	7,000		10,000	1,500 2/		
Total	7,000		11,500		est. 13,570	
Total all meat and offals	18,062t		25,300t		29,002t	

1/ 866,000 sheep and 813,000 goats
2/ 900-1000t from 700,000 head of meat birds at 13-15kg a head and 200,000 head of cull hens at 2.8-3.0kg (5-600t).

Table 5. Ivory Coast: Livestock Production
Import and Consumption (tons)
1966 - 1974, with projections
of domestic production to 1980 and 1985

Beef Dom.Prod	4,050	5,291	5,487	5,690	5,776	5,863	6,839	7,776
Import	19,062	37,200	36,766	36,077	32,250	29,553	(+2.6%)	
Total	23,112	42,491	42,253	41,767	38,026	35,416		
kg per cap	5.07	8.28	8.00	7.86	6.96	6.29		
Sheep/goats								(+1.4%)
Dom. Prod.	4,830	5,031	5,328	5,625	5,251	5,317	5,780	6,196
Import	3,399	5,801	6,740	5,529	6,321	5,390		
Total	8,229	10,832	12,068	11,154	11,572	10,607		
Kg per cap	1.81	2.11	2.28	2.10	21.2	1.88		
Pork Dom Prod.	2,200	2,200	2,226	2,475	3,525	4,252	11,420	26,016(+17.9%)
kg per cap	0.48	0.43	0.42	0.47	0.64	0.76		(+15.3%)
Meat Import	1,911	2.011	1,839	1,493	1,294	1,473		
Poultry Dom.Prod	7,000	9,992	10,626	11,500	12,535	13,570	21,654	31,964(+8.1%)
kg per cap	1.54	1.93	2.01	2.17	2.29	2.41		(+5.7%)
Fish Dom. Prod	78,500**	85,000	102,940	112,240	92,400	86,307		
Import	0	10,000	15,060	23,760	55,000	73,693		
Total	78,500	95,000	118,000	136,000	147,400	160,000		
kg per cap	17.76	18.52	22.33	25.62	26.96	28.41		(+11.3%)

* SEDES 1966 basis is offtake of 13% taurin with carcass weight 77 kg. and 12.1% zebu with carcass weight of 115 kg. The plan uses a basis of 10% offtake for both species and 100 kg. carcass for taurin and 150 for zebu. The SEDES estimate results in almost the same tonnage as does the Plan."

**for 1965

The domestic beef production in Table 5 is based upon estimates of the cattle herd, usually from the Rindepest/CBPP innoculation campaign, multiplied by the assumed offtake rate (10% in the estimates for 1970 and subsequent years) multiplied by an assumed weight for the carcass and the offals (100 + 25 kg. for taurin and 150 + 38.5 kg. for zebu cattle). The year to year differences are then based upon an assumed rate of increase of the herd (in this case 3%). The rate of increase of the taurin herd has only been about 2% a year, and the size of the zebu herd has fluctuated greatly depending on the conditions as perceived by the Peul herders.

Estimates based upon reported slaughter of cattle amount to about half of the estimated number that are slaughtered (officially and unofficially).

The imported beef is based upon an estimate of the importation of cattle, assuming 100% slaughter with a carcass weight of 150 kg. and 38.5 kg. of offals. This is probably fairly accurate.

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Other estimates are made in similar ways but tend to be less reliable (for domestic production) because of the hazy estimates of the size of the traditional herds. Estimates for modern pig production are based upon knowledge of the producers and their volume. Modern poultry production is based on sales of day old poults plus estimates of the number of layers culled.

The projections are based upon the rate of change in the 1970's. For beef and small ruminants thereis no doubt of the capacity of the market to absorb the increased supply.

In the case of pork, it is likely that the modern sector is responsible for much of the 17.9% a year increase in production. This product is sold only in category 1 butchers shops. A modern packing plant, financed by private investors, is planned for Abidjan next year, with a minimum throughput equal to the total output of the modern sector in 1972. Subsequently a packing plant is proposed in the north. The increased pork supply would be marketed through the national chains (like "Avion"). It is not clear that the present rate of expansion of the pork supply can be matched by expansion in feed supply or marketing, unless the feed grain programs move much faster than they are doing now, with a consequent decline in price.

Poultry production has expanded rapidly in the last decade. As with pigs there is a different market for the traditional and the modern production; the traditional poultry are sold in the African market alive and the modern birds are sold dressed in the supermarkets and butchers shops. However, ~~the~~ modern poultry had only 13% of the market in 1972, compared to 40% in the modern pork market.

The 1975-80 Plan

In the past, the livestock sector had not received any substantial investment in the Development Investment Plans.* In 1967 livestock received 439 million fcfa, 1.2% of the government operating budget, and in 1973 621 million f, 0.7% of that budget. The increase, as usual in the Francophone countries, mainly just covered personnel costs, while there was a decline in the proportion of the budget used for Livestock Service operation. In the 1970-75 plan CFA 5.9 billion ($30 million) f were planned for livestock development investment; however the total invested will probably be less than half of this sum.

The 1975-80 plan is currently being developed (May 1975) and the political pressures exerted by the farmers are being considered: A major election will take place in November 1975. On the other side the disturbance in the meat market, which really started in April 1975 due to increased prices is likely to stimulate action.

Supply-Demand for 1980-1985.

The projected increases in total domestic production are sufficient, assuming the trend in supply of fish is maintained, to sustain 1973 levels of per capita consumption assuming 1970-72 levels of imports of cattle and ruminants. * because the major increases in production are in poultry and pigs, the consumers would have to substitute these for sheep, goats, and beef. While poultry may be acceptable in these quantities, it is not likely that pork, which was 4.3% of the red meat supply in 1972, and 6.5% in 1973, and 8.1% in 1974, could be 30.6% of the supply in 1985. The figure of 16.5% in 1980 seems possible.

* In fact, however, the level of imports from Mali and Mauritania has dropped radically in April-July due to export restrictions in those countries.

C. Livestock Production Systems and Ecological Zones

In the Ivory Coast three major ecological zones are represented:

the Sudanian Zone

the Guinean Zone

the Forest Zone

The potential for extensive ruminant production on natural pastures is better in the sudanian and guinean zones. However tsetse fly infestations and ticks in these zones make cattle production more difficult.

In the forest zone, the thick forest represents a major obstruction to ruminant production. In limited areas such as palm groves where the ruminants can keep the grass under control, there are demonstrated possibilities for production.

The Ivory Coast has no stable group of nomadic herders, descending regularly into the sudanian zone in the dry season. From time to time large numbers of nomads enter the Ivory Coast from both Mali and Upper Volta as a sort of drought avoiding strategy. In spite of the widespread complaints by farmers to the administration and even to President HouphouetBoigny, repeated surveys in the North of the Ivory Coast indicate that there are almost no nomadic herders present. The relatively small numbers of Zebu cattle in the area (60,000 head) make small migratory movements; the herders typically have permanent dry season houses and are Ivorian residents.

The Peul herd not only these Zebu cattle but also taurin cattle for the local population. Some local groups do not herd their cattle at all; others herd their own cattle.

The Peul are "professional" herders and watch their cattle at all times, whereas the local cattle herds may be left to graze unwatched during the day and return to the village at night.

The Peul have traditional grazing agreements with the farmers and live at peace with them; the farmers gain by having their fields manured and their cattle tended; the Peul gain from the milk produced by cattle entrusted to them, certain other perquisites (such as a portion of the calves), and they gain from the feed value of the crop residues.

Production in this system is limited by the amount of dry season pasture and fodder available; wet season pasture and fodder typically is not a limiting factor. One prevalent thesis - that the increase in population is requiring more land for food production and so decreases the land available for grazing -appears to be wrong. In fact, the rate of increase of the population in the sudanian zone is slowly declining, due to migration of the population to the urban areas and to the forest zone.*

Traditionally the extensive production of cattle has depended upon the combination of dry and wet season pastures. More recently, attempts are being made to encourage keeping cattle on farms and distributing nucleus herds of taurin cattle to farmers. These are attempts to develop a modern sector of cattle production with cultivated forage. These methods are being tested on the Sipilou ranch and the Bandema Valley Authority cattle finishing scheme.

Included in this modern sector is animal traction, with feeding for draft and finishing the cull animals for butchery.

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*		1970	1980	1985
Forest zone	urban	5[illegible]8,000	1,120,000	1,490,000
	rural	1,763,000	2,270,000	2,560,000
Savanna zone	urban	318,000	580,000	650,000
	rural	1,507,000	1,420,000	1,350,000

Source: Desplechin, J. Strategie du developpement de l'elevage, Min. of Economy and Finance 1973.

Attempts are being made to develop "industrial feedlots" (for example, at Ferkessedougou), which are part of the intensive modern sector development. However, at present none of these units are in existence.

In the forest zone it is feasible to produce cattle on the grass growing under the palm trees in palm groves. The present contribution of such production to the national supply is negligable.

The last system of cattle production to be discussed is the "recuperation" of cattle before slaughter. This involves attempting to restore weight on cattle delivered (usually trekked) to the major cities. This is a logical course of action but one which, so far, has not been commercially profitable.

Small ruminant production. Some of the small ruminant production is handled by the Peul, who have their own herds. However, most of the small ruminants (sheep and goats) are "self raised" (autoelevage), that is, the animals are left untended for almost all the year (except perhaps during the crop season). Substantial changes would be necessary to obtain substantial increases in production. Research on improved methods is underway at the CRZ in Bouake and elsewhere in West Africa.

Modern pig production. Modern pig production is well established in the north (Bouake, Ferké, Korhogo) and near Abidjan. Output has doubled in the last 5 years. There are three large producers (finishing a thousand head a year) and many smaller producers. There is one center for producing feeder pigs for sale to farmers for finishing (Korhogo). The Korhogo center also supplies the pig feed. The larger producers may import their own supplement and mix their own pig rations. The Korhogo center is running at a loss. The profitability of modern pig production under suitable production is likely to be demonstrable from the 12 or more units selling over 200 head a year. However, a regular supply of low cost feed.

may be difficult to assure. Molasses, if regularly available, might fill part of the need.

A limited amount of short term credit has been available for modern pig producers from the BNDA (Agric. Dev. Bank).

Pig and poultry production. Traditional production occurs in villages. The stock are fed byproducts from the household and sometimes purchased by-products (such as brewers grains) are used. The stock are largely untended and get much of their ration from scavenging. The parasite problem can be serious , especially in pigs which may carry parasites of humans (trichinosis and tapeworms).

Traditional pig and poultry production are both important and very significant in terms of their contribution to the domestic meat supply.

Modern poultry production. There are both private entrepreneurs and Government organisations involved in modern poultry production. The largest unit is at Abobo, where both meat birds and eggs are produced.

The major GOIC poultry center is at Bingerville. There is a hatchery there and day old chicks and feed are supplied.

There can be no doubt that a properly managed modern poultry enterprise is profitable but a number of African entrepreneurs were forced out of business in 1973/74 by the squeeze between the cost of feed and the price of the product.

It must be remembered that the supply of eggs on the African market is sufficient and that the modern meat birds are sold dressed and only through category I butchers shops and supermarkets. The market for modern poultry production is thus limited However, the price of poultry in the African market is still higher than the African market prices of meat.

From time to time attempts have been made to improve the meat and egg production of the local chickens by introducing improved cocks. This is quite feasible but needs management and a maintenance of a supply of suitable cocks so that the breed does not become pure "improved". The improved breeds do not stand the rustic conditions of production of the traditional sector. So it is occasionally necessary to back cross to traditional breeds to maintain a "rustic" quality.

D. Marketing Patterns and Prices

The market data is incomplete and does not account for even the sale of all of the imported animals. The point of slaughter of about 50% of the cattle and about 95% of the sheep and goats is not known.

In general, cattle enter at points along the northern border (see description of projection veterinary posts on the frontier and fig 1) and move southwards to market. Cattle entering in the Odienné region transit to Liberia (about 10,00 head a year) or move to the cities in the West, Man, San Pedro and Sassandra. Some of these cattle move by truck and some on the hoof. All of the sheep and goats move by truck. The main stream passes through Nielle or Ouangalodougou to Bouaké and Abidjan. The Malian cattle mainly arrive on hoof and about half of the Voltaic imports arrive on the hoof and half on rail.

All of the cattle arriving at Abidjan are supposed to arrive on wheels - rail (90%) or truck (10%).

Major problems are caused by delays at railway loading points, waiting for wagons. The loading points are usually in densely populated areas with a lot of farming and the delay leads to conflicts between drovers and farmers. An attempt is to be made to improve the declining efficiency of the railroad. The cost of rail transport has doubled in recent years.

The commerce in imported cattle is mainly carried out by Malian merchants and wholesale butchers.

However, in spite of frequent allegations that the profits are excessive, all of the studies which have been made (SEDES, UNDP Mali project 523, etc.) indicate that the livestock are handled in a competitive market with relatively modest margins of profit.

There is, however, a problem common to the whole francophone region - meat prices are set officially but the prices of cattle are set in the market place.

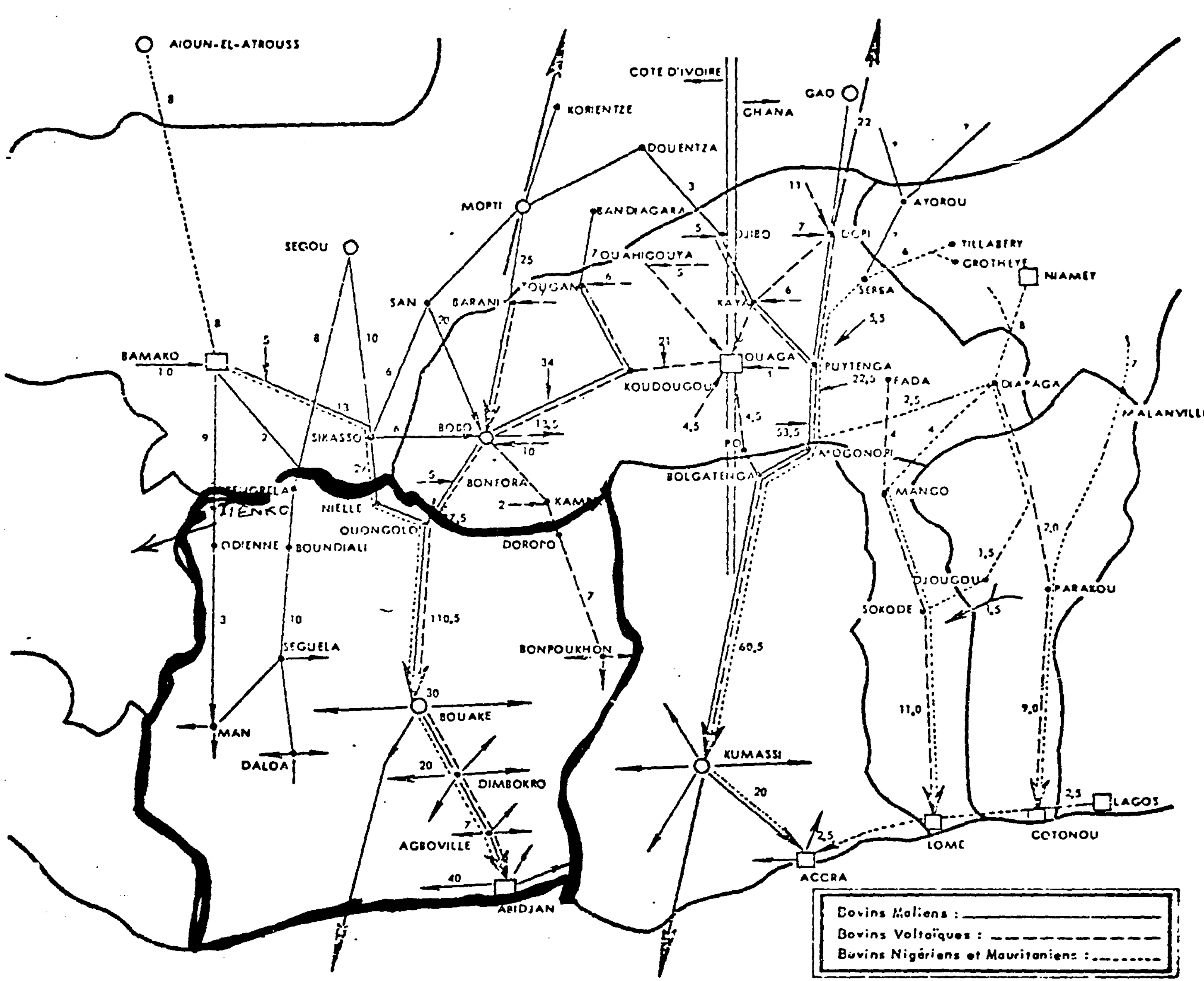

Fig. 1. Regional Cattle trade (data are for 1966)

In 1974 ~~the~~ slaughter declined in most of the countries including the Ivory Coast, although the price of meat rose only modestly--less than the increase in the minimum wage of 20 + 25% within a 6 month period in FY 1973/74 (table 6). However, the price of rice more than doubled (from 60f to 125f/kg.) and the prices of other staples (cassava, yams, and plantains) also increased. The market appeared to be adequately supplied; that is, there was still plenty of meat available on the Treichville and Adjame markets during the noon hour.

