

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

PIO/I

PROJECT IMPLEMENTATION
ORDER/TECHNICAL
SERVICES

1. Country: Worldwide 3158617 Proj. No. 93103110
 2. PIO/TA No.: 931-11-130-311-73 PN-70-AE-201-81
 4. Project/Activity No. and Title:
International Livestock Center for Africa (ILCA)

DISTRIBUTION	5. Appropriation Symbol <u>72-11X1023</u>		6.A. Allotment Symbol and Charge <u>402-31-099-00-20-57</u>		6.B. Funds Allotted to: <input checked="" type="checkbox"/> A.I.D./W <input type="checkbox"/> Mission <u>17P</u>	
	7. Obligation Status <input checked="" type="checkbox"/> Administrative Reservation <input type="checkbox"/> Implementing Document				8. Funding Period (Mo., Day, Yr.) From <u>1/1/75</u> To <u>12/31/75</u>	
	9.A. Services to Start (Mo., Day, Yr.) Between <u>1/1/75</u> and _____				9.B. Completion date of Services (Mo., Day, Yr.) <u>12/31/75</u>	
	10.A. Type of Action <input type="checkbox"/> A.I.D. Contract <input type="checkbox"/> Cooperating Country Contract <input type="checkbox"/> Participating Agency Service Agreement <input checked="" type="checkbox"/> Other Grant Agreement					
	10.B. Authorized Agent <u>AID/W</u>					
Estimated Financing		(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date	
\$1,000=						
11. Maximum A.I.D. Financing	A. Dollars		140,000		140,000	
	B. U.S.-Owned Local Currency				FUNDS RESERVED BY	
12. Cooperating Country Contributions	A. Counterpart				POSTED <u>1/15/75</u>	
	B. Other				SER/FM/CSD <u>4/4/75</u>	

13. Mission References

14. Instructions to Authorized Agent

This PIO/I requests the Contract Office execute a grant with the International Livestock Center for Africa (ILCA) Addis, Ababa, Ethiopia, for CY 1975. These grant funds will be utilized by ILCA in the amount of \$140,000 as a part of their overall CY 1975 work plan attached as A. Other donor contributions are a part of this work plan.

Special Provisions are attached as attachment B.

Use of these funds shall be attributed to the core budget portion of ILCA's overall budget unless otherwise authorized by AID/W.

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate TA/AGR, Slitzenberger <u>[Signature]</u> Date: <u>12/6/74</u>	B. Funds for the services requested are available TA/PM, Wleake <u>[Signature]</u> Date: <u>12/6/74</u>
C. The scope of work lies within the purview of the initiating and approved Agency Programs TA/AGR, Livesser <u>[Signature]</u> Date: <u>12/6/74</u>	D. <u>[Signature]</u> TA/PM, C. Melfetto Date: <u>12/6/74</u>
E. TA/AGR, GBaird <u>[Signature]</u> Date: <u>12/6/74</u> TA/AGR, Rholmes <u>[Signature]</u> Date: <u>12/6/74</u>	F. TA/PM, Mkozynski <u>[Signature]</u> Date: <u>12/6/74</u>

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to Signature and date: _____ Title: _____	17. For the Agency for International Development <u>[Signature]</u> Signature: John Gunning Title: Chief, Program Office, TA/PM	18. Date of Signature <u>12/10/74</u>
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ILCA

International Livestock Center for Africa (ILCA)

Program Description

January 1, 1975 through December 31, 1975

A - Project Objectives

ILCA has been established to create an effective overall network for research, training and outreach on animal production and health in Africa, linking international, multilateral, regional and national efforts.

Objective of ILCA will be to determine the means of improving animal production (breeding, feeding, management, improvement of range and pastures, social and economic factors and marketing) in tropical Africa and in lending support to governments and to authorities responsible for attaining new levels of productivity. For this purpose the Center will analyse selectively all existing information, collate the facts supplied by new studies, and participate in a broadened program of multidisciplinary research aimed at the integration of these disciplines. Special attention will be given to the analysis of current livestock development programs.

