

1614

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE

A = Add
 C = Change
 D = Delete

Amendment Number
3

DOCUMENT CODE
3

2. COUNTRY/ENTITY

Kenya

3. PROJECT NUMBER

615-0239

PDBBR-627

4. BUREAU/OFFICE

Africa

5. PROJECT TITLE (maximum 40 characters)

Institutional Dev. for Agric. Trgn

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY
03 31 93

7. ESTIMATED DATE OF OBLIGATION
(Under 'B' below, enter 1, 2, 3, or 4)

A. Initial FY 89

B. Quarter 4

C. Final FY 90

8. COSTS (\$000 OR EQUIVALENT \$1 =)

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	(2,000)	()	()	(6,850)	(350.0)	(7,200)
(Loan)	()	()	()	()	()	()
Other U.S.						
1. University of Ill.				2,100.7		2,100.7
2.						
Host Country					14,041.7	14,041.7
Other Donor(s)						
TOTALS				8,950.7	14,391.7	23,342.4

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) ARDN	680			3,000				3,000	
(2) DFA	680			2,600		1,600		4,200	
(3)									
(4)									
TOTALS				5,600		1,600		7,200	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

620 630 968 690

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code XII R/AG
B. Amount 3,459 830

13. PROJECT PURPOSE (maximum 480 characters)

- A) Create at Egerton College an agricultural education institution of excellence serving the needs of Kenya and Africa.
- B) Establish permanent institutional relationships between Egerton College and a U.S. agricultural education institution.

14. SCHEDULED EVALUATIONS

Interim MM YY MM YY Final MM YY
09 88 10 90

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000 941 Local Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of 6 page PP Amendment)

This amendment increases the A.I.D. contribution by \$1.6 million. The University of Illinois contribution remains the same. GOK contribution is increased by \$1.47.

The methods of implementation and financing have been reviewed by the Mission Controller. USAID/Kenya Controller: T Totino

17. APPROVED BY

Signature: Steven W. Sindig
Title: Mission Director

Date Signed MM DD YY
08 31 89

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY
10 20 89

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I. IDAT Project Description

A. Background

A major thrust of USAID/Kenya's agricultural strategy is continued focus on institutional strengthening, particularly in areas of agriculture education and research. USAID has a special interest in Egerton University by virtue of over a decade of major support, first to expand and improve its diploma programs and more recently to develop degree level training as Egerton moved from college to full university status. Recently Egerton, among Kenya's four universities, has been given primary responsibilities for agricultural education. It has, therefore, become the designated center of excellence for most agricultural related subject matter areas. Expectations are that Egerton will become the preeminent institution for degree level training and will take a leadership role in the full and effective integration of teaching with research and extension.

The successful Agricultural Systems Support Project (ASSP), undertaken with A.I.D. resources from 1978 - 1984, supported the expansion of Egerton's physical facilities and provided resources for staff training. The evaluation of ASSP recommended continued A.I.D. support at modest levels for the further development of Egerton as it made the transition from college to full university status. Following A.I.D.'s major investment in the development of Egerton as a teaching institution, it was determined that additional resources were required to support complementary research and extension activities. Thus, the IDAT Project was designed and started in 1987.

The IDAT Project is an innovative program of support to limited areas of institutional development at Egerton. The collaborative funding arrangement includes substantial financial input from the University of Illinois, in addition to 45% of the project's real financial resources being provided by Egerton. The project focuses on curriculum development, administrative and management improvement, faculty and staff development, and the development of an educational materials center with a research, extension and outreach program.

The University of Illinois at Urbana-Champaign (UIUC) was competitively selected under a Title XII Collaborative Assistance Mode to design and implement the project. Their contract was approved by A.I.D. on December 16, 1986. Actual project implementation began on January 31, 1987 following approval of a revised budget.

The total original estimated cost of the project was \$8,588,400, of which A.I.D. was expected to contribute \$2,000,000, the Government of Kenya to contribute the local currency equivalent of \$4,507,700, and the UIUC to contribute approximately \$2,080,700. In August 1987, the Project was revised (PP Amendment #1) and, while other contributions remained unchanged A.I.D.'s contribution increased by \$1,300,000 to a new total of \$3,300,000. The increase was earmarked for the sabbatic/scholar program, library development and the procurement of computers. In May 1988, the project was amended again (PP Amendment #2) to a new total project cost of \$20,272,400, of which the A.I.D. contribution was increased by \$2,300,000 to a new total of \$5,600,000. Furthermore, both UIUC and the GOK increased their level of support to the project: UIUC by \$20,000 to a new total of \$2,100,700, and the GOK by the local currency equivalent of \$8,064,000 to a new total of the equivalent of \$12,571,800. Objectives of Amendment #2 were to 1) provide a new PABX for the University complex; 2) increase support for graduate degree training including an extension of the PACD by 18 months to allow for completion of degree training; and 3) provide specific support to the Research and Outreach Component of IDAT through an applied agricultural policy research and training program. The following Table 1 summarizes the funding authorized for the project to date (not including this proposed PP Amendment).