Recent results of studies by Montgomery* support our hypothesis that the meat and other ingredients of the sauce take second place (in the priorities of the consumer) to the purchase of the carbohydrate staple. Montgomery's results also show that consumers respond rationally to price changes in meat and to the alternative of substituting fish for meat. The price of fish has remained relatively stable (at about 150f/kg. on the African market) largely because the GOIC has permitted an enormous increase in the purchases of fish from foreign trawlers in Abidjan harbor.

Since April 1975 the meat situation in Abidjan has changed. The supply is inadequate and

the actual price has reached a record level . The situation has probably been accentuated by an official decline in the price of rice from 125f to 100f/kg.

The change in prices of meat over the last 20years can be seen in table 6 and the current (May, 1975) offical prices in table 7 .

The price of the beef sold in piles by one butcher (who also slaughtered cattle) was determined by the writer in May 1975. On each pile of bones the butcher's assistant place 150 gm. of meat (weighed on the scales) and each pile was sold for 100f (or 667f/kg. meat with bones free). The official price for such a transaction was 50f for a 350 gm. pile with 40% meat and bones, and 60% offal or about 180f/kg. edible product.

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* The consumption of meat in Abidjan varies with the prices of meat, of fish (a substitue for meat), and of a composite of cassava, yams, and plantains.

Table 6. Development in the price of beef, Abidjan (4/kg).

		1956 to 59	1959 to 64	1964 to 67	1967 to 70	1971	1972	1973	1974	1975
MODERN 1ST CLASS BUTCHERS	FILET	460	460	580	580	900	900	900	950	1100
	BROILING	375	430	510	510	800	800	800	800	950
	ROAST	300	345	390	390	650	650	650	650	800
	BRAISING	200	230	260	260	335	335	335	340	360
	BOILING	130	130	150	150	240	240	240	300	300
	LIVE	60	70	80	90	100	120	130	150	
	CARCASS	170 TTC*	175 TTC	180 TTC	210 TTC	225) tax 81) 306	225) 81) 306	250) 81) [illegible]	250) 93) 343	275) 113) 388
TRADITIONAL 2ND CLASS BUTCHERS	FILET	250	290	335	335	335	335	335	500	
	BROILING	200	230	255	255	255	255	255	350	
	ROAST	200	230	250	250	250	250	250	350	
	BRAISING	150	175	190	190	190	190	190	300	
	BOILING	120	120	130	130	130	130	130	300	
	LIVE	60	70	80	90	100	110	120	130	
	CARCASS	140	150	165	175	200	210	225	300	

* TTC - taxes included

Table 7. Adminstrative Prices for Meat
(Abidjan, 22 March, 1975)

	Category of Market			
	1st class			2nd class
	1st quality	Extra		
		f		
Beef				
Filet, kg.	950	1100		500
Grills, Kg.	800	950	with	
Roasts, kg.	650	800	bones	300
Braising, kg.	340	360	without	350
Stewing, kg.	300	300	bones	
		by the pile*		50
Offals				
liver/kg.	320	320		250
heart	320	320		each 225
tongue	320	320		each 200
kidney	320	320		each 150
brains/each	200	200		150
tripe/kg.	110	110		110
Mutton				
Leg/kg.	675	820		370
Chops/kg.	600/660	650/800	with	350
Shoulder (boneless)/kg.	600	650	bones	
		by the pile**		50
Pork	No fixed prices			

*Minimum standard for beef "tas" is to be 350 gm. with 60% offal and 40% meat and bones (or better).

**Minimum standard for mutton "tas" is to be 300 gm. with 60% offal and 40% meat and bones.

The price of beef with bones was 350f and without bones 400f, 50f/kg. higher than the official level. There was no filet available but it was priced at 800f/kg. (500f officially). All of the filet was taken by the supermarkets and Class 1 butchers.

The price of cattle was reported to be 40-45,000f for a steer that would provide about 125 kg. carcass or 320-360f/kg. carcass plus 16f/kg. slaughter tax. Under these circumstances the butchers will not sell meat at the official price. There was less of a shortage of mutton in the market. The price was about 50f above the official level. However, since only about 31% of the sheep sold in the area were sold through the abattoir and meat market normally, the significance of the supply in butchers stalls is not certain.

An attempt was made to find out why the number of cattle imported had declined in the last two months. These cattle would normally come from Mauretania (13% in 1974), Mali (53%) and Upper Volta (33%). Of the Voltaic exports a considerable number are of Malian origin smuggled into Upper Volta.

Two important changes have occurred. Mauretania has officially stopped cattle exports, although we have no information of the effectiveness of this measure. And Upper Volta has effectively stopped Malian cattle from entering Upper Volta.

The latter will be causing a reduction in the "domestic"* supply and so creates price competition for exports. This could have reduced exports from Upper Volta.

The Mauretanian action, if effective, will cut off the stream of Mauretanian cattle to the Ivory Coast and also the several thousand head each year which were normally slaughtered in Mali.

The Malians (OMBEVI) recognized the reduction that was taking place in the export to Ivory Coast but believed it to be a transitory effect. The drought

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*Many of the smuggled Malian cattle were slaughtered in Western Upper Volta.

in Mali mainly affected the region which supplied cattle down the Niger river to Niger and Nigeria. The regions supplying the Ivory Coast were relatively lightly affected.

It is possible that the closing of the Voltaic border caused some cattle, which would have gone through Upper Volta to Ivory Coast and Ghana, to follow the Niger river route to Nigeria. Traffic along this route in 1974 was only about 10% of normal (believed to be due to the drought). Movement in 1975 is believed to have recovered somewhat but still to be below the normal level.

The Ghanian market, which has a fixed price for buying cattle at the Voltaic frontier, is not a major factor in the Ivorian shortage of supply. Indeed, the rise in prices may have reduced the supply offered to the Ghanians and the lack of access from Mali, except through Ivory Coast, also is likely to have reduced the Ghanian supply.

The shortage of beef on the Ivorian market is expected to remedy itself in a few months, at least taking the edge off the acute shortage. This will be done by adjustments in price of cattle and in the selling price of meat (i.e., by changes in composition of the piles sold, etc.).

The effect is expected to be lasting on the livestock and fishing sector development plans of GOIC, coming as it does at the time when the 1975-1980 plan is being formulated. It is to be hoped that, in spite of the usual complaints of "anarchy among the wholesale butchers", need to "limit the number of butchers licensed to slaughter,", "need to Ivorianize the butchers"*, the GOIC and its technical advisors will recognize the fact that the meat market is working effectively and that intervention by setting maximum prices for cattle will only further reduce the quantity and quality of the supply.

It is interesting to hypothesize how close the price of boneless meat is to the threshold at which say Nigeria first, followed by Liberia and perhaps Ivory Coast

*Fraternité Matin 22/23 March 1975, the semi-offical Ivorian newspaper, p. 3.

will import boneless chilled or frozen carcasses from other continents.* The GOIC was seriously considering .- importing

1000tons of beef from the French surplus at 1000/ton fob France.**

The increase in price of cattle is met with satisfaction by many, who consider that the price of meat on the coast was excessively low and that a higher price will make such modern sector trends as industrial feedlots profitable. However, if Nigeria decides it can as well import beef from Brazil or Australia and the chilled or frozen (boneless) carcasses can be handled, the pressure will be taken off the supply, at least in that geographical area.

Furthermore, the increase in the price of cattle and their scarcity makes it more difficult and more expensive to supply a feed lot. The increase in the price per Kg. liveweight gain is increased but the cost of the feed and of operating a feedlot has risen as fast or faster. So the economics of industrial feedlots may not be improved.

Market for Pork

The major part of the pork produced, (60% of the tonnage in 1971), is from the traditional sector and does not pass through the regulated livestock markets, abattoirs, or butchers. This is presumably produced and consumed by non-Moslems, although Moslems may produce (but not consume) pigs.

The majority of the output of the modern sector, with carcasses 2-3 times the weight of the traditional pigs, appears to be purchased by a small number of wholesale butchers (most of whom are not African), slaughtered in large urban abattoirs, and sold to supermarkets, or in the category 1 (European) butchers shops of the wholesalers. With the exception of pigsfeet, which are sold outside the butchery area, pork is not handled at all in the African meat markets, mainly because the butchers, often Malian in origin, are Moslem.

* Australia currently has a large surplus of grass fed beef for which no market has been found.

** In June, 1975, it was reported that the Ivory Coast did import 1,000 tons of beef from France and was considering a second purchase of 2,000 tons of beef.

Poultry Market

Eighty seven percent by weight of the poultry produced in 1972 was in the traditional sector. These birds are marketed alive in a poultry section of the village and urban markets. A portion of them are purchased by merchants who transport them to the larger urban markets.

The modern birds are not the choice of the African mass market because of the lack of flavor and the tenderness (which causes them to disintegrate in the stew pot). They are sold dressed in the supermarket, the Category I butchers shops, and on the poultry farms. The extent to which the market will accept a much greater volume of modern poultry is unknown.

Eggs from the modern sector are sold throughout the markets and by vendors on the street. They are completely accepted by the Africans.

E. Government Organization

a) Ministry of Animal Production.

The GOIC has a Ministry of Animal Production, concerned with all aspects of livestock production except research (Ministry of Scientific Research) and feed grain production (Ministry of Agriculture). The organization of the Ministry of Animal Production is shown below:

Minister

Cabinet

Finance and Administration

Conseilleurs Techniques

Bureau for Projects (CEGOS,SEDES,FAC) (expatriate personnel)

Office of project management and execution (FAO assistance)

School for Extension Workers

Veterinary Service
- Regional office
  - Sectors
    - Veterinary posts

Livestock Production
- Regional office
- Livestock enterprises
- Sodepra
  - cattle
    - Program Nucleus herds & Extension
  - pigs
    - extension
  - poultry
    - centers
      - extension

Range Management (Agrostology)

Processing and Markets

Abattoirs and cold storage

Fisheries

Under discussion "Division of Animal Industries" which would include hides as well as processing.

1. The Veterinary Service. (Last report, 1972)

The 1972 report indicated a need, not presently covered by people in training, for 3 veterinarians, 3 livestock assistants and 13 monitors, with an extra 3 assistants in training for ITE. However, this cadre has to take care of increased demand for staffing the enlarged veterinary posts in the north (2 vets, 2 ITE, and 8 assistants) and other development programs.

Staff 1972

Region	No. of sectors	No. of posts	Vet. Inspector	Vet. Asst.	Livestock Asst.	Monitor	Total
Headquarters			3	-	6	7	16
North	5	14	4	-	13	36	53
Center	3	8	-	-	9	19	28
East	3	4	1	-	10	10	21
South	2	6	1	-	8	10	19
West	1	2	-	1	2	8	11
Center West	2	2	-	1	5	8	14
Laboratories*			-	2			
Total	16	36	9	4	49	98	160
Training					3***	5	8
Detached					4	1	5
New posts operations			6**		8****	13	

*Bingerville and Korhogo diagnostic laboratories.

**3 new veterinarians arrived at the end of 1973.

***3 assistants training will become ITE (Ingieur des travau elevage).

****5 moniteurs in training to be livestock assistants.

Operating budgets have been:

1970	38,630,000
1971	22,600,000
1972	26,600,000 including 14.6 million for vaccines.
1974	26,600,000

Health Status

BPP

In 1972, there was the usual level of Cbpp but also an outbreak of rindepest in imported Malian cattle. There was a mortality of about 560 head of imported and 140 head of domestic cattle. There were 396,000 immunizations given. About 50,000 head were treated with trypanocide drugs.

In 1973, according to the ELC summary, there was another outbreak of rindepest in May with 562 deaths.

2 Livestock Production Division and Parastatal Organizations

The livestock production division has principal responsiblity for the poultry program. It also has an extension program on pig production and has distributed about 175 nucleus cattle herds (almost 2,700 head) to farmers. Confusion over the role of Sodepra, nominally under the Production Division, handicaps action in pig and ruminant production.

Staffing 1973 Report.

	Vet.	ITE	Assistant	Monitors	
Sodepra	1	1	1 + 3*		(excludes expats)
Bingerville Center	1	1	2	3	
Korhogo Centers			2	6	
Bouake Center			1	3	
Headquarters	2	2			
	4	4	6	12	

*Detatched from vet. service.

The composition of the Agrostology, Procession and Markets, and Abattoir divisions is not known. In Abidjan they have a separate staff, but in the rest of the country they share duties within the regional framework.

Sodepra is an autonomous parastatal organization with responsiblities for

-Abokouamikro and Sipilou Ranches

-Livestock production program in the north for farmers, for Peul

-Korhogo pig center and program

-Livestock production in crop programs (Soderiz, etc.)

The latest ranch, Marahoue, financed by FED, has been set up with a contracted management working under an executive committee which sets up the annual production plan This arrangement is to overcome deficiencies in management by Sodepra.

5. Research Institutions

The research programs are under the direction of the Ministry of Scientific Research. A special program for establishing research priorities has been developed* and its effect is now being felt. Interagency program and budget committees are responsible for identifying priorities and allocating funds. The committees include the staffs of the Ministry of Scientific Research and the research institutes, the Plan, Economy and Finance, Animal Production and its divisions, Agriculture, and the University. The program has been modified to bring it more in line with the needs of the development program.

The research program for the livestock sector involves:

ORSTOM (Km-4) Forage plant breeding

CRZ (Bouake) Livestock Research Center

CIRES (Abidjan) University Institute of Social and Economic Research
National Agricultural College.

Applied Research is also done by Korhogo substation of CRZ

Sodepalm - cattle production and selection using palm groves

Ministry of Animal Production - Sheep/goat management.

The CRZ also is responsible for the management of the forage seed multiplication farm.

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* du Plessis, C.J. et al. Planning of Agricultural Research in the Ivory Coast; Ministry of Scientific Research, 1973.

Priority programs in the livestock sector for 1974 and 1975 include:

-Systems of exploitation of the Savanna

-Agrostology of natural pastures

-Improvement of forage grasses (Panicum)

-Cattle nutrition

-Genetic improvement of ruminants (especially cattle)

Projects at CRZ

1. Forage production and management including grazing trials:

   -Panicum maximum, including ORSTOM's new variety.

   -Stylosanthes.

   -Brachyaria mutica in low lying land.

   -Improvement of natural pastures by brush killing and seeding various species.

   -Irrigated forage production.

   This project includes study of the digestability of forages at different time of the year.

2. Cross breeding of introduced breeds on the local taurin and Zebu cattle

   Originally this involved Jersey x N'Dama; the resultant half-blood has been found to be trypano-tolerant but increasing the Jersey blood then causes a loss of the tolerance. Forty 3/8 Jersey cattle have been put into herds in the bush.