The research will be divided into the following five areas with each problem studied by groups of research workers:

- 1- Zootechny -- "the animal"
- 2- Physical environment -- "climate and soil"
- 3- Biological environment -- "pastures, epidemiology"
- 4- Human environment -- "sociology, anthropology"
- 5- Economic conditions -- "macro and micro economy, marketing" ✓

ILCA's fields of interest are: transhumance (seasonal movement of

livestock), rangeland management, maps of rangeland, sociological aspects, epidemiology, zootechnical experimentation, forage cropping and rangeland improvement, climate classification and range water development, and the economics of animal production and marketing.

B- Projected Activities:

1 - The Center will undertake the following tasks:

- to collect, classify and disseminate in English and in French all the relevant facts on animal production in tropical Africa;

- to design and develop new or improved production systems and establish new research priorities;

- to employ an interdisciplinary research team to study existing systems of animal production;

- to support and make fully operational existing research stations at the national and regional level, and cooperate with them in preparing a completely coordinated research program which will take account of the urgent needs of livestock development;

- to take all appropriate steps to enable it to undertake all the specific research programs which could be entrusted to an international center. These programs should be fully justified, and particular regard ought to be paid to their international character and to their timetables;

- to organize or to assist in organizing seminars, technical conferences and training courses for personnel dealing with livestock problems (whether in the field of research, extension, planning or production) with the prime objective of improving skills at the regional level in designing integrated, multidisciplinary systems for research and development; and

- to furnish to national, regional or international authorities supporting statistics, information and advice on the different phases of animal production in which the Center will be actively engaged;

This approach, which has the merit of reinforcing activities under way, while at the same time establishing suitable coordination machinery, is preferable to the other possibilities, namely regrouping all activities within a single, central station, or alternatively, using the whole of the available supplementary resources to support existing national stations.

2 - Long Term Research Programs:

Two fields of research have been chosen for start-up in the immediate future:

(1) Drought, Transhumance and Nomadism

It is evident that the severe drought has disturbed the traditional systems of production in the Sahelian and Sudano zone of intertropical Africa.

Looking back into the past, it is clear that drought periods did occur, but no observations were made or action taken to prevent future loss of life to cattle and human beings.

In these regions, transhumance and nomadism are the usual methods of production. ILCA will immediately start its research on these problems, and use, at the beginning, all the reports which were made by AID and cooperation organization in 1972, 1973 and 1974, as well as information available in Africa itself in the official libraries and research centers.

The objective will be to establish a network of subjects for research that will enable long term studies to be made on the evolution of groups production, of systems and of production, under climatic variations.

(2) Acclimatization of Exotic Breeds of Cattle in Africa

As a component of improved cattle production systems increased production capacity of cattle is imperative. Cattle of improved qualities have problems of acclimatization and adaptability when introduced into tropical and new management environments.

It is well known that the programs of improvement of African animal production through cross breeding with exogenic breeds, from either temperate zones of Europe or America or tropical zones of India and Latin America, have produced uneven results.

This subject is being chosen because of the widespread high interest in the introduction of improved breeds into Africa, and the large sums of money being expended on the introduction, into the tropics, of cattle from temperate zones, either as live animals or through artificial insemination.

(3) International Network on Feed Information Centers

The government of the Federal Republic of Germany has offered to help ILCA, if ILCA will participate in the "international network on feed information centers".

At the present time, centers in the U.S.A. (Utah and Florida universities), Australia, Great Britain, France, the Federal Republic of Germany, and Switzerland are working in cooperation with the Division of Animal Health and Production of FAO.

In this project, ILCA would be the network's correspondent for Africa.

(4) Stratification of Production Systems

A project is proposed in Mali on possible means of combining nomadic and transhumance systems of production with intensive feedings, in places where irrigation is possible. This associate program will have two components, one agronomic - economic techniques of irrigation, and one anthropological - methods for the coordination of transhumance and forage cropping.

Research on the agronomic component of this project may commence in 1975.

C - Seminars

1 - General

Seminars and workshops will be of great value in ILCA's work. These meetings provide excellent opportunities for the exchange of information and techniques and for coordination of activities. They are also a good method for the training and refreshment of research workers and directors.

The modern methods of group animation increase the efficiency of such meetings, and the offset techniques of printing and reproduction allow very rapid publication of communications, reports and conclusions.