   The Neilor and Guzeira Zebu cattle, donated by Brazil, are being used to create pure bred herds and for crossing with local Zebu and N'Dama. At three years of age the Brazilian Zebu males weigh 600-650 kg. compared with 300 kg. for the local Zebu.

   It is proposed to create a Zebu center, perhaps with a loan from the Council of the Entente, either near the forage seed multiplication farm at Badika or in the Forest of the Palé. The center will serve

   -to select from the local Zebu cattle.

-to study crosses between Zebu and taurin cattle.

-to study crosses with the Brazilian Guzeira and Neilor cattle (already in the North of Ivory Coast.

-to test the Azawak and Gobra and perhaps the Sahiwal and Sokato Goudali Zebus pure and in crosses.

There is already a market for improved Zebu bulls for sale or lease to the sedentary Peul in the region. The Zebu center would provide stock for multiplication and subsequent use in livestock production for milk, meat and animal traction.

3. Sheep and Goat Project. A project has already started on the evaluation of the Sahelian and the intermediate Djalonké breeds of sheep. The next steps will be selection and crossing.

Next year (1975/76) a start will be made on a similar study of goats.

Management systems for sheep and goat production will be studied.

This work will be carried into the field, in coordination with the FAO village sheep program: in base line villages, in villages with expatriate volunteers to carry on an extension program, and on an industrial scale on irrigated pastures under management of Sociabé (an autonomous Ivorian organization).

4. Improvement of N'Dama Cattle. CRZ is responsible, with Sodepra, for using the herds on the Sipilou and Abokouamekro ranches for selecting of improved cattle for use in the cattle development programs in the Ivory Coast.

5. Improvement of Baoulé and Lagoon cattle. The Baoulé cattle herds in the Sodepra palm groves are being used as a basis for selection of improved Baoulé cattle for grazing programs in the other palm groves and for peasant production.

In another area a nucleus of 200 lagoon cattle (smaller and more trypano-tolerant than the Baoulé) is being used to start selection in this breed.

b) Education and Training

1) Formal training of the cadre for the livestock sector

Veterinarians are trained at the regional Veterinary School atDakar, as well as in the French and Belgian (french speaking) veterinary schools.

Agronomes (Ing. Ag. and Elevage) are trained in the ENSA at Abidjan, with an enrollment of about 40-50 students a year (one third "foreign"). Currently the first cycle is being taught in the University at Abidjan, the second cycle is taught in the ENSA, and the third cycle is done abroad. It is planned to do the third cycle in the Ivory Coast soon.

ITE (Ingineur des Travaux elevages) are trained at Bamako; it requires 4 years after the BAC.

Livestock Assistants are trained at the Bingerville school.

Monitors in livestock production are trained locally.

There are almost no Ivorian "animal scientists," who would have taken a course at the ENSA followed by the third cycle abroad. This makes it difficult to man the livestock production development program projects. For this reason, the Ivorians plan to use expatriates as project managers; the Ivorian counterparts should be trained in place.

Only recently have formally trained ITE's been used in the livestock sector in Ivory Coast. A few of the older ITE's were awarded the qualification on the basis of experience and not formal education. This rank is also in short supply.

There is almost a complete void in Ivorian livestock research workers. One Ivorian veterinarian has just started to work at the CRZ, Bouaké.

Because of the high level of training available in the special branches of livestock production in the U.S., it would be helpful to the Ivorians if the third cycle could be taken as a masters program (with or without thesis) in the U.S. Such specialties as range management, animal breeding, animal nutrition, pig production, poultry production, rangeland cattle and sheep production, and forage production, could be usefully studied in the US as training for project managers and research workers, both short term and for degrees.

2) Non-Formal Extension Education in Livestock Production

Apart from the nearly complete lack of a qualified Ivorian Cadre to develop an extension program in livestock production, the organization to carry such a program is not in existence.

The extension work is mainly carried on by the veterinary service, which is organized by regions and sectors and is stationed in posts. This program is carried out by the staff that delivers the veterinary service and a small number of "specialists" in pigs and poultry.

In theory, the livestock extension should mainly be done by Sodepra. However, Sodepra does not have the means to do the job. Farmers receive some extension service from their "operation" -- rice or cotton. The operations are becoming polyvalent; that is they now include food crops and, in theory, livestock.

In the proposed livestock development program in the North each region will have an expatriate director within Sodepra and the extension agents, trained by the project staff, will presumably work through the "operations" with the farmers. A separate program, using Peul extension workers, will be used with the Peul herders.

No decision to develop teams to deliver a rural development program has been made. It must be remembered that the "operations" have been relatively successful in stimulating the production of the export crops such as cotton, palm oil, coffee, cocoa, etc., and have already made a start in rice. Also shortage of domestic rice supply has been more of a political problem (with rise in prices) than shortage of food grain whereas the interior states and Senegal have suffered important shortages of food grains in both rural and urban areas, which has resulted in broadening the responsibilities of the operations to include food grain. In the Ivory Coast, maize and soybean production programs have entrusted to Soderiz, the rice operation and, in the past, than shortage of meat.

Furthermore, only in the last 2 years has a real effort been proposed for development of the North. It is not clear at the moment the extent to which this political emphasis will be translated into financed production programs.

The elections take place in November and examination of the budgets of Calendar 1976 and 1977 will show how many of the proposals are to be financed.

II. National Plan and Strategy*

A. The Plan Document

The 1975-80 plan provides a broad set of interventions in all the areas of Ivorian Livestock Production and also calls for changes in the Ministry of Animal Production to improve project design, development and supervision.

In the last "plan" it was recognized that reliance on ruminant livestock production alone would not be sufficient to maintain, let alone increase, the percapita meat consumption in the Ivory Coast. So a program was started, at the Presidential level, to stimulate production and storage of maize and soybeans for poultry and pig production. This program is carried forward into the 1975-80 plan.

The program of the Ministry of Animal Production includes:

1. a major program of livestock extension and improved veterinary service delivery to farmers in the North under Sodepra but integrated into the cash crop "operations". This involves FAC (applied research unit), the French Caisse Centrale (CCCE) providing a loan, and German and Belgian funding and technical assistance. This will include ruminants, pigs and poultry.
2. five new veterinary posts, markets and abattoirs, plus housing, water and electricity supply, to monitor the trade cattle entering the Ivory Coast in the expectation of reducing the morbidity and mortality of diseases introduced by trade cattle, sheep and goats. Additional AID Entente loan funding

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*The 1975-80 Plan Document is not yet available. A copy of the 1970-75 plan is available.

is being sought for this from the Council of the Entente. Grazing areas are proposed to reduce the conflicts with farmers and to minimize weight loss on the way to the market.

3. a program of extension and improved veterinary service to the nomadic and sedentary Peul, providing water supply, cattle trails, fire breaks, improved grazing and forestation. This is expected to reduce conflict between the nomadic herders and the farmers.

4. Set up a production ranch (Marahoue) financed by the FED and an industrial feedlot by the sugar factory at Fekessedougon (hoped to be financed by Germany). The Marahoue, although under Sodepra, has a management policy committee establishing the annual program and a contracted management given the authority to carry it out. The management of the feedlot has not been established; it is not yet clear whether it will be under Sodepra or Sodesucre.

5. Provide credit to set up a number of intermediate mixed farming enterprises. This was originally conceived as 25,000 ha. cattle ranches, which proved to be unattractive financially and slow to mature. The size has been reduced to about 1,500 ha. and the concept includes mixed farming and several livestock enterprises. Latino-consult is to produce a program plus detailed plans for the first 5 farms by the end of calendar 1975. Credit has been sought from the AID loan through the Council of Entente. Extension will be provided by UNDP.

6. Agrostological and Entomological study of the Savanna region. UNDP sponsoring Entomological survey and FAC Agrostology study.

7. Industrial supply of feed for pigs and poultry on private and on state run farms. USAID loan support is sought for an initial 5,000 ton drying and storage facility in the Bouake area. An international feed company is being sought to participate in setting up of the feed industry.

8. A major thrust in pig production involving:

   -- expanding the Sodepra feeder pig center at Korhogo

   -- building a series of 5 x 200 sow farrowing units under independent (non Sodepra) management at Fekessedougou.

   -- finish pigs at the Ferke feeder pig center

   -- promote pig finishing among private farmers in operations like SODERIZ and SODECOTON

   -- a private pig packing plant with 15-20,000 head a year capacity Bouake. See "Plan 5".

9. A program to increase modern poultry production in the private sector, especially near Abidjan, using feed delivered from Bouake. Within the Ministry of Animal Production, the structure exists for

   -- Project Development Office (Bureaues Projets) with personnel from CEGOS and SEDES (FAC financed)

   -- Project management office (Cellule d'execution et Controle des Projets) with a staff of three expatriates (FAO) and Ivorian counterparts

   These are to be developed in the 1975-80 plan.

Existing development projects which are to be continued include:

1. Livestock production and peasant cattle feeding on stylosanthes in the Bandema Valley Authority Program (FED)
2. Demonstration projects (UNDP)

   -- Baoule cattle in palm plantations with Sodepalm

   -- Lagoon cattle in palm plantations with Sodepalm

   -- Village sheep production

The Research Strategy has been discussed under research institutes (Part A, Section 5, Item 3, p.24)

B. Evaluation of the Strategy

The strategy is well conceived to meet the needs of the livestock sector of the Ivory Coast in maintaining or increasing per capita meat consumption. However, it seems that most of the emphasis in ruminant production is on cattle, the major component of the large city meat supplies. In the next 5 years the increase in the domestic cattle supply will be quite small. A thrust in small ruminant production could make a substantial increase in supply within this period.

There are six major areas of weakness and two areas where problems may arise.

1. The concept that maize and soybeans must be produced in large scale mechanized units and stored in very large central drying and storage units will be very costly to get going. Small farmers in the forest zone have already demonstrated their ability and willingness to increase maize production if they can either store it themselves or sell it to some organization that can store it.

If the 2 tons/ha (31.4 bu/acre) yield on 100 ha at Sipilou is any indication, the government societies should be kept out of maize production. The farms would need drying and storage facilities on them because of the near impossibility of planning to move maize to a large central storage at harvest time, which is during the rainy season.

Soybeans would most simply be grown as an intercrop between rice crops, as is successfully done in the Cameroons.

The whole economic basis of the proposed pig and poultry programs can be threatened if the feed cost becomes excessive. Alternatively the government will have to set arbitrarily low prices and subsidize the cost of production.

2. Sodepra will have to be able to delegate authority and use modern farm management principles if it is to overcome the need for a substantial annual subsidy to balance its business. It is also necessary to avoid "direct operations" managed by Sodepra in the expanded program.

3. The GOIC will have to be certain that is is acting on the basis of information and not emotions in the program for the nomadic and sedentary Peul (item 3, p 31). The results of the studies being made by BNEDT and CIRES in the north indicate that

- there are no nomadic Peul left in Ivory Coast
- there is little friction between the sedentary Peul and the farmers because they wish to preserve their traditional relationship.

Current proposals to develop a grazing area in the Forest of LaPalé and the Valley of the Bagué, conceived in the heat of a political demonstrations against the Peul by the Ivorian farmers in the north, will have to be re-developed with new goals (i.e., abandoning the concept of reducing conflict) and to be evaluated in the light of the extra production of milk and meat, without the benefit of the social value of reducing conflict. The proposed investment of 42,000 cfa/head* of cattle in the grazing area is already extraordinarily high and if the cost is charged only against the benefits of additional grazing capacity, the project would not be economically feasible. The 42,000 f investment/head equals the level of investment per head on a ranch.

* 500 million for 12,000 head. There are already 11-12,000 head of cattle in the area at certain times of year and so the additional carrying capacity of the system on a year round basis must be estimated. The new "Plan" calls for an investment of 5000 f/head for development (table 8, p. 36).

concept that tsetse flies can be controlled in a small area rather than by a substantial campaign may need revision.

Table 8. IVORY COAST
Investment proposal for livestock development in the Savanna (1975-80 Plan)

	Village Livestock	Transhumant Cattle	Frontal Zone
		f cfa/head cattle	
Stock Water Supply	1,000	2,000	4,000
Natural pasture management	500	500	1,000
Cultivated forage	1,000	---	---
Trails, water supply domestic	500	500	1,000
Tsetse fly eradication	1,000	1,000	2,000
Verterinary infrastructure	500	500	---
Veterinary treatment equipment	500	500	1,000
	5,000	5,000	9,000
Number of head	500,000		25,000
Total Investment	2,500,000,000		225,000,000
Annual maintenance cost/head	711		700
	335,000,0000		17,500,000
Extension cost/head	400	100	100
Prophyllaxis/head	250*		250

Commitment by president 900 million f

* Cattle at 250 f and sheep/goats 155 f
Cost of prophyllaxis estimated at 14,166,000/year.

4. In order to reduce the real source of conflict between the Peul - that is the drovers of trade cattle herds - and the farmers, it is essential that the RAN (railroad) reorganize its cattle car service to avoid keeping large herds, in densely populated farming areas, awaiting railroad cars. This would also reduce the frequency of outbreaks of disease introduced by the trade cattle.

5. The concept of the intermediate sized enterprises seems quite wrong from the farm management point of view. Farms should be started on a size scale that permits the manager to learn the technology, making a number of mistakes, without going broke. They should not be started at the large size proposed. For every ten farms that are started at the most 2 or

3 can be expected to grow; perhaps 1 or 2 is a more realistic estimate. In the U.S, on most farms the management is handed on, with the successor undergoing an apprenticeship before he succeeds the manager. If not the result is often disastrous.

The intermediate sized enterprises should be "tailor made" to fit the demonstrated skills of managers of existing farms that show promise for growth. In a free market, such as the livestock sector in the Ivory Coast, only the exceptional manager can make and keep enough money to grow.

The same problem occurs in starting farmers in pig production and finishing; it is better to start a large number of small enterprises and help the viable ones grow than to try to launch a few large units. Of these large units one third can be expected never to reach full capacity, a third will reach full capacity but be unable to repay their debt and about a third may be successful.

6. The "magical attraction" of size also leads the GOIC to set up the ranch of the Marahoué (15,000 head) and the feedlot at Ferke. The only financially successful ranches in the region were set up in Central Africa (Zaire, Congo RP and Cameroons) by private entrepreneurs. There is no record of the number that failed.

There is no economic reason to think that a 15,000 head ranch can compete in cost of production with the traditional herders. There is every reason to expect that the expenses of the infrastructure and management and labor of a ranch will not result in sufficient increase in efficiency to produce at a price competitive with the traditional herders, subsisting on milk and with low cost family labor.

The deficits on the Sipilou and Abokouamekro ranches are greatly reduced by the possibility of selling pure bred females at very high prices to other parastatal societies. The Maraboué ranch will have to market its cattle in competition with the Zebu of the traditional herders in Ivory Coast and in the Sahelian countries.

In the same way, there is no feedlot in West Africa that is known to be profitable if it has to pay a realistic price for the feed and if it is to pay the cost of the facility and management. The proposal at Ferke is to run 3 groups of 33,000 head through each year. It will only be possible to feed cattle intensively in the dry seasons and so the investment will have to be amortized against two lots fed a year rather than three. The proposal assumes that 66,000 head of cattle can be purchased a year in Ivory Coast, Mali and Upper Volta, without seriously disturbing the prices - a dubious assumption.

In addition, if commercial rather than subsidized prices for feed supplements are used, feedlot will be difficult to demonstrate.

7. A pig production program based upon a high level of molasses in the ration has been demonstrated as feasible for growing and finishing by T.R. Preston and his colleagues in Cuba. Preston, now working for the Mexican National Commission for the Sugar Industry and consulting for FAO, could presumably advise on this.

Production of pigs selling for \$1/kg liveweight or more, with a supply of molasses at 2¢/kg is likely to be profitable. Pigs can be produced in the U.S. for 45¢/lb. with maize at about 9¢.

The proposal to supplement the pigs ration with slaughter house wastes may need revision, since the Mexicans found fish meal (which is available in Ivory Coast) a superior supplement to molasses. The concept of building a yeast plant, converting molasses to yeast, at each "industrial" pig production unit, should probably be replaced by one large industrial yeast production and drying unit. Yeast only comprises a very small portion of the ration (2% of the dry matter).

A problem that may arise is that the operation is so profitable that the GOIC and Sodepra will not try to establish peasant pig feeding units, but will monopolize the production themselves.

The supply of molasses, while not inexhaustible, is sufficient for the production proposed. However, if the cattle feeding operation for 100,000 head a year is set up, this will consume the molasses output of the Ferke' sugar plant.

The pig program assumes a sufficient demand for the product with an already increasing supply (see Table 5). One part of the population, including the butchers in the African markets, will not touch pork; although in Ghana it was reported that Moslems were more likely to eat smoked cuts.

A complete marketing organization has to be built to carry the product outside the traditional market (supermarkets and one or two butchers who also made sausages, smoked hams, etc.). This problem is recognized and it is proposed to handle the product in the PAC and AVION chain of small supermarkets which are not presently involved in the sale of fresh meat.

Another problem is that the meat prices are highest in Abidjan where the existing market for modern pork production lies and where the packing plant will be. Can pork be marketed in competition with other meats and fish in the other urban markets?

A similar problem is met with modern meat birds (broilers and cull hens). The traditional African market is for a smaller, more flavored, live bird. Can sufficient outlets be found for the modern, dressed birds - a highly perishable product - at a price that will encourage production?

The pig production program again assumes that there are economies to large scale units (1,000 sows). Unless the unit at Ferké can perform better than the unit at Korhogo (12.1 pigs weaned per sow per year, with about half of these sold as feeder pigs) it will not be financially viable. The unit at Ferké is to be prepared to finish pigs, which it will certainly have to do because of the lack of a market for feeder pigs. The economics of pig feeding depends mainly upon the price of feed, the efficiency of conversion of feed to liveweight and the price of the finished pigs.

While some individuals are making a profit finishing pigs, usually by buying low priced feed (spoiled grain, etc.), it cannot be assumed that a government unit in large scale finishing will be able to do the same. Use of molasses at 4 f/kg is proposed but it is not known the extent to which it can be used.

The shortage of protein above that produced as a by-product at the abattoirs is to be overcome by the production of yeast from molasses and its incorporation (after centrifusing) in the ration.

Public Policy Constraints

The concept of development operations for single crops - rice, cotton, palm - has caused confusion for a farmer being visited by a number of extension workers each trying to promote his own program. To some extent this still happens. However, attempts are being made to unite programs presented to a group of farmers.

Similarly the veterinary service has one group of agents and chain of command, Sodepra has another, and the Division of Livestock Production (Sodepra's supposed superior) has yet another (mainly in poultry).

D. External Assistance

1. Ministry of Animal Production to form an Office of Project Development (FAC/GOIC) and Project execution and Control unit (FAO).

2. Sedentary Livestock Production in the North. A substantial demonstration and extension project for farmers and sedentary herders (largely excluding Peul).

FAC "Cellule d' Appui"

CCCE (French)
Germany
Belgium

} Technical assistance and rural development project.

3. Transhumant (and Sedentary) Peul herders in the North,

Seeking AID loan

4. Distribution of tsetse flies in the Savanna region Study (UNDP).

5. Group of small demonstration production projects (UNDP)

- Baoule cattle in palm plantations
- Lagoon cattle in palm plantations
- Village sheep production

6. Grazing areas for trek cattle in the North

7. Pig packing plant, Abidjan, capacity at least 15,000 head a year. (Ivorian private enterprise.)

8. Feed mill and grain storage complex

Feed mill (mixed state (30%) ivorian (30%) and foreign enterprise (35%).)

Grain drier and storage 5,000 t (AID Assistance requested)

9. Marahoué ranch, 15,000 head production unit (FED).

10. Bandama Valley authority livestock production including peasant feeding on stylosauthes (FED).

11. Korhogo expansion of center for production of feeder pigs BISI/SODEPRA.

12. Ferke feeder pig production center, seeking AID loan.

13. Cattle Trails and markets in the North (Odienne, Boundiali, and Korhogo or Ferke) BISI

14. Medium sized livestock enterprises:

    extension paid by UNDP

    planning Latino-consult

    financing first 5 units by ?

Table 9

Export of Dried Meat

	Meat tons dry	tons carcass	No of head	offals dry	ton fresh	No. of head
1960	398	1592	14210	72	217	8640
1965	1013	4052	36180	70	211	8400
1970	869	3476	31035	89	266	10680
1971	793	3172	28320	?		
1972	[illegible]81	3524	31465	?		
1973	1410	5640	50360	825	2475	?
1974	1448	5792	51715	1312*	3936	?

* 84% of the offals come from N'Djaména, presumably the Farcha abattoir. Even so this cannot include only offals but must include hooves as well.

APPENDIX I.B

LIVESTOCK SECTOR ANALYSIS

TOGO

Prepared by Dr. Donald S. Ferguson, Center for Research on Economic Development, University of Michigan, AID/W, October 1975.

TOGO LIVESTOCK SECTOR ANALYSIS

I. ECONOMIC SETTING AND LIVESTOCK SECTOR

Togo is situated on the Gulf of Guinea and is bounded by Ghana, Dahomey and Upper Volta and includes some 56,600 square kilometers. Population is estimated to be about 2.1 million persons and growing at a rate of about 2.7 percent per year.

Togo has maintained a moderate rate of economic growth since independence. During the first five-year plan (1966-1970), GDP increased about 5 percent per year in real terms and agricultural output increased 3-4 percent annually. While agriculture in 1969 represented 36 percent of the gross national product (GNP), animal production was estimated to be roughly 3 percent.

In 1970, the country's per capita income reached CFA 31,000 (US$126) although it was much lower in rural areas where it averages CFA 17,000 ($68). In 1971-1972, and probably 1973, the growth of GNP was close to zero at constant prices despite nominal growth rate of 8 percent per year accompanied by a similar rate of price inflation. The economic slowdown was due to deterioration in the terms of trade for cocoa (until mid-1973), unfavorable weather conditions for food and export crops, a reduction in construction and a decline in border trade with Ghana. The outlook for coming years is more favorable because of higher export prices for cocoa, coffee and phosphates. The latter has tripled in price since 1973, bringing large government surpluses in the form of export taxes and mining company profits (nationalized).

Most of the ruminants in Togo - cattle, sheep and goats, are owned by sedentary farmers and are grazed in the general neighborhood of the owner village. Although the prospects for developing "modern" production must be considered modest because of a small elite market and high feed costs, there is considerable opportunity to improve the efficiency and output of existing flocks and herds.

Livestock Production: The estimated livestock population of Togo in 1973 and 1975 by region are given in Table 1. Estimates for 1975 are the following:

Livestock Population 1975 1/ (thousands)

Region	Cattle	Sheep & Goats	Pigs	Poultry
Maritime	12.1	252.6	63.7	427.1
Plateau	34.4	136.8	10.6	437.8
Central	73.5	225.3	51.0	585.8
Kara	33.5	231.6	23.3	457.2
Savanna	117.7	431.6	40.3	1.184.1
	271.2	1,277.9	188.9	3,092.0

1/ Source: Togo Ministry of Plan. Estimates confirmed by the Veterinary Service.

Table Togo: Livestock Population 1973 and Projections for 1975 and 1980 by Region (thousands)

Type	Year	Plateau	Central	Kara	Savanna	Maritime	Total
		REGIONS					
Cattle	1973	31.8	70.0	32.0	112.0	11.5	257.3
	1975	34.4	73.5	33.5	117.7	12.1	271.2
	1980	39.0	83.3	37.9	133.1	13.7	307.0
Sheep and Goats	1973	130.0	214.0	220.0	410.0	240.0	1,214.0
	1975	136.8	225.3	231.6	431.6	252.6	1,277.9
	1980	159.6	256.1	263.3	490.7	287.2	1,465.9
Pigs	1973	10.0	48.1	20.0	38.0	60.0	176.1
	1975	10.6	51.0	23.3	40.3	63.7	188.9
	1980	12.3	59.1	24.7	46.7	73.8	216.6
Poultry	1973	412.6	552.0	431.0	1,120.8	402.6	2,919.0
	1975	437.8	585.8	457.2	1,189.1	427.1	3,097.0
	1980	507.5	679.2	530.1	1,378.5	495.2	3,590.5

Source: Togo: Ministry of Plan

It is estimated that there are about 270,000 cattle, 1.3 million sheep and goats, 190,000 pigs and over 3 million poultry in Togo. The estimated cattle population for 1975 exceeded the 1972 estimate by about 70,000 head (36%) because of more accurate counting during the recently completed C.B.P.P. vaccination campaign. Cattle population estimates for the two northern most regions, central and Savanna had been underestimated by 43 and 58 percent respectively. Small stock populations may be similarly underestimated.

Consumption/Availability:

The estimated annual per capita consumption of beef, goat/mutton, pork and poultry are the following:

	Kg.
Beef	2.4
Goat/Mutton	1.5
Pork	1.2
Poultry	2.2
TOTAL	7.3

Of the total, roughly 88 percent is produced in Togo but 25 percent of the beef is imported as live cattle from sources in Mali, Upper Volta and Niger. Live cattle imports provide 40 percent of the cattle slaughtered in the major market centers. The marketing patterns and prices are described in more detail in Section C. Low animal protein consumption levels, particularly in rural areas, reflect low levels of per capita income and low effective demand which have discouraged both large scale importations of cattle and domestic production.

II. TOGO LIVESTOCK ECONOMY

A. AGRICULTURAL REGIONS

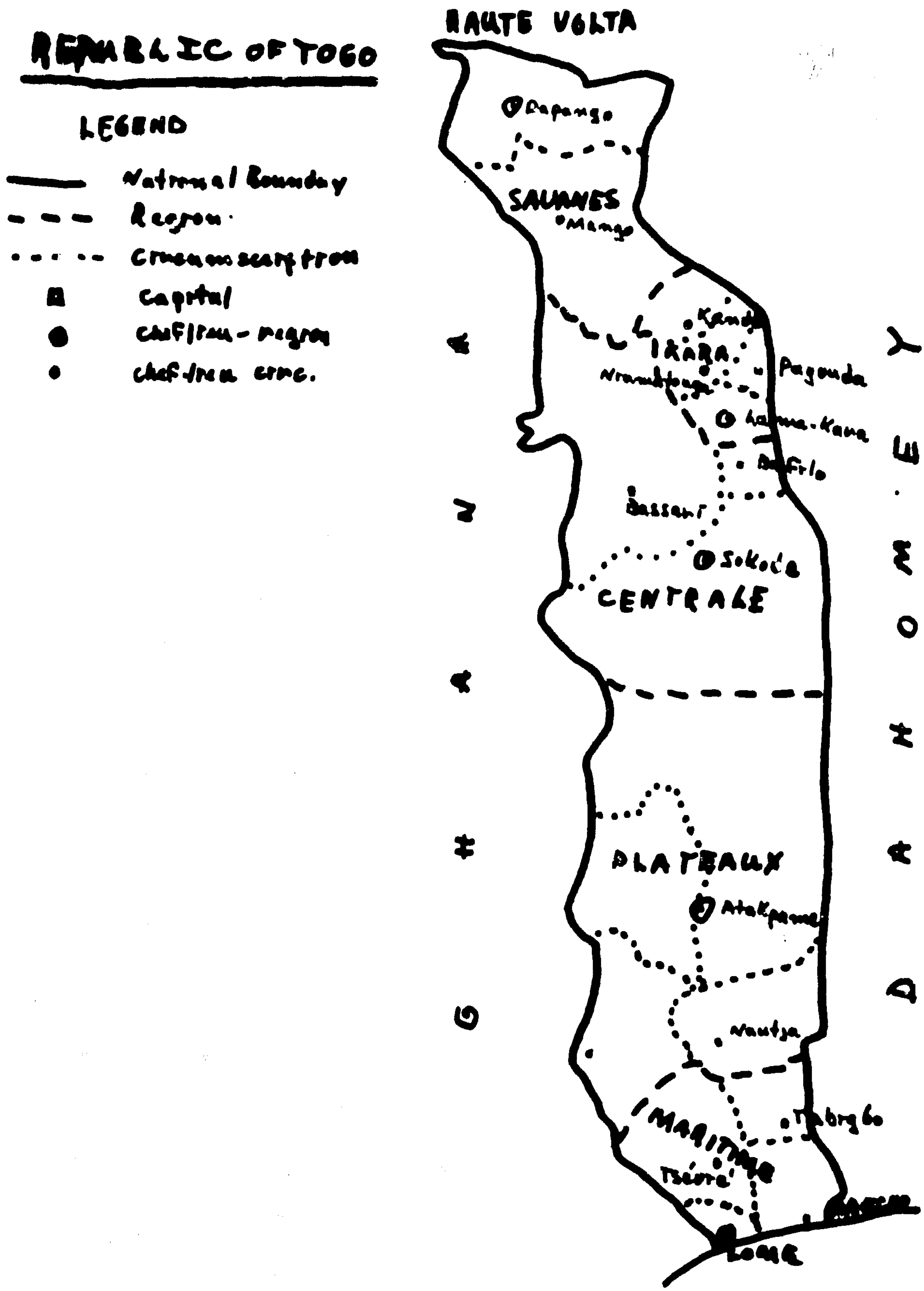
From an agricultural and livestock production viewpoint, Togo can be divided into four district agro-climatic zones which correspond roughly with the political sub-divisions (Map 1).

The Maritime region has a bi-modal rainfall pattern with April-June (600 mm) and September-November (300 mm) precipitation peeks. Vegetation is equatorial rainforest remnants interspersed with derived oil palm savanna. Main crops are cassava and maize.

The Plateau region can be divided into two parts; a mountainous western zone covered by humid mountain forest and grasslands, and an eastern zone, with vegetation similar to that of the Maritime region. Rainfall is unimodal averaging about 1,500 mm per year. Coffee and cocoa are the major cash crops.

The Central region is wooded savanna with an average of about 1,300 mm per year in a single rainy season of 8-9 months. This region, which forms the large mid-section of Togo, is the country's least populated area with about 15 persons per square km. Although

Map 1


HAUTE VOLTA
REPUBLIC OF TOGO
LEGEND
Capital
Dapango
SAVANNES
Mango
KARA
Pagouda
Bafilo
Bassari
Sokode
CENTRALE
PLATEAUX
Atakpame
Nuatja
MARITIME
Tsévié
LOME
GHANA
DAHOMEY

the soils and rainfall levels can support crops such as cotton, groundnuts, yams, maize and pulses, the absence of an aquafer near enough to the surface to supply year-round water is a major constraint to spontaneous settlement and agricultural development, including grazing.

The Savanna and Kara regions are characterized by a less certain rainfall pattern averaging 1,100 mm and patchwork of different soils types including sandy, alluvial, and mountain soils varying greatly in their land use capabilities. Population pressure varies from about 30 to over 85 persons per sq. km. and is particularly high in the Dapango and Lama-Kara areas.

Population pressure in some areas is forcing migration to the Plateau and Maritime regions and to Ghana as migrant laborers. Principal crops are millet/sorghum, groundnuts and rice in the Oti Valley.

There are several hunting and forest reserves in the Savanna region where settlement and crop cultivation are prohibited. They cannot be used for grazing because of higher concentrations of tse-tse fly which result from the undisturbed vegetation and game populations. The reserves also serve as reservoir of Trypanosomiasis and fly which limit livestock production near the reserves. In some locations near rivers, Onchocerciasis (river blindness) limits settlement and land use.

Grazing Resources: The grazing resource of southern Togo is underutilized and could support a higher livestock population. However, portions of the northern regions (Kara and Savanna) are severely overgrazed as are neighboring districts in Ghana and Dahomey. Land shortage is forcing migration from the Lama-Kara and Dapango areas. Lack of dry season water and forage constrain the integration of livestock and crop production in these regions. Overgrazing by village sheep and goats may be contributing to soil erosion as does annual burning of most of the grassed areas. No development projects are focusing on conservation of land and water resources of Togo.