When ILCA becomes fully operational it will organize two workshops or seminars per year, and will start in 1975, using facilities already available in Africa.

(2) Rangeland evaluation improvement and mapping in the Sahelian and Soudanian zones of Africa Seminar

At the moment several teams of research workers are interested in rangeland evaluation, which is indispensable to the development of integrated planning of animal production, but the results are presented in such a manner that often the extension people are not in a position to make use of all the information that exists on pastoral mapping and evaluation reports.

On the other hand, many attempts have been made to try to improve the management of natural rangeland in tropical Africa, not many are widely known.

New methods of teledetection and mapping with satellites offer some hope of having more accurate and rapid evaluation.

A seminar on the subject would unite specialists in these fields of research, from tropical Australia, Europe and America as well as from Africa.

The seminar will be held in Bamako, Mali, in January 1975 and will be followed by an excursion in the Soudano-Sahelian part of Mali.

(3) Workshop on methodology of inquiries into cattle in transhumance and nomadic regions of Africa

This seminar will form part of a larger study on transhumance, and African systems of animal production

The seminar will deal with all the methodological approaches of this problem and will provide an occasion for research workers involved in such studies to compare their techniques and results.

The methodology to be used in the evaluation of all factors of production will be discussed: herd composition, mortality, morbidity, socio-anthropological factors and the economics of production, marketing and environmental conditions.

The seminar will have as its objective the recommendation of a standardized method of evaluation which would permit comparison between inquiries conducted in different parts of Africa by different teams of research workers.

This seminar may be held late in 1975 or early 1976.

(4) Workshop on systems of animal production

As it has been shown by the Task Force and the TAC and recognized as evidence by the Board of Trustees, the system approach will be very productive. But the identification of the different systems of animal production as well as the methodology have to be better defined.

The preparation of this seminar will be the basic study on which ILCA would base its choice of major areas of activity. This should be the focus of work of all staff members recruited in 1974 and 1975 so that a comprehensive study of animal production systems can be presented.

D - Training Activities of ILCA

If at the beginning of its activities ILCA will use seminars and workshops as means of training, in the future it will look with more interest in the traditional ways of training.

It will receive graduates of African Universities and Faculties as well as from other parts of the world and also research workers willing to acquire a tropical experience in animal system production research.

As it has been fixed by the sub-committee on animal production and the consultative group, ILCA will be, as the other international centers, a center of excellency for the spreading of knowledge in its field.

The core programs as well as the associated one's will be used in the future as support for training actions.

ILCA will look for possibilities of formal linkage with African Universities and Foundations.

E - General Discussion

The current level of animal production in Africa is well below the continent's potential. Several reasons -- economic growth rates, nutrition and welfare of the population, trade balances and conservation of imperiled range resources -- make efforts for improvement most urgent.

The principal obstacle to the development of animal production is not the simple lack of technical knowledge. Decades of activity in numerous research centers have built up a considerable body of knowledge. Moreover, the existing national or regional centers provide researchers with most of the facilities needed for their future activity.

Granted that the results of prior research have not been disseminated widely enough, and that current research work is limited by lack of funds and of experienced personnel, results achieved in tropical Africa in increasing animal production have been disappointing mainly because of the failure to integrate the biological, economic and sociological components of research and apply them to development programs. Thus, technology is clearly ahead of development, but the breeders do not have the means to employ it, and in particular lack adequate funds to make the necessary investments.

It is particularly important to study systems of animal production in tropical Africa in greater depth, so as to be able to take full advantage of existing knowledge and to define the order of priorities for future research. This study should take full account of aspects of biology, economics and social anthropology relating to animal production. The production systems approach will permit study of the relationship between plant and animal production, which too often are studied independently.

The authorities of several African countries are now making an effort to define the problem of livestock development from a multidisciplinary point of view and a number of promising programs are coming into being. Progress is, however, limited by the dearth of relevant information and of adequately staffed interdisciplinary teams.

An International Center for the Development of Animal Production in Tropical Africa has a circumscribed and clearly defined objective and the research program would be quite different from the classical approach.