The Oti Valley will be included in the West African Onchocerciasis (river blindness) vector control program. Full development of the valley may include resettlement activities, irrigated crop production and grazing. Survey of the land use capability of the Onch-free areas would be desirable as part of development activities.

B. LIVESTOCK PRODUCTION PATTERNS

Most cattle, sheep and goats are owned by sedentary farmers. Most sheep, goats and poultry are in village flocks which are essentially scavengers. Sheep and goats may be tied to stakes during the growing season to prevent damage to food crops. Cattle, with the exception of village herds in the Maritime and Forest zone of the

Plateau region, are usually managed and grazed in large herds by Fulani herdsmen. A number of owners will contract management to herdsmen for a small fee and a portion of the cow's milk supply. Typical herd sizes are given in Table 2. Sheep and goats are of the dward rain-forest types. Cattle types are variants of the West African Shorthorn which are small averaging less than 200 kg live weight at maturity. Cattle in the northern areas are slightly larger and perhaps 15 percent show some zebu cross breeding. The small numbers of crossbred cattle in the Savanna Region is remarkable, given the widespread use of Fulani herdsmen, indicating that Trypanosomiasis and Streptothricosis may be more prevalent than in comparable areas in neighboring countries. The small size of the local cattle is a major constraint to the development of animal traction. A proposed FED assisted program would seek to upgrade the local cattle with Ndama in order to increase size somewhat while retaining Trypano-tolerance (see Development Projects).

The age/sex structure of typical herds in the Savanna Region is given in Table 3. Less than 16 percent of the herd is males over 12 months of age suggesting that marketing tends to be precocious before animals reach full size. A more careful analysis of the potential to increase farm income from small lot feeding of cattle and through animal traction are required. Limited experience

TABLE 2: TOGO: Number of Herds by Size Category, Circumscription of Dapango and Mango, Savanna Region, 1973

	Dapango		Mango		Region	
Category	No.	%	No.	%	No.	%
0-50	279	45	65	34	344	43
51-100	200	33	52	28	252	31
100 +	134	22	72	38	206	26
-	613	100	189	100	802	100

Source of Table: A. Tourne, G. Djangbedja and K. Affoynon, Monographie de la Region des Savannes - Togo (version provisoire, B.D.P.A. for Togo Ministry of Rural Economy and UNDP, 1975.

CAUTION: May not be accurate, table in field notes did not add up - table adjusted accordingly.

TABLE 3: TOGO - Age/Sex Structure of Herds Circumscriptions of Dapango and Mango, Savanna Region, 1972

Category	Dapango	Mango (No.)	Total Region	Percent
Cows	17,538	8,020	25,558	34.5
Heifers	7,206	3,203	10,409	14.1
Sub-Total	24,744	11,223	35,967	48.6
Bulls	1,075	207	1,282	1.8
Young Bulls	4,970	1,043	6,013	8.1
Steers	3,517	1,035	4,552	6.1
Sub-Total	9,562	2,285	11,847	16.0
Female Calves	10,331	3,258	13,589	18.5
Male Calves	9,918	2,617	12,535	16.9
Sub-Total	20,249	5,875	26,124	35.4
TOTAL HEAD	54,555	19,383	73,938	100.0

Source of Table: A. Tourne, G. Djangbedja and K. Affoynon, Monographie de la Region Des Savanes - Togo (Version Provisoire), BDPA for the Ministry of Rural Economy and the UNDP, 1975). Definitions of age categories not specified.

with animal traction in Togo and Dahomey suggest that the increased value of animals following use in animal traction and growth to full adult size is an important incentive to mixed farming development. Increased use of animal traction would be expected to increase the marketed supply of meat.

C. MARKETING PATTERNS AND PRICES

Togo is a meat-deficit country. In recent years, cattle imports have averaged roughly 10,000 head and sheep and goat imports, 6,000 head (Table 4). These are small in relation to those of neighboring countries (SEDES, 1969). The tons of carcass meat equivalent imported and that of fish are given in Table 5, and the estimated domestic production and importations and total availability of carcass meat for 1973, 1975 and 1980 in Table 6. Based upon these estimates prepared by the Togo, Ministry of Plan, roughly 88 percent of all meat consumed is produced within Togo as was 75 percent of the beef supply. Of considerable interest, the dependence of Togo on imported animal protein is projected to increase. However, given the probably decline in cattle available for importation from Upper Volta following the drought, per capita availability may be expected to decline.

TABLE 4: TOGO - Recorded Cattle and Small Ruminant Importations and Controlled Slaughter - 1965 - 1972 (thousands of head)

Year	CATTLE		SMALL RUMINANTS	
	Imported	Controlled Slaughter	Imported	Controlled Slaughter
1965	12.5	13.6	1.0	28.2
1966	13.0	14.3	3.0	24.9
1967	14.0	15.7	.2	29.3
1968	9.0	17.4	1.6	39.6
1969	9.0	18.1	1.1	35.5
1970	11.5	20.9	11.1	37.5
1971	8.0	21.9	6.0	33.5
1972	8.0	24.7	6.0	35.2

Source of data for 1972-1973: SEDES, Diagnostique et Perspectives sur la Production Animale en Togo, 1974.

TABLE 5 : TOGO - Estimated Beef, Mutton, Poultry and Fish Importation - 1968 - 1973*

	Beef	Mutton	Poultry	Fish
1968	1,052	93.0	7.1	3,630
1969	2,000(?)	105.4	10.3	10,470
1970	373	110.5	51.4	6,894
1971	642	91.4	103.9	7,706
1972	648	35.9	306.6	5,937
1973	1,117	23.9	213.3	4,826

*Source: Togo Ministry of Plan. Beef, mutton and poultry include estimates of on-hoof (live) importations.

TABLE 6: TOGO - Estimated Production, Importation and Availability of Meat and Poultry - 1973, 1975 and 1980

(Tons - Carcass)

Product	1973	1975	1980	Growth Rate
Beef:				
Production	3,614	3,810	4,311	2.5
Import	1,120	1,260	1,729	6.5
Consumption	4,734	5,070	6,040	3.6
Sheep:				
Production	2,757	2,903	3,309	2.7
Import	20	246	381	-
Consumption	2,777	3,149	3,690	3.2
Pork:				
Production/Consumption	2,432	2,581	2,991	3.0
Poultry:				
Production	4,090	4,340	5,030	3.0
Import	270	280	300	1.9
Consumption	4,360	4,620	5,330	2.9
TOTAL:				
PRODUCTION	12,893	13,634	15,641	-
IMPORT	1,410	1,786	2,410	-
CONSUMPTION	14,303	15,420	18,051	-

Source: Togo Ministry of Plan, 1975. For method of estimating production see Table

The numbers of cattle, sheep and goats slaughtered in controlled markets by origin is given in Table 7. Roughly 90 percent of imported (Zebu) cattle are slaughtered in official markets as are most imported sheep and goats but less than 20 percent of domestically-produced animals are slaughtered in urban centers.

The data indicate that urban consumers are highly dependent upon imported cattle for both present and future meat supplies, --- a strong justification for continued Togolese support for the Regional (ELC) livestock production and marketing organization and related programs. An improvement to the Togo cattle trails is being financed under the first ENTENTE Loan.

Retail beef, goat/mutton and pork prices as of April 1974 for selected markets are given in Table 8 and wholesale prices for Lome in Table 9. Prices are similar to those in other coastal markets within the Franc zone. Despite what would appear to have been a declining per capita availability of meat and fish, wholesale meat prices did not increase faster than that of the Lome cost of living index for the period 1963-1973 (Table 9). However, current price data (April 1975) suggest that meat prices have increased by roughly 50 percent during the previous 12 months, well above the rate of the cost of living index.

It is too early to assess the impact of this recent increase on either consumer demand (consumption) or producer decisions.

TABLE 7: TOGO - Controlled Slaughter Cattle, Sheep and Goats by Type and Origin - 1971-1973

	HEAD		
	1971	1972	1973
CATTLE			
Zebu Breeds (imported)			
Bulls	1,049	829	764
Steers	6,137	6,582	6,150
Cows	467	420	549
Sub-Total	7,653	7,831	7,466
Taurine Breeds			
Bulls	2,240	2,478	2,550
Steers	6,562	8,325	7,236
Cows	4,181	4,928	4,401
Calves	1,069	1,142	1,266
Sub-Total	14,252	16,873	15,453
TOTAL CATTLE	21,905	24,704	22,899
SMALL RUMINANTS			
Sheep			
Imported	3,450	2,348	5,950
Local	13,318	13,364	16,062
TOTAL	16,768	15,712	22,012
Goats			
Imported	2,445	1,874	3,800
Local	14,258	17,638	16,683
TOTAL	16,703	19,512	20,483

Source of Data: Togo, Service de l'Elevage

TABLE 8 : TOGO: Beef, Mutton/Goat and Pork Prices by **Market** Center, 1974

Market Center	Beef With Bones	Beef Without Bones	Mutton or Goat	Pork
		(CFA)		
Dapango	150	-	180	125
Lamakara	280	200	200	150
Bassari	140	-	180	-
Sokode	150	180	200	125
Atakpame	200	225	250	-
Palime	250	-	300	-
Vogan	250	300	300	250
Lome	250	300	300	200

Source of Data: SEDES, Diagnostic et Perspectives sur la Production Animale ou Togo (SEDES pour FAO/PA/UD, Avril 1974). ($1.00 = CFA 210).

TABLE 9 : LOME: Wholesale Meat Prices, 1967, 1970, 1972 and 1974

	1967	1970	1972	1974
Full Carcass	150	150-160	175	200
(Index)	(100)	(107)	(117)	(133)
Front Quarter	-	140-150	150-170	190
Hand Quarter	-	175-180	175-200	215-225
Hind Quarter (Niger)	-	215	230	245
Cost of Living Index				
Food	97.2	114.2	132.1	-
All Items	101.1	112.5	128.8	-

Source of price data: SEDES, Diagnostic et Perspectives su la Production Animale ou Togo (Auril, 1974). Cost of living data: IBRD/IDA, Current Economic Prospects of Togo (December, 1974).

A recent survey of the cost of marketing cattle in Togo has been completed by SEDES (Tables 10 and 11). The data indicate that profit margins are modest and price differences between markets reflect the costs of marketing. Most Zebu-trade cattle are walked to market but the smaller Taurin cattle and sheep and goats are marketed by truck. No major government intervention in marketing would appear to be justified.

D. PRODUCTION POLICIES - AGRICULTURE/LIVESTOCK

For a number of years, Togo has relied primarily on regional agricultural agencies (SORADs) to promote agricultural development. The SORADs which were established in 1967 were to follow an integrated approach to rural development combining agricultural extension services, credit and crop marketing and the provision of some social services. Because the SORADs lacked both human and financial resources to deal with such a wide range of activities several additional commodity-oriented public agencies for the promotion of particular crops --- cocoa, coffee, grains, etc. were created. These agencies, which may operate in all five regions, provide technical advice and supervision, foster research, and in certain cases, undertake processing and marketing activities within Togo.

TABLE 1C . TOGO: Estimated Wholesale Value of Taurine and Zebu Cattle and Sheep by Market Location

(C F A)

	TRANS. ON HOOF		TRANSPORT BY TRUCK			
	Zebu		Taurine			
Market Center	Value	Per Kg. Net 1/	Value	Per Kg. Net	Value	Sheep Per Kg. Net
Dapango	25,000	179	16,000	160	2,500	250
Sokode	25,900	185	17,000	170	2,600	260
Atakpame	26,600	190	18,500	185	2,75C	275
Lome	28,000	200	19,000	190	3,000	300
Difference	3,000	21	3,000	30	500	50

Source of Data: SEDES, Diagnostic et Perspectives sur la Production Animale ou Togo (SEDES, Avril 1, 1974).

1/ Net or liveweight

TABLE 11: TOGO: Estimated Marketing Costs, Diapango - Lome

(666 Km.)

	Cost Per Head (CFA)
Salaries, Food, Miscellaneous	500
Forced Sales/Losses	300
Finance Cost	400
General Cost of Dealer	
Cost of Disposal - Lome	
a. Use of holding ground	400
b. Credit to butcher (30 days)	450
c. General cost dealer	800
TOTAL COST	2,900
ESTIMATED PROFIT	1,500
Price differential Diapango - Lome	4,400

Source of Data: SEDES, Diagnostic et Perspectives sur la Production Animale ou Togo (SEDES, Avril, 1974).

To date, the Veterinary Services has remained as a separate service operating in all five regions. The Service controls livestock markets, inspects animals slaughtered and is responsible for disease control functions but has not played a direct role in extension education.

The SORADs, assisted by Peace Corps, and more recently the Cotton Society have had small programs to promote animal traction, as did a USAID-supported rural development project.

A further reorganization of rural and agricultural development services is in the process of implementation. It is proposed to group in under the "Ministry of Rural Development" all production and marketing activities including the commodity-oriented societies. Within a "Ministry of Rural Equipment: will be grouped the "service" agencies such as health, veterinary services, roads, water development and the like.

While in theory, coordination of development activities will be facilitated by the reorganization, integration of livestock development sub-projects which include infrastructure development, health, marketing, and production/extension activities will be more complex. A society for livestock and meat production has been proposed (Office Nationale de la Viande) but lacking any major existing activities such as state ranches, or abattoirs have not been created. A management agency will be required upon completion of the Lome abattoir (see Development Projects).

F. EVALUATION OF IMPLEMENTATION CAPABILITY

Staff. The staff of the existing Direction of Veterinary Services as of April 1975 consisted of:

a) 11 - veterinary doctors, including one posted to each district.

b) 7 - Ingenieur du Elevage (annual production).

c) 23 - Ingenieur - Adjoint.

d) 28 - Adjoint Technique.

e) 24 - Infermier

f) 21 - Vaccinators.

Training. Training within Togo is available only for the Adjoint Technique provided by the Ecole Agricole du Toue. The Adjoint engineers have received training in Bamako, the doctors in Dakar, while the infermiers are informally trained "on the job".

The Director of Veterinary Services stated that his staff is "inadequate" for current needs. A division of the existing service into health and production/extension activities would require additional staff. He requested at least four scholarships for training in annual production under the ENTENTE Project. Donor assistance in upgrading and "inservice training" for specific activities must be envisaged for any new production projects such as animal feeding, grassland improvement or ranching.

Budget Support for Animal Production:

Budget data related to animal industry was not obtained by the ENTENTE livestock design team. However, staff and budget totals for 1960 and 1971 indicate that funding has not kept pace with staff expansion.[1/]

	Staff (Mo.)	Operating Budget (CFA Millions)
1960	32	5.50
1971	74	6.12

Informal estimates by the design team are that over 90 percent of budgeted expenditures are for staff salaries. The lack of operating budget severely constrains the program and effectiveness of existing staff members. If services are to be expanded both an expansion of operating budget will be required and producers who benefit must bear a larger share of costs.

1/ Source: SEDES, Diagnostique et Perspectives sur la Production Animale en Togo, 1974.

Agricultural Credit:

In 1967, the GOT created the Caisse Nationale de Credit Agricole (CNCA), a public establishment which is autonomous administratively and financially which has been given the role of providing agricultural credit to small scale agricultural enterprise. This credit is to be coordinated with the activities of the Societies d'Amenagement Rural (SORADs) and that of agricultural cooperatives. Credit is provided to small farmers through the SORAD and cooperatives.

To date, few direct loans for animal production have been made. (1.4 percent of loans value in 1971/72). Because of an expected increase in the demand for pork and poultry products, the capability of the fund to service small producers should be expanded. An alternative for the "medium" size producer would be loans under the African enterprises loan program of the ENTENTE Fund or through the AID/EF Livestock II Program. In addition, loans for animal traction units are provided by the production societies.

III. NATIONAL PLAN AND STRATEGY FOR LIVESTOCK AND MEAT PRODUCTION

A. TOGO LIVESTOCK DEVELOPMENT STRATEGY

No clear livestock development strategy has been spelled out by the GOT. First, Togo has, until recent months, been able to import sufficient meat from the Sahelian countries at low prices to balance domestic production deficits. Second, development activities have been justifiably focused upon export crop production. As a consequence, Togo lacks sufficient trained technical staff for the implementation of an integrated livestock development program. Projects favored by GOT representatives during discussions were "ranches" and "production centers", for sheep and cattle in low human population zones. Those favored by donor agencies were demonstration centers for production and feeding of small ruminants and cattle and animal traction. The former would appear to be unwise because of the lack of financial success with large-scale ranches in West Africa. The latter appears to offer a substantial opportunity to expand production and incomes given the comparatively low productivity of existing flocks and herds and the larger impact on employment and incomes and crop production through animal traction. The two alternatives do require radically different programs and training.

A recent FAC-financed evaluation of the GOT's strategy for livestock development identified four principal constraints:

1. Lack of means - both financial and staff, with few persons with training in animal production subjects;

2. lack of knowledge and understanding of the systems of production leading to improvised rather than planned interventions;

3. tendency to launch programs simultaneously in all circumscriptions making implementation and evaluation difficult;

4. lack of coordination between veterinary services, SORADs, Avetonou Center, private farms, agricultural companies and public works division with the risk of improper use of existing infrastructure.

In evaluating Togo's ruminant development strategy, it must be kept in mind that Togo is a small country with correspondingly small veterinary services. Animal industry is, and is likely to remain, a minor part of total agricultural production. That is not to say that there is not considerable opportunity to improve productivity and expand numbers. Nonetheless, it would appear to be preferable to integrate livestock development activities within existing development agencies rather than create new services or agencies, specifically in support of livestock development.

Because the supply of cattle from outside of Togo is not likely to expand in the shortrun and could in fact decline, development expenditures should focus on production expansion rather than on additional marketing infrastructure. There are unused forage resources particularly in the Central and Plateau Regions which suggests that the center of production will shift toward the south.

For expanded poultry and pork production, the principal constraint is clearly the high cost of animal feeds. For poultry, the insufficient local supply of day-old chicks, credit for small producers and extension services are also constraints. Expanded production will largely depend upon increased feedgrain production within Togo. For pork current price levels are a constraint. Prices average about CFA 100/kg less than those of beef.

B. DEVELOPMENT PROGRAM TOGO LIVESTOCK

1. Abattoir Frigorifique: FAC GOT

FAC and the GOT have participated in financing construction of a refrigerated abattoir and cold storage for the port of Lome. The facility contains:

1. Cold storage capacity for: 24 cattle carcasses
   144 sheep and goats
   40 pigs

2. Abattoir and chilling room with daily capacity for slaughter of:

80 cattle	9.8 tons
183 sheep/goats	2.2 tons
40 pigs	1.1 tons

This capacity is projected to be adequate for the next twenty years, and is roughly 40 percent greater than current Lome slaughter. Space has been included to double the cold storage capacity if required.

3. General Services building including general refrigeration and ice-making capacity for servicing fishing vessels using the new port facilities (German aid).

4. "Fifth quarter" section for sanitary handling of offals with provision for manufacture of by-products when justified.

5. Cold storage section for storage of frozen fish (300 tons) and imported products requiring refrigeration.

6. Administrative building.

7. Two houses for management staff.

Total estimated cost of the project is 485,000,000 CFA or $2,200,000

Financing:	CFA
FAC	135,000,000
Togo Development Bank	200,000,000
Togo Capital Development Funds	150,000,000
	485,000,000

FAC - Engineering Supervision	30,000,000
TOTAL	CFA 515,000,000

When completed the facility will replace the current unsanitary and inadequate facility with one of the most modern abattoirs and cold storage facilities in Africa. The impact on high quality protein supplies will be primarily through facilitating importation of chilled and frozen fish. Initiation awaits completion of facility (October 1975) and formulation of a management society.

2. Development of Cattle Breeding in the Plateau and Central Regions (FED).

Economic investment project involving CFAF 290 million CFA about two-thirds under the third FED fund and one-third under the 4th fund.
(Togolese contribution CFA 490,000 (est.)

The project is aimed at increasing the productivity of traditional agriculture and animal production by developing animal traction and cultivation. The program includes upgrading the local cattle, which are of small size, with larger trypano-tolerant cattle (N'Dama) which will have the size necessary for traction. The area of the project is the northern part of the plateau region. The estimated current cattle population is 82,000 head distributed in 1,400 herds.

The project would include construction of veterinary service infrastructure, and a CFA 100,000 revolving fund for animal traction. The GOT lists the project a meat production project because of the eventual sale of the oxen for meat.

The integrated livestock development project includes on-farm extension education, a demonstration center, training and recycling of extension agents. Although it is assumed that the area will reach a maximum carrying capacity during the project period, no program of pasture management or land use is planned which would protect the productivity of the forage resource from potential overgrazing. In addition, a complete program would need to include sheep and goat management programs.

Center and plateau districts livestock population is estimated to be the following:

Species	Head
Cattle	82,000
Sheep	211,000

Species	Head
Goats	182,000
Horses	1,000
Donkeys	28
Pigs	53,000
Chickens	632,000

Cattle are concentrated in the western plateau at elevations of ± 500 meters and include West African Shorthorn, Baoule, Ndama and some Borgou (Zebu) breed types. Individual animals show traces of Brown Swiss, Charolais and Wakwa (Brahman/Zebu) from earlier development efforts. Herds tend to be large as suggested by the following herd size categories:

	No. Of Herds
Small herds (less than 50)	755
Average herds (50-100)	458
Large herds (100+)	156
Total	1,369

Animals in a herd generally are owned by several persons who employ a Fulani herdsman. Milk constitutes the most important share of the herdsman's income.

Social constraints were seen to include, the lack of technical knowledge and know-how on the part of the owners, fear that the herdsmen might retaliate if herding contracts were suspended, and social discrimination against any person who would himself raise cattle.

Management problems include the fact that males are sold at less than two years of age without reaching full size. Some negative selection is believed to be taking place because large robust animals tend to be marketed first. The project would trade local males on a value basis for selected N'Dama males. The current cattle population is projected to grow from the present 82,000 to 202,000 in the 14th year of the project, and consist of only upgraded N'Dama cattle by the 13th year of the project. Potentially, the herd could expand further with pasture improvement and forage production.

3. Rural Integrated Development - Savannah Region (SORAD des Savanes).

Direct FAC assistance livestock development (excluding the Lome Abattoir) is minimal. FAC has for a number of years, supported the activities of the SORADs of Savanna and Maritime. SORAD's activity in the Savanna region includes extension support for groundnut, paddy cotton, millet, sorghum, animal traction, infrastructure and applied research. Over one thousand farmers have adopted ox-cultivation. Implementation is via technical experts provided by B.D.P.A. The 1974 budget is for 570,000 F for all activities. This project will be terminated in 1975.

German Aid - Avetonou Livestock Center

The Avetonou Livestock Center is the largest and best developed Center in Togo. The Center has received German technical assistance for the past 11 years and the staff still includes 5 technicians provided by Germany. The objective of the station has been to demonstrate the technical feasibility of introducing purebred exotic stock in West Africa. Herds of Brown Swiss and Yellow Bavarian cattle are maintained in excellent health with satisfactory levels of production and health. However, their use has not spread to local farmers. Of the some 650 ha., 485 ha. are improved pasture. Some cross-breeding and selection of local dwarf breeds has been carried out in order to upgrade the size of these animals for animal traction. The station has never been stocked to capacity and in 1974, 221 selected N'Dama stock were imported from Zaire. This herd will provide N'Dama sires for the upgrading programs designed to add size and conformation to local cattle while retaining their trypano-tolerance. The

Center also has facilities to house agricultural school students during practical training and provides practical training in livestock production. A large modern piggery is now used to house a small herd of purebred stock for sale to private producers. Because of the high operating cost of the Center, the GOT is reluctant to assume responsibility for staffing the Center and the necessary budget subsidization.

IV. BIBLIOGRAPHY OF MAJOR SURVEYS AND FEASIBILITY STUDIES

1. IBRD/IDA, W.A. Regional Office, Current Economic Situation and Prospects of Togo (Report No. 458a - TO, Dec. 1974). 40 pp. plus Appendix.

2. SCET, Projet d'Anemagement des routes et des marches a Betail ou Togo, Tome I, Rapport General, Tome II, Dossier de Presentation, (Lome et Paris, Aout, 1972). Feasibility study for the improvement of cattle trails and markets in Togo. Provides data on numbers of cattle using various trade routes. Activities financed under AID/ENTENTE Guarantee Fund Loan, May, 1975. Principal author: A. Armaud.

3. SEDES, Diagnostic et Perspectives sur la Production Animale ou Togo (SEDES pour FAO/PNUD, Avril, 1974). 109 pp. plus annexes.

Provides current statistical data on the livestock sector of Togo, describes existing institutional infrastructure, on-going and proposed development projects including cost estimates and suggests additional programs with necessary governmental re-organization. Report prepared by J. Sarniguet and Y. Legrand.

4. SEDES et Togo, Ministre de l'Economic Rural, Les Aspects du Credit Agricole ou Togo (Lome et Paris, Decembre, 1973). A study of the agricultural credit structure and requirements prepared for the UNDP and the Ministry of Rural Economy.

5. Tourne, A., G. Djangbedja et K. Affognon, Monographie de la Region des Savanes ou Togo (Version Provisoire, BDDA pour le Ministre de l'Economie Rural et le PNUD, Lome et Paris, 1975). Monograph prepared by the rural economy section of the Savanna region development agency which summarizes the agricultural economy of the region including the livestock sector. The objective of the report was to identify possible programs and interventions by the Agency in agricultural production and marketing.

APPENDIX II.A

CONVENTION

creating

THE MUTUAL AID AND LOAN GUARANTY FUND
of the
ENTENTE COUNCIL

The Government of the Republic of the Ivory Coast
The Government of the Republic of Dahomey
The Government of the Republic of Upper Volta
The Government of the Republic of Niger
The Government of the Togolese Republic

- anxious to promote the economic development of their countries,
- conscious of the need for large-scale recourse to international cooperation in the financing of their economic development projects,
- wishing to provide a maximum of guaranty and security for the foreign capital invested in their countries,
- wishing to coordinate and harmonize their efforts to ensure an accelerated and uniform economic development for their countries,

have agreed on the following arrangements:

Article 1. - There is instituted among the signatory States, replacing the solidarity Fund created May 29, 1959, a "LOAN GUARANTY FUND", a public International Organization, financial in character with legal status and financial autonomy.

Its headquarters shall be located in Abidjan.

<u>Article 2</u> - The Fund has as its purpose the guaranteeing of productive loans from outside the Entente States:

- issued or contracted for by the States, public or semi-public institutions, or private enterprises having their registered office and main field of activity in one or more of the member States, and

- having as their purpose the financing of profitable industrial, agricultural, and commercial projects and of infrastructure projects.

<u>Article 3.</u> - The Fund's commitments shall be secured by liquid assets in French francs deposited in a financial institution of international reputation.

The Fund's guaranty ceiling is limited to ten (10) times the face value of its resources.
No one project may absorb more than 15% (fifteen per cent) of the Fund's guaranty potential.

<u>Article 4.</u> - The State in which an investment is made and for which a loan is guarantied shall sign a guaranty in favor of the Fund. It shall undertake to include in its annual budget the yearly instalment figure for such loan.

In case of default by the principal debtor the State in which the investment is made shall submit the matter to the Administrative Council of the Fund which shall advance the yearly instalment, subject to repayment and free of interest.

As long as the State referred to above shall not have satisfied the claims of the Fund, consideration of all applications for new guaranties on behalf of the said State shall be suspended.

Article 5. - The Fund's resources shall be derived:

- from an endowment constituted by the annual payments of the States, these being determined every five years by the Administrative Council;
- from subsidies and gifts;
- from the proceeds of its investments;
- from the proceeds of payment for its guaranty, the guaranty commission being determined according to the risk covered, in conformity with the provisions of the Internal Regulation.

Non-payment by a State of its participation shall preclude consideration of guaranty applications from that State.

In any case, as a provisional measure for the first two years the States are committed to provide jointly an annual contribution of 650 million CFA francs to the Fund.

Article 6. - The Fund shall be administered by an Administrative Council which delegates its powers to a Management Committee.

The Administrative Council shall be made up of the Chiefs of State of the Entente Council; it shall be presided over by the Chairman in office of the Entente Council.

The Management Committee shall be made up of two representatives for each State. Its Chairman shall be one of the representatives of the State whose President presides over the Entente Council.

An administrative secretary shall examine guaranty applications and, on behalf of the competent organs of the Fund, shall supervise the negotiation and realization of loan projects approved by the Fund as well as debt servicing. Both the Administrative Council and the Management Committee shall take decisions by the unanimous vote of their members.

Article 7. - Projects submitted to the Fund for consideration shall be accompanied by a dossier of technical, economic, and financial studies. To supplement its information the Fund may submit the dossiers of projects for which guaranties are sought to a consulting firm included in a list duly approved by member States.

An internal regulation will govern all procedures applied by the Fund.

Article 8. - All management documents committing the Fund must bear the signatures of two persons duly authorized by the Management Committee.

Article 9. - Each year a firm of accountants designated by common consent shall examine the management of the Fund and report to the Administrative Council. This report as well as the semi-annual position reports must be widely publicized.

Article 10. - Each year member States must submit to the Entente Council a report on the economic progress they have accomplished and the difficulties they have encountered.

Article 11. - In case of a State's withdrawal it may not claim payment of its share of the Fund's assets until after the liquidation of the commitments assumed by the Fund during the period when it was a member.

In accordance with Article 4 above, it shall remain equally bound by the commitments assumed by it with respect to the Fund. No compensation will be granted in favor of the State which withdraws.

Article 12. - In the event of dissolution, the Fund's resources shall remain earmarked for guaranty of its commitments.

For the Government of the Republic of the Ivory Coast:
Félix HOUPHOUET-BOIGNY

For the Government of Upper Volta:
Lt. Col. SANGOULE LAMIZANA

For the Government of the Republic of Dahomey:
General Christophe SOGLO

For the Government of the Republic of Niger:
HAMANI DIORI

For the Government of the Togolese Republic:
Nicolas GRUNITZKY

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N° 10/CE/FONDS/CA/70

CONVENTION RELATING TO THE CREATION OF AN ECONOMIC COMMUNITY OF LIVESTOCK AND MEAT AMONG THE ENTENTE STATES

The Government of the Republic of the Ivory Coast
The Government of the Republic of Dahomey
The Government of the Republic of Upper Volta
The Government of the Republic of Niger
The Government of the Togolese Republic

- Taking into account the bonds which unite them within the Council of the Entente

- Desirous of assuring the economic development of their respective countries and particularly of the rural sphere

- Concerned to assure to their populations the satisfaction of food needs, particularly in the matter of meat

- Recording the interdependence which exists among the countries members of the Entente and among them and their neighbors on the trade in livestock and meat, and in production and animal health

- Conscious of the efficacity which international cooperation within a regional framework can have in this matter.

Affirm by the present convention their common will to cooperate among themselves and to negotiate in common with their neighbors, with the Common African and Malagasy Organization (OCAM) of which they constitute a sub-region and with the outside world in general, on problems relating to the production, the processing and the trade in livestock and meat.

To this effect they have agreed on the following arrangements:

Article 1. - The high contracting parties constitute by the present Convention an Organization called the Economic Community of Livestock and Meat of the States of the Entente hereinafter designated the Community.

Article 2. - The aim of the Community shall be to promote in common in a regional framework the production and trade in livestock and meat:

- inside their respective frontiers
- among member countries
- among member and third countries, bordering or not, notably those grouped within OCAM.

Article 3. - The Community shall be brought into being by a series of successive agreements which will be entered into

1°/- Between the member States
2°/- Between the member States and others having the right to do so.

These agreements may be:

- technical cooperation agreements
- trade agreements
- payment agreements
- financial agreements
- agreements for the harmonization of legislation:
  - customs
  - fiscal
  - professional
  - sanitary

  and bank credit

The totality of agreements entered into and the present convention will constitute the charter of the Community.