F - Support to ILCA

The kingdoms of Belgium, Denmark and Sweden, the French Republic, the Federal Republic of Germany, the International Development Association, the International Development Research Center of Canada, the United Kingdom of Great Britain and Northern Ireland, the United Nations Development Program, the United States of America, and the International Bank for Reconstruction and Development acting as executive agent, undertook to sign the Memorandum of Understanding and to provide funds for ILCA.

ILCA budget details: ILCA's budget for CY 1975 has been set in the amount of \$1,885,000; AID's contribution for CY 1975 will be \$140,000 or 7.43 percent.

Summary of Support for ILCA
(as of November 14, 1974)

Total requirements	\$1,885,000 ^{1/}
AID contribution	140,000
Support from other donors	1,745,000 ^{2/}
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AID as proportion of total	7.4% ^{3/}

^{1/} Reduction of \$1,005,000 from figure cited in June 1974 budget documents due to delays in the building program

^{2/} Australia, Belgium, Denmark, France, W. Germany, Netherlands, Sweden, United Kingdom, and UNEP. In addition there is prospect of a donation from Nigeria.

^{3/} Larger AID donation not needed due to availability of other funds.

Special Provisions

1. Reports

A. The following reports shall be submitted to the TA/AGR Technical Specialist as stated in B below:

(1) Comprehensive Annual Report on overall program and fiscal matters for CY 1975 in 100 copies

(2) Report prepared in connection with annual International Centers Week. (This report will describe proposed program and funding requirement for CY 1976 in five copies)

(3) Reports that may be prepared from time to time on various program activities.

B. The AID/Technical Specialist is: Dr. Guy B. Baird
Associate Director Research
Technical Assistance Bureau
Office of Agriculture
Washington, D.C. 20523

General Grant/Program questions can be addressed to:

Mr. Ryland Holmes, Chief
Program Division
Technical Assistance Bureau
Office of Agriculture
Washington, D.C. 20523

C. In addition to the report requirements of A above, Grantee shall send one (1) copy of the technical and annual reports (item 1 and 3 above to all AID Missions. Grantee will be advised, by the Technical Specialist of these recipients and changes as they occur.

2.

A. PIO/T is subject to AID regulations governing grants of funds.

B. Except as specifically authorized by AID/W, all services financed with funds from this grant agreement must be obtained from U.S. sources.

C. Except as specifically authorized by AID/W, the purchase of commodities financed under this PIO/T must be limited to the U.S. under Geographic Code 000.

D. The Federal Reserve Letter of Credit (FRLC) method of financing is to be used and funds are to be advanced periodically as needed by the Grantee in accordance with AID's terms and conditions for such reimbursement.

ILCA

CY 1975, Budget

43 1975 Budget

For the year 1975, the total needs of IICA are estimated at US \$2,848,000; US \$2,251,000 will be needed for personnel operations, including 67 posts and 45 man-years, and US \$597,000 will be needed for capital expenses.

Costing for personnel operation is as follows:

1.) Programme Unit	US \$1,675,000
Research	1,113,000
Documentation	420,000
Training	142,000
-for 57 posts and 35 man-years	
2.) Support Unit	US \$ 470,000
Service operation	25,000
General administration	445,000
-for 10 posts and 9 man-years	
3.) General operations	US \$ 20,000
4.) Contingencies	US \$ 86,000

44 Conclusions

If the Consultative Group on International Agricultural Research agrees to the proposals, the buildings and scientific equipment will be fully operational by the end of 1970.

It may be said that these are optimistic projections; however, due to the needs of tropical Africa we must do our best to be ready as soon as possible, and not wait for the completion of the buildings before starting the research programmes.

TABLE 2

STAFFING PATTERN FOR TLCA

	1974			1975			1976			1977			1978		
	Senior Scientist	Associate Scientist	Total												
<u>Staffing Pattern</u>															
Administration	3	4	7	7	6	10	5	7	12	5	8	13	5	8	13
Documentation	3	6	9	5	11	16	5	12	17	5	14	19	5	14	19
Training	1		1	1	1	2	2	1	3	2	4	6	2	4	6
Research	6	7	13	10	15	25	12	32	44	12	35	47	12	35	47
Associate Programmes	4		4	4	10	14	4	10	14	4	12	16	4	16	20
Total	17	17	34	24	43	67	28	62	90	28	79	107	28	77	105
<u>Recruitment Schedule</u>															
Administration	3	4	7	1	2	3	1	1	2		1	1			
Documentation	3	6	9	2	5	7		1	1		2	2			
Training	1		1		1	1	1		1		3	3			
Research	6	7	13	4	6	12	2	17	19		3	3			
Associate Programmes	4		4		10	10					2	2		4	4
Total	17	17	34	7	24	33	4	19	23		11	11		4	4