This should lead to the creation of a true common market of livestock and meat among the member States.

Article 4. - On their request, there can be admitted in the capacity of "Associates of the Community":

1°/- States not members of the Entente Council, desirous of benefitting from the advantages of the Community and which negotiate agreements with them to this effect.

2°/- States not members of the Entente Council, or International Organizations which, without benefitting from them, are desirous of participating as friendly parties in the building of the Community, by furnishing assistance in personnel, in kind or in money.

The "Associates" shall be represented at the meetings of the Council of Ministers envisaged by article 7 of the present convention by a delegate having a consultative vote.

Article 5. - The maintenance of a contracting party in the Community shall be subordinated to the observance of obligations flowing from the agreements envisaged in article 3 of the present convention, to the payment of contributions towards the functioning of the Community and the furnishing of statistical data.

In case of grave and prolonged default, ~~a~~ the Member State may be excluded from the Community.

Article 6. - The organs of the Community shall be:

- the Council of Ministers
- the Executive Secretariat.

Article 7. - The supreme organ of the Community shall be the Council of Ministers of the member States.

It shall be composed of two Ministers per member State or their representatives duly commissioned; one of these Ministers shall be the one concerned with problems of production and animal health. The other shall be the one concerned with problems of trade and economic affairs. It shall be presided over in turn for a period of two years.

It shall meet at least once a year, on the convocation of the Chairman.

Convocations to meetings of the Council shall be addressed at least one month before the date of these meetings.

The convocations shall be accompanied by an agenda fixed by the Chairman, as well as presentation reports concerning the questions submitted for the examination of the Council of Ministers.

Article 8. - The Council shall define general policy and shall set the contributions of member States.

It shall see to the execution of its directives

It shall sign the agreements envisaged in article 3 when those agreements concern the totality of States members of the Community.

Article 9. - Decisions of the Council shall be taken by the unanimity of its members. They shall be notified by its Chairman to the Executive Secretary. Contentious points shall be submitted to the nearest conference of Chiefs of State of the Entente Council.

Article 10. - Every deliberation of the Council shall be the subject of an official report of the minutes.

Article 11. - The Council shall give an account of its activities to the Conference of Chiefs of State of the Entente Council.

Article 12. - The Council can only deliberate validly if all the member States are present or represented.

Article 13. - The Executive Secretariat shall have the role of permitting the putting into operation of a common market of livestock and Meat among the States Members and associates of the Community, and to this effect:

- to collect, outside as well as inside the zone, all information judged useful on the physiognomy and evolution of the livestock and meat market;

- to normalize and to centralize the statistical information which the States furnish to it on:
    - livestock and animal production
    - commercial movements across and inside frontiers
    - the evolution of supply and demand
    - the prices prevailing in various periods and their mode of formation
    - the intermediary costs and, notably, the costs of transport
    - the profit margins of the interested professions
    - the sanitary situation, etc...

- to synthesize this information and to disseminate it among the interested parties;

- to coordinate the programs for the eradication of epizootic disease;

- to exploit the information collected and to draw from it lessons in the form of concrete proposals of programs of improvement to submit to the Council.

These programs shall pertain notably to the improvement of conditions of trade:

- by measures of adaptation and harmonization
    - of customs, fiscal, and sanitary laws

- of the organization of professions concerned
- of prophylaxis;
- by the putting into operation of necessary equipment - sanitation posts, markets, abattoirs;
- by the promotion of bank credit;
- by trade and payment agreements.

The present list of activities of the Secretariat shall not be restrictive. The contracting parties reserve the possibility of deciding to confide to it any study, or any intervention that they shall judge usefully enters into the subject matter of the present convention.

They agree moreover to limit their assignments for the carrying out of studies or of interventions decided conjointly, and the elaboration of programs and proposals, without assigning to it authority of any sort over the Governments. The decisions which flow from these shall be taken by each Government in so far as they concern the internal arrangements of the States and of a common agreement by the Governments concerned when it is a question of inter-state agreements.

Article 14. - The Secretariat shall be installed at Ouagadougou. It can be transferred at any moment to another member State of the Community.

Article 15. - The Secretariat shall be administered by an Executive Secretary named by the Conference of Chiefs of State of the Entente Council on the proposal of the Council of Ministers. His functions shall be terminated under the same conditions.

Article 16. - The Executive Secretary shall hold his powers from a delegation of the Council.

Article 17. - The Executive Secretary shall assure, under the authority and the control of the Chairman of the Council, the functioning of the Secretariat. He shall be responsible before the Council for the carrying out of the decisions of the latter.

He shall have under his orders all the personnel of the Secretariat.

He shall proceed to the recruitment and to the licensing of subordinate staff, employees and workers. He shall execute the budget of the Community under the control of a financial controller.

He shall be considered as an international civil servant, and, in this capacity, shall enjoy diplomatic status.

Article 18. - The Chairman of the Council shall name senior staff of the Secretariat from among the candidates presented by the member States. He shall terminate their functions.

This senior staff must be technicians of a high level of competence and experienced in the disciplines corresponding to the programs of work fixed by the Council which shall fix their number and their qualifications.

They shall be placed under the authority of the Executive Secretary from whom they shall receive orders and to whom they shall account for their execution.

Article 19. - The salaries of the Executive Secretary and the senior staff shall be fixed by the Council.

Article 20. - The subordinate staff, the employees and the workers, shall be recruited by the Executive Secretary and placed under his authority. They shall be subject to the labor code in force in the country where they exercise their activities.

They shall not have the status of international civil servants and shall not enjoy diplomatic status.

Their number shall be fixed by the Council at the time of the establishment of the budget.

Article 21. - Each member or associated State shall designate from within its competent services an official, by preference a Veterinary-Doctor, as correspondent of the Secretariat, charged notably with gathering and transmitting to it statistical and technical information, and with receiving and disseminating information furnished by the Secretariat.

This correspondent shall not be a member of the Secretariat and shall not be remunerated by it.

Article 22. - Any independent and sovereign African State, member of the Entente Council, can notify to the presiding Chairman of the Conference of Chiefs of State, its intention to adhere to the present convention.

Seized with this request, he shall inform all the members of it. Admission shall be decided by unanimity of the members of the Community.

This decision shall be communicated by the presiding Chairman of the Conference of Chiefs of State to the State concerned.

Article 23. - Any State which desires to withdraw from the Community shall inform in writing the presiding Chairman of the Conference of Chiefs of State.

Notification of it shall be made by him to the other member States.

One year after the aforementioned notification, the present convention shall cease to apply to this State which, by that fact, shall no longer belong to the Community.

Article 24. - The present convention can be amended or revised if a member State shall address a written request to that effect to the presiding Chairman of the Conference of Chiefs of State.

He shall advise the other member States of it.

The amendment shall only take effect when it is unanimously approved by the Conference of Chiefs of State.

Article 25. - The present convention shall be ratified or approved by the signatory States in conformity with their respective constitutional procedures.

The original instrument shall be deposited with the Government of the Republic of Upper Volta which will transmit the certified copies of this document to all the signatory States.

The instruments of ratification or of approval shall be deposited with the Government of Upper Volta which will notify their deposit to all the signatory States.

Article 26. - The present convention shall enter into force one month after all the signatory States will have deposited with the Republic of Upper Volta their instruments of ratification or approval.

Done at Abidjan, the 10th of May 1970"

For the Government of the
Republic of the Ivory Coast
/ss/
Félix HOUPHOUET-BOIGNY

For the Government of the
Republic of Dahomey
/ss/
Hubert MAGA

For the Government of the
Republic of Upper Volta
/ss/
Sangoulé LAMIZANA

For the Government of the
Republic of Niger
/ss/
HAMANI Diori

For the Government of
the Republic of Togo
/ss/
Etienne EYADEMA

APPENDIX II.C

ENTENTE FUND

INCOME AND EXPENSE ANALYSIS
(IN THOUSANDS OF CFA)

	1973 (Actual)	1974 (Actual)	1975 (Est.)
Receipts			
Funds on Hand Beg. of Yr.	18,426	83,926	225,341
Interest on Capital Deposits	317,526	472,927	631,000
Guaranty Commissions	1,657	2,350	2,000
Miscellaneous	14,627	19,312	1,760
Drought Relief	30,000	-	-
Total	382,236	578,515	860,601
Expenditures			
Operation of the Secretariat	55,800	126,683	130,450
Financing Charges	120,000	51,764	162,020
Constructions	15,000	21,775	240,000
Grants	41,000	42,965	48,530
Development Interventions	19,000	66,617	161,310
Interest	-		40,000
Reserves and Miscellaneous	17,510	32,370	28,201
Drought Relief	30,000	10,000	-
Total	298,310	352,174	810,511
Balance of Funds Remaining at End of Year	83,926	225,341	50,090

APPENDIX II.C

APPENDIX II.D

GUARANTIES ACCORDED BY THE ENTENTE FUNDS
(in millions of CFA)

Year	Country	Purpose	Beneficiary	Amount of Guaranty	Total Investment	Outstanding Guaranties (as of 1/1/75)
1967	Upper Volta	Warehouse	Chamber of Commerce	80	90	0
1968	Dahomey	Kenaf I	Government	275	See Kenaf II	102,6
	Togo	Lomé Sanitation	Government	300	722	60
	Niger	Agricultural Equipment	Government	62	62	0
	Dahomey	Textile Factory	ICODA	150	450	150
1969	Upper Volta	Agricultural Equipment	Government	68	85,1	13,6
	Togo	Entente Houses	S.C.I.C.E.	110	292,5	0
1970	Upper Volta	Banfara Flour Mill	G.M.V.	125	410	122,8
	Togo	Clinker Crusher	CIMAC	135,2	435	67,8
	Upper Volta	Oil Processing Mill	S.H.S.H.V.	272	719	244,8
	Dahomey	Kenaf II	Government	675	3.061	575
1971	Upper Volta	Warehouse at Lomé (Togo)	Chamber of Commerce	65	80	85
1972	Upper Volta	Warehouse at Bobo-Dioulasso	Chamber of Commerce	70	80	70
1973	Upper Volta	Warehouse at Abidjan	Chamber of Commerce	40	62	40
	Niger	Entente House I	S.C.I.C.E.	180	180	180
	Upper Volta	Entente Livestock Bldg. and Villa	S.C.I.C.E.	115	115	110
	Dahomey	1 Villa	S.C.I.C.E.	25	25	25
	Niger	Hotel Ayorou	SORENTTE	40	100	40
1974	Niger	Entente House II	S.C.I.C.E.	180	180	180
			TOTAL	2 967,2	7 134,6	2,046.4

APPENDIX II.E

ENTENTE LIVESTOCK COMMUNITY

Regulation for the use of AID loan funds.

Protocol No. 6 passed by the council of Ministers 21-23 July 1971.

1. Eligable Beneficiaries.

The member states

Their mixed societies

Their State societies

Their public institutions given a legal entity and financial autonomy

Their professional societies or cooperative associations

legally established corporations or individuals presented by the Governments.

2. Form of dossier for request for credit. This should include:

a) The scope of the project and its place in the national livestock program, and if possible the effects expected to be obtained in improvement of supply of animal protein in the sub region.

b) A description of the administration or management for a determination (by the EF) of the ability of the beneficiary to manage the project and his capacity to repay the loan.

c) A technical description explaning the project (description estimate and plans) and the means of implementation and execution, also the results expected

d) A budget showing:

- The total sum involved and the sources of finance.
- The loan requested of the fund, divided into local expenses and expenses in foreign currency.
- The provisional payment schedule.

- The fixed and variable costs of operation.
- The estimated revenue stream and a provisional balance sheet.
- The provisional repayment schedule for the loan.

e) A description of the economics of the project and its effect at the local, national and regional level.

f) Annexes such as maps, statistics, plans etc.

The project documents, prepared by the competent Ministries are to be sent to the Executive Secretary of the ELC. The Ministries may request the ELC to prepare dossiers to submit with the loan requests.

The ELC review on the technical and economic feasibility of the part of the project financed by the loan is by the executive secretary to the applicant.

The applicant may then revise the dossier, withdraw it or let it stand. The dossier and the ELC reports are then submitted to the next meeting of the Council of Ministers. Approval must be unanimous and is recorded as approval. Rejected dossiers are returned by the President of the Council with an explanation by the Executive Secretary. When the project has been approved for a loan, the report of the Executive Secretary and the decision by the President of the Council of Ministers are sent to the offices of the Fund for the attention of the President of the Administrative Council. He, within a month of receiving the dossier, will sent the Beneficiary loan agreement for signature.

3. General Criteria For Financing Projects.

The project evaluation reports of the Executive Secretary of the ELC will consist of Three Plans and a Conclusion.

a) a technical evaluation using the standards generally accepted in the country involved and in the context of the execution and costs proposed

b) a financial and economic evaluation, including study of the marginal costs and fixed costs, revolving funds, return on capital invested and internal rate of return.

c) analysis of the effect of the project on the national and regional economy, permitting evaluation of how the project will be integrated into the existing program ("upstream" effects, "downstream" effects and revenues generated).

d) Conclusion on which the decisions of the Council of Ministers can be made.

Criteria used by the Executive Secretary in his analysis can be varied with the characteristics of the project.

K. H. Shapiro
10/4/75

APPENDIX III.A

USAID/UM-CRED LIVESTOCK RESEARCH PROJECT SUMMARY

The livestock research project being carried out for USAID by the University of Michigan's Center for Research on Economic Development in collaboration with participating African institutions is composed of the following activities:

1. Review and synthesis of the literature and statistics on livestock production and marketing in the Entente states of Central-West Africa[1] and their neighbors[2];
2. Detailed analysis of eight major topics discussed below;
3. Five field research studies, summarized below, related to the major topics to be analyzed.

Phase A of the project, from May through December of 1975, focuses on the literature review, initial assembling of statistics available in the United States, and preliminary design of the five field studies. Phase B, from January through December of 1976, shall be devoted to the five field studies, collection and review of literature and statistics not available in the United States, and preliminary analysis of the eight major topics discussed below. Phase C, from January through December of 1977, will focus on processing and analysis of the field study data, integration of that data into analyses of the aforementioned eight topics, and writing of final reports.

With regard to livestock marketing, the literature review will provide inputs for a background report with the following subsections:

1. Description of the marketing system's suppliers, points of transfer, agents, facilities, transportation, government policies, and consumption patterns.

---

[1]Upper Volta, Niger, Ivory Coast, Togo, and Dahomey.

[2]Mali, Nigeria, and Ghana.

2. Volume, value, age, sex, weight, and type of animal produced, exchanged at each transfer point, handled by each type of agent, using each facility, moving through alternate transport channels, and consumed at major population centers.
3. Costs of production, collection, exchange, transport, slaughter, credit, licenses, taxes, and animal maintenance and losses.
4. Prices at each transfer point, at different levels in the marketing chain, at different geographic locations, and at different times of the year and over years.

Four major topics warrant intensive analysis in the marketing inquiry. These analyses, as well as the intensive analyses in the production inquiry, which are to be conducted during Phase B and C, will be based on information uncovered in the literature review, on statistics collected during Phases A and B, and on data derived from the five field studies. Subject to the constraints imposed by the data available from these sources, an effort will be made to analyze the following topics in the marketing inquiry:

1. Supply responsiveness of producers--what are the relative costs and benefits of various activities undertaken by livestock producers; how might these be affected by changes in prices and in marketing costs; how have production and off-take patterns been altered in response to such changes in the past and how might they be altered in the future?
2. Competitiveness of marketing agents--are price changes promptly and accurately transmitted back to producers by traders; do price differentials over space, time, and form accurately reflect costs of marketing operations; do marketing costs approximate feasible minimums?
3. Transportation alternatives--what are the relative advantages and disadvantages of the existing methods of transporting livestock; how

might these methods be altered; what are the costs and benefits of such alterations?

4. Consumption patterns--what are the present patterns of meat consumption; how might these change in response to population growth, income changes, and increased urbanization; what is the nature of competition between Sahelian meat and its major substitutes?