ILCA BUDGET 1975 / 1978

SUMMARY OF ALL EXPENSES

	1974		1975		1976		1977		1978		Totals
	man yrs.	COST	man yrs.	COST	man yrs.	COST	man yrs.	COST	man yrs.	COST	COST
1. OPERATIONS COST											
Programme Unit	0.1	176	36	1,675	62	2,710	70	3,068	82	3,577	11,536
Support Unit	3.3	213	9	450	10	696	10	390	12	1,157	3,416
General Operations		5		20		34		57		96	212
All others				85		110		160		202	588
Total (A)	3.4	404	45	2,251	72	3,550	80	4,175	94	5,022	15,752
Average man-years		52.1		50		50		52.1		50	
2. CAPITAL EXPENDITURE											
Headquarters buildings		38		274		66		2,495		859	4,279
Outside headquarters		12		158		270		360		230	1,030
other expenses (1st phase)		100		215		181		57		71	624
Total (B)		147		597		1,117		2,912		1,160	5,933
3. GRAND TOTAL (A + B)		5/1		2,848		4,717		7,087		6,192	21,685

TABLE OF POSITIONS AND MANPOWER

TABLE 4

	Senior Staff				Scientific/Supervisor				Clerical staff				Other support staff			
	Positions		Man-years		Positions		Man-years		Positions		Man-years		Positions		Man-years	
	'74	'75	'74	'75	'74	'75	'74	'75	'74	'75	'74	'75	'74	'75	'74	'75
<u>Central Research Team</u>																
Biotechnol.	2	2	0.8	2	2	3	0.5	2.10	2	3	0.5	3		2		2
Physical Environment	1	1	0.3	1	1	3	0.4	1.25	1	2	0.4	2	-	-	-	-
Biological Environment	1	3	0.3	1.10	2	2	0.5	2	1	2	0.4	2	-	-	-	-
Chemistry	1	2	0.3	1.10	1	4	0.3	1.20	1	3	0.4	3	-	-	-	-
Microbiology	1	1	0.3	1	-	2	-	0.25	1	3	0.4	3	-	-	-	-
General scientific support	-	1	-	0.25	1	1	0.4	1	1	2	0.4	2	-	-	-	-
TOTAL :	6	10	2	6.75	7	15	2.1	7.00	7	10	2.5	15	-	2	-	2
<u>Documentation and Training</u>																
Head of the Team	1	1	0.3	1	1	1	0.4	1	1	1	0.4	1	-	-	-	-
Library	1	1	0.5	1	1	3	0.4	1.50	2	4	0.5	4	-	-	-	-
Communication, audiovisual	-	1	-	0.10	1	2	0.3	1.25	-	1	-	1	1	1	0.4	1
Education	1	1	0.4	1	3	5	1	3.25	2	5	0.5	5	1	3	0.4	3
TOTAL :	3	4	1.2	3.10	6	11	2.1	7.00	5	11	1.4	11	2	4	0.8	4
Training	1	2	0.3	1.10	-	1	-	1	1	2	0.4	2	-	-	-	-
TOTAL :	1	2	0.3	1.10	-	1	-	1	1	2	0.4	2	-	-	-	-
<u>Support Departments</u>																
<u>1. Service operations</u>																
Building and ground													5	5	1.5	5
Station operation													-	20	-	20
TOTAL :													5	25	1.5	25
<u>2. General Administration</u>																
Office of Director	2	2	1.5	2	1	2	0.5	1.25	4	8	1	8	5	6	1.5	6
Accounting	1	1	0.5	1	1	2	0.4	1.25	2	5	0.5	3	-	-	-	-
Purchasing	-	1	-	1	1	1	0.5	1	2	2	0.5	2	-	-	-	-
Personnel	-	-	-	-	1	1	0.4	1	1	2	0.5	2	-	-	-	-
TOTAL :	3	4	2	4	4	6	1.8	4.5	9	17	2.5	15	5	6	1.5	6
TOTAL FOR HEADQUARTERS :	17	20	5.5	17.80	17	33	6	20.50	22	37	6.6	45	12	37	3.8	37
<u>Associate Programmes</u>																
Dir. Associate Programmes	2	2	0.6	2	-	1	-	1	1	2	0.3	2	-	-	-	-
West Africa	1	1	0.3	1	-	5	-	3	-	-	-	-	-	-	-	-
East Africa	1	1	0.3	1	-	4	-	2	-	-	-	-	-	-	-	-
TOTAL :	4	4	1.2	4	-	10	-	6	1	2	0.3	2	-	-	-	-
JICA TOTAL :	17	24	6.9	19.70	17	33	6	20.50	23	37	7.1	45	12	38	4.3	40