With regard to livestock production, the literature review will provide inputs to a background report that will have the following subsections:

1. Description of the traditional migratory, semi-migratory, and sedentary production systems;
2. Description of proposed new methods of production including ranching, feedlots, sedentary fattening, and intensified mixed farming;
3. Identification and mapping of the zones of present and potential land use;
4. Size of the herds, impact of the drought, present and potential off-take patterns.

Four major topics warrant intensive analysis:

1. Future role of livestock production in the Sahelian economies—what is the natural rate of herd reconstitution following the drought; what is the likely effect on herd reconstitution of (1) increased demand for meat and (2) government constraints on exports; what is the likely contribution of livestock to (1) rural incomes, (2) to government revenues, and (3) to foreign exchange earnings.
2. Comparison of alternative modes of production—what are the relative costs and benefits of proposed new production systems and how do they compare with traditional ones; how do the proposed new systems mesh with traditional systems?

3. Comparison of alternative strategies for livestock development--what are the relative advantages and disadvantages of present and proposed national and donor strategies; how might these various strategies be synthesized?
4. Assessment of environmental impacts and constraints--how would the Sahelian environment be affected by proposed alterations of traditional production systems and by institution of new systems; what are the environmental constraints and potentials relevant to these proposals?

Five field research studies shall be conducted to provide new and more detailed data for the intensive analysis of the above major topics in the production and marketing inquiries. Three studies will be conducted by project employees and their African counterparts while two of the studies will be conducted by University of Michigan doctoral candidates funded primarily by the long-term AID program begun in 1969 and designed to develop scholars with expertise in Central-West African development.

The field research inquiries are being designed as case studies to provide depth and detail of information that is largely lacking for the area and that will complement the more general information developed in the review of literature. While full details for the field projects shall be worked out in consultation with participating African institutions, the nature of each study is sufficiently specified to permit the following summaries.

The survey of the literature on marketing and production, the detailed analysis of major topics, and the five field studies should contribute to a better understanding of the constraints on livestock development in the Sahel and to the identification of suitable programs in the future.

KS:mh

Field Research Summaries

Field Study 1: The Potential for Intensifying Livestock Production Among Sedentary Farmers in Upper Volta.

U.S. Investigator: Christopher Delgado

Schedule in Africa: Pre-study preparation—October, 1975 to February, 1976

Field study—March, 1976 to March, 1977.

Objectives: (1) Evaluation of economic trade-offs among production of subsistence crops, cash crops, and livestock.

(2) Identification of major constraints to intensification of livestock production.

(3) Specification of interventions to overcome identified constraints.

Background and Rationale: In a major World Bank review of African agricultural development programs, Uma Lele attributes many failures to "inadequate knowledge of technological possibilities and of their suitability to small farm conditions..." [1, p. 160]. The first question that must be answered for adequate project preparation is, "are technologies actually profitable at the farm level?" [1, p. 161]. In general, Lele notes, we must ask, "what really are the critical constraints to development in a specific situation?" [1, p. 161].

This need for more detailed, specific, farm-level data as an input to project preparation provides the underlying rationale for this field study and for studies 2 and 3. The context in which Lele's directives will be pursued is a population of sedentary farmers who may be able to significantly expand their livestock activities. The government of Upper Volta (GOUV) and USAID have recently been discussing programs for such intensification in the ORD's of Kaya, Koupela, and Fada. (See the USAID Upper Volta Village Livestock Project Review Paper.) The GOUV has indicated a basic need for information about the tradeoffs between grain production and cattle production in the proposed project ORD's. The USAID project review paper cites the need to investigate existing alternatives to livestock which may affect the extent of farmer participation.

Research Methodology: The field study will focus on a sample of 100 farm households in one village (with the option of expanding the focus with complementary substudies) at a site to be determined in consultation with the GOUV. The major types of data that must be collected are: time allocated to all farmwork, other work, and nonwork activities throughout the year; land allocated to subsistence crops, cash crops, grazing, and fallow; harvests of crops, production of milk, and offtake of livestock; cash income and expenditures.

The above data will be collected by a team of six enumerators and by the U.S. and African investigators. The enumerators will visit each household twice a week for a full year to collect data on time allocation, crop and livestock product outputs, and cash flows. The investigators will direct the land surveying and conduct in-depth interviews with the households to gather relevant socio-economic background data. The full research team will live in the village for the entire year.

Field Study 2: The Potential for Altering Patterns of Livestock Offtake from Semi-Nomadic Herds

U.S. Investigator: Tod Eddy

Schedule: Pre-study preparation--October, 1975 to December, 1975

Field work--January, 1976 to January, 1977.

Objectives: (1) Evaluation of economic trade-offs among production of grain, production of milk, production of animals for sale at various ages, and production of animals for security, prestige and other non-sale objectives.

(2) Identification of major constraints to altering livestock offtake.

(3) Specification of interventions to overcome identified constraints.

Background and Rationale: As discussed under field study 1, the underlying rationale for these first two studies is the need for more detailed, specific, farm-level data as an input to project preparation. Numerous projects have been proposed for changing the mode of livestock production in the Sahel. Many of these varied proposals share a common prerequisite: an alteration in the pattern of livestock sales from semi-nomadic and nomadic herders. For example, one proposed strategy calls for the sale of young stock by semi-nomads to sedentary farmers who would fatten the animals in preparation for sale to the coast. Implementation of such a strategy would be facilitated if we had a better understanding of the economic objectives and constraints of the semi-nomadic populations who are expected to alter significantly their own traditional economic strategy.

Research Methodology: The field study will focus on one semi-nomadic group in both its sedentary locale and during its seasonal transhumance. This research will be closely coordinated with field study 1 so as to gather the same types of data from two different kinds of populations and hence, as an added bonus, have the possibility of gaining additional insights from comparative analysis. Thus as in study 1, a team of enumerators and the two investigators will stay with the target population throughout the year to gather data on time allocation; land allocation;

output of crops, milk and animals; cash flows; and relevant socio-economic background factors.

Field Study 3: Biological Determinants of the Pattern of Livestock Offtake from Semi-Nomadic Herds

U.S. Investigator: Severne Johnson, graduate student in animal ecology.

Schedule: Pre-study preparation--October, 1975 to February, 1976

Field study—March, 1976 to March, 1977.

Objectives: (1) Determination of semi-nomadic grazing strategies with regard to amount and type of vegetation, sources of water, age/sex/species composition of herds, and movements in transhumance.

(2) Identification and evaluation of constraints to and potentials for altering the pattern of livestock offtake.

(3) Specification of interventions to affect beneficially the identified constraints and potentials.

Background and Rationale: This is the third study to share the underlying rationale of the need for more detailed, specific, farm-level data as an input to project preparation. As was discussed under field study 2, many of the projects currently proposed for the Sahel are predicated on an alteration of livestock offtake patterns from semi-nomadic and nomadic herds. (For example, increased sales of young stock.) The extent to which such patterns will be altered depends in large measure on the current biological constraints and potentials, (which play a major role in determining their economic counterparts which are the focus of study 2). Projects concerned with altered offtake patterns would benefit from a better understanding of the biological rationale underlying currently observed herd compositions and transhumance movements.

Research Methodology: The investigators and a small team of assistants will live with one semi-nomadic group for a full year to gather the following kinds of data: environmental parameters such as humidity, precipitation, temperature, and pan evaporation; vegetation composition of each sub-range; moisture content of forage; livestock census; livestock weight change; nutritional components of herd consumption; breeding system; use of excess males; water supply usage; predation; and competition among species, ages and sexes within the herd. These data must be collected over a full year since seasonal constraints often are binding, and it is the semi-nomads' response to seasonal fluctuation that may be the prime determinant of patterns of livestock offtake.

Field Study 4: The Efficiency of Livestock Marketing in Upper Volta

U.S. Investigator: Larry Herman, graduate student in economics.

Schedule in Africa: Pre-study preparation—October, 1975 to December, 1975.
Field study—January, 1976 to January, 1977.

Objectives: (1) Determination of the structure and costs of livestock marketing within and from Upper Volta.

(2) Identification of the constraints to and potentials for increasing the efficiency of the marketing system in providing meat to consumers and an adequate return to producers.

(3) Specification of interventions for affecting the identified constraints and potentials.

Background and Rationale: The livestock marketing system affects the welfare of meat producers and consumers. Producers and consumers benefit to the extent that the system: (a) minimizes the necessary costs of transfers, handling, shipment, and slaughter, and (b) is competitive to the point of eliminating excess profit by any agent. Reports by SEDES, USAID, and the West African governments have all cited various aspects of the marketing system which may warrant improvement: costs of transport by alternative modes (direct monetary costs and also indirect costs from delay and weight or animal loss); inability of animals less than six years old to make the trek south; delayed and imperfect reflection of higher consumer prices back to producers; control of local markets by associations of butchers; control of long distance trade by a few dealers; credit constraints in the long distance trade. An examination of issues like these may lead to beneficial interventions that would lower the price spread between producers and consumers and thereby improve the welfare of both.

Research Methodology: The investigators and a small team of assistants will be based in Ouagadougou and will trace the structure and costs of livestock marketing from there back to producers and forward into the long distance trade to the coast. This study will be linked with field study 5 based in Bouaké, Ivory Coast, focusing on the long distance trade.

The Upper Volta study will focus on the start of the trade at the producer level; the small markets where animals begin to be grouped into larger herds for shipment south; and the major massing and debarkation markets of Ouagadougou and Bobo Dioulasso. The activities, costs and returns of agents at all of these stages will be examined through interviews, questionnaires, and observation. The costs and seasonal flows via different modes of transport will be examined by checking records where available, and by interview and observation. Variation of prices at each point in the marketing chain, over time and in different locations will be determined through a simple price collecting system that will be set up if possible. A major effort will be undertaken to determine whether the structure and conduct of the livestock trade are conducive to, and have in fact led to, minimization of marketing margins.

<u>Field Study 5: The Efficiency of Long Distance Livestock Marketing in the Ivory Coast</u>

U.S. Investigator: John Staatz

Schedule in Africa: Pre-study preparation—March, 1976 to April, 1976.

Field study—May, 1976 to May, 1977.

Objectives: (1) Determination of the structure and costs of long distance livestock marketing from the Sahel to coastal consumers.

(2) Identification of constraints to and potentials for increasing the efficiency of the marketing system, with special attention to modes of transport.

(3) Specification of interventions to affect beneficially the identified constraints and potentials.

Background and Rationale: As discussed under field study 4, the welfare of both producers and consumers is affected by the relative efficiency of the marketing system. The long distance international trade presents a rather complex structure in which many writers claim to have sighted various types of inefficiencies. The transportation systems are of major concern: delays at rail loadings, scarcity of rail cars, poor treatment of animals in truck and rail transit, severe losses on treks, lack of holding facilities at debarkation points, and lack of feed and water facilities en route all must be investigated. The structure of the trade is also of concern in that it is alleged that a few large merchants can extract monopoly profits and prevent producers from receiving their share of higher meat prices in the south. A better understanding of these and related issues is needed both for interventions aimed at improving marketing *per se*, but also for interventions that rely on an efficient marketing system to stimulate livestock production by accurately and promptly relaying the message of higher beef demand in the coastal countries.

Research Methodology: The investigators and a small team of assistants will be based in Bouaké from where they could trace the long distance trade north and south. Interviews will be conducted with shepherds, truck drivers, traders or brokers in the small and large markets, butchers, and government officials. Efforts will be made to obtain access to records of the railway and trucking companies. Prices will be collected throughout the year from markets at various points along the trade routes. A major effort will be made to determine the flows and costs of animal transport by alternative means throughout the year.

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APPENDIX III.B

CENTER FOR RESEARCH ON ECONOMIC DEVELOPMENT
ENTENTE LIVESTOCK PROJECT BUDGET SUMMARY (REVISION)
By Fiscal Years

	May - Dec.75	May-June 75 FY 1975	July 75-Sept.76 FY 1976	Oct.76-Sept.77 FY 1977	Oct.-Dec.77 FY 1978	FY 75-78 Total
Salary/Wages	47,126	5,447	119,218	100,170	18,205	243,040
Fringe	6,380	817	16,122	14,361	2,731	34,031
Subtotal	53,506	6,264	135,340	114,531	20,936	277,071
Supplies	15,820	1,420	65,575	16,463	1,883	85,341
Travel						
Domestic	4,280	1,525	5,285	4,005	360	11,175
International	16,810	5,735	24,660	8,265	0	38,660
Inter-African	0	0	10,200	9,140	0	19,340
Subtotal	21,090	7,260	40,145	21,410	360	69,175
Equipment	10,000	0	10,000	0	0	10,000
Indirect Cost	31,004	4,180	76,084	64,182	13,111	157,557
TOTAL	131,420	19,124	327,144	216,586	36,290	599,144

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Appendix IV: Short Description of Illustrative Sub-Projects

1. Togo: Small Ruminant Centers

UNDP is presently designing project for small ruminant centers at Gando (Plateau Region), Dacko (Center Region) and Dete (Kara Region). Centers would serve mainly as loci for dissemination of improved stock and extension information to herders and would work closely with 4-5 sub-centers in outlying villages. American Embassy/Lome indicates that project design has been largely completed.

2. Upper Volta: Central Cattle Trails

The project would improve cattle trails which traverse the central part of Upper Volta leading toward the central market towns of Ouagadougou and Bobo-Dioulasso. The objectives of the project are to reduce livestock weight loss during the trek to market, reduce conflicts between drovers and local farmers, and provide additional water supplies for animals and persons living near the trade routes. EF indicates that project design has been completed.

3. Upper Volta: Treatment of Gastro-Intestinal Parasites

The project would demonstrate to traditional herders the effectiveness, ease of application and profitability of treating cattle, sheep and goats with anthelmintics. Treatments would initially be provided free of charge in four major livestock regions for two years. Following initial demonstration, herders would be encouraged to pay for anthelmintic treatment. The GOUV project document claims that the project would increase meat production by local herders by 28% within three years, through reduced mortality and more rapid and efficient weight gain. EF indicates that project design has been completed.

4. Ivory Coast: Frontier Entry Posts and Cattle Trails

The project would establish five frontier entry posts in N. Ivory Coast and would improve nearby cattle trails and market facilities. The entry posts would function as veterinary posts to protect the domestic herd from outbreaks of diseases from trade cattle, and will also encourage sorting cattle for ox traction, for breeding ranches and for feedlots from the import stream. Cattle trails will reduce conflicts between drovers and farmers and reduce weight loss between the border and major livestock markets. EF indicates that project design has been completed.

5. Upper Volta: Center for Pork Production

The project is part of a Voltan program to increase the production of non-ruminant livestock through use of agricultural by-products and improvements in breeding stock. The project would multiply improved breeding stock, supply feeder pigs to local herds, and provide extension and demonstration services for those herders.

6. Benin: Extension of FAO Animal Traction Program

FAO has executed a highly successful animal traction program in the Borgou and Central regions of Benin and hopes to extend this program to other regions in central Benin The project would provide capital funds which would complement FAO technical assistance in extending the use of animal traction and peasant livestock fattening to additional farmers in other regions.

7. Ivory Coast: Development of Pastoral Zone

The project would establish a pilot grazing area for Zebu cattle in the northern (pastoral) zone of the Ivory Coast. The GOIC would like to encourage migratory Fulani cattle herds to remain in this region year round but also hopes to eliminate crop damage that results from the presence of livestock herds during the cropping season. EF indicates that project design has been largely completed.

8. Ivory Coast: Zebu Center

The project would establish a modest-sized breeding center where Zebu cattle would be cross-bred with tsetse resistant local breeds. Bulls produced at the center would be sold or leased to a ready market of sedentary Fulani herders/farmers.

9. Benin: Atactora Region Project

This integrated livestock development project would increase pastoral and village livestock productivity in the Atacora Region of northern Benin It would encourage improved utilization of rangeland, expansion of the tsetse resistant Somba breed, production of sheep and goats in village settings, and improved livestock marketing.