T A B L E 5

Summary of man-years and personnel costs

	1974		1975		1976		1977		1978	
	man yrs.	COST								
<u>By Organizational Unit</u>										
1. Programme Unit										
A. Research	5.5	523	25	1113	16	1927	50	2002	60	2168
B. Documentation	3.3	170	10	420	14	584	15	616	17	724
C. Training and Conferences	0.3	53	1	142	2	202	5	330	5	385
TOTAL :	9.1	756	36	1675	32	2713	70	3068	82	3577
2. Support Unit										
A. Service operations		4		25		53		105		325
B. General administration	3.8	209	9	445	10	633	10	695	12	832
TOTAL :	3.8	213	9	470	10	686	10	800	12	1157
3. General Operations										
TOTAL :		5		20		34		57		96
4. All Others										
TOTAL :				86		110		160		202
<u>GRAND TOTAL :</u>	12.9	694	45	2251	42	3000	80	4175	94	5032
Co. of posts at the end of the year	34		67		90		101		105	
Average man-year/cost :		53.8		50.0		50		52.2		52.5
<u>By Items of Expenditure</u>										
Personnel Service cost		300		1277		2204		2524		3033
Travel		151		268		422		460		535
Housing (personal and technical)		79		129		233		264		283
Vehicles		44		77		131		128		144
Publications		9		11		13		19		21
Consultants boards		66		136		135		136		138
Supplies		45		353		474		644		873
TOTAL :		694		2251		3000		4175		5032

TABLE 6

ILCA BUDGETS 1975 / 1978

CAPITAL EXPENSES

(US \$ 000)

	1974	1975	1976	1977	1978	Totals
<u>HEADQUARTERS BUILDINGS</u>						
Civil works	30	161	446	1.810	524	2.974
Furnishings				305		305
Scientific equipment		50	200	350	300	900
Library (books)	5	10	20	30	35	100
Total (A)	35	221	666	2.495	859	4.279
<u>OUT OF HEADQUARTERS</u>						
Adematulu Experimental Station	12	153	180	230		575
Associate Programmes		5	90	130	230	455
Total (B)	12	158	270	360	230	1.030
<u>OTHER EXPENSES IN CAPITAL</u>						
<u>FOR FIRST PHASE OF OPERATIONS</u>						
Total (C)	100	215	161	57	71	624
GRAND TOTAL (A + B + C)	147	597	1.117	2.912	1.160	5.933

ILCA
INTERNATIONAL LIVESTOCK CENTRE FOR AFRICA, ADDIS ABABA
SUMMARY OF CAPITAL COST OF HEADQUARTERS BUILDINGS

SURFACE AREA OF BUILDINGS

CONSTRUCTION

1. General Administration	900 m ²	
2. Documentation and Training	1900 m ²	
3. Research and Laboratories	<u>1900 m²</u>	
Subtotal A :	4700 m ²	<u>4700 m²</u>
4. Stores and Workshops	1900 m ²	
5. Residences	2000 m ²	
6. Canteen	500 m ²	
7. Housing	800 m ²	
8. Ancillary housing, clinic, laundry	100 m ²	
9. Recreation Center	<u>300 m²</u>	
Subtotal B :	5600 m ²	<u>5600 m²</u>
<hr/>		
TOTAL gross area, A + B		10300 m ²
<hr/>		