Table 1

Authorized Project Financial Contributions by Source and Year

	A.I.D.	UIUC	Egerton	Total
1986	2,000,000	2,080,700	4,507,700	8,588,400
1987	1,300,000	-0-	-0-	1,300,000
1988	<u>2,300,000</u>	<u>20,000</u>	<u>8,064,000</u>	<u>10,384,000</u>
	5,600,000	2,100,700	12,571,700	20,272,400

B. Component Status

The purpose of the IDAT project is to create at Egerton an agricultural education institution of excellence serving the needs of Kenya and Africa. An important mechanism for obtaining this goal is the establishment of long-term institutional relationships with relevant institutions including the formal relationship with the University of Illinois at Urbana Champaign (UIUC). The project will strengthen and institutionalize Egerton's emerging status as an institution of excellence to provide

practical-oriented agricultural training for Kenya and Africa. Strengthening U.S. university relationships with Egerton is assisting its immediate and future institutional needs through consultations, training, technical assistance and collaborative research. The project has four components described below.

1. Curriculum Development

This component is intended to establish internal and external curriculum review committees to ensure that graduates have the requisite skills to meet the needs of the agricultural sector. An internal committee structure has been established and the committees have been focusing on changes to the curriculum in accordance with the new 8-4-4 educational system. External curriculum committees have yet to be established due to the substantial intake of new BSc students, which has dominated the attention of university officials and faculty. A survey of future employment opportunities for Egerton graduates with emphasis on private sector opportunities is in progress and expected to be completed by November 1989. Results of this research will be integrated into the curriculum review process.

2. Administrative/Management Improvement

This component is designed to address needed improvements in EU's administration including: data management, financial management, information dissemination, and management of administrative functions through computerization and improved telecommunications capability.

Non-academic support services are being computerized to provide improved information management in all areas. The first step has been the design and implementation of a fully automated financial management and student records system.

A computer instructional center has been established and staffed by two lecturers in addition to a computer manager and technicians. Training courses are currently on-going for students and administrative staff. In addition, computer facilities are increasingly being utilized for research and related academic purposes.

To date there have been steady improvements in the administration and management at Egerton. A realignment of top level management staff (Deputy Vice Chancellors and Senior Planning Officers), along with increased delegation of responsibilities in the administration and academic structures, has greatly improved administration and management efficiencies.

3. Staff Development

Under this component, two participants from the Egerton faculty have completed their post-graduate degree programs and returned to faculty positions. An additional twenty-two members of the Egerton faculty are currently enrolled in post-graduate degree programs (6 M.S. and 16 Ph.D.) in the U.S. Eight senior level EU administrative staff have completed short-term individualized training programs at UIUC in areas related to improving administrative/managerial functions at Egerton.

4. Educational Materials, Research and Outreach

This component includes a number of different project activities. The activities include the development, including construction, of an Educational Materials Center (EMC), the purchase of educational materials, the sabbatic/scholar program and library development. The Educational Materials Center was constructed by the GOK with counterpart funds. Equipment has been installed and is expected to be fully functional by the beginning of the 1989-1990 academic year.

The applied research program in agricultural policy analysis has been established in four major production areas of Kenya. This program has introduced the Policy Analysis Matrix (PAM) to Egerton and Kenya. A well functioning research team including staff from Egerton, the University of Nairobi (College of Agriculture), Stanford and Arizona Universities have completed initial data bases related to principal commodity production, marketing and processing systems in these four regions. The results of this analysis, to be presented at a major seminar in November, will demonstrate the private and social profitability of principal farming systems in these four regions.

II. Crop Management Research Training

Crop Management Research Training (CMRT) involves the development of crop management technology and its adaptation, verification and refinement based upon real farmer needs in developing countries. A CMRT program was started at CIMMYT over two decades ago to fill a specific training need of agronomic scientists throughout the developing world. CIMMYT undertook to teach these methodologies and practical skills in as short a period as possible to a wide range of scientists with varying educational backgrounds and experience levels. The driving force of CMRT has been to return these participants to their research agencies in a few months with a set of skills

and practical knowledge that can be immediately applied to national research problems and crop production constraints. Currently, CIMMYT is the only source of CMRT training as crop management research is not taught at any university at any level.

The current allocation of one or two places per country in CIMMYT's production agronomy training programs in Mexico is grossly inadequate to meet the growing demand for trained personnel in CMR in Kenya and other countries of the region. CIMMYT has recognized this constraint and its Board of Directors has formally endorsed CIMMYT's commitment to the establishment of CMRT programs in African regional centers as part of its long-term strategy for decentralizing its activities.

III. Project Amendment Strategy and Rationale

A. Strategy

This IDAT Project Amendment proposes to assist with the establishment of a CMRT Program in Kenya to serve the growing needs of Kenya and other countries in the region for this type of training. This amendment will provide funding for the construction of physical facilities at Egerton University required to support the new CMRT Program. The facilities will be sufficient for a class of 30 trainees at a time. Initially, the CMRT Program will be administered by CIMMYT under a separate five year project partially funded by AID/W. The Agricultural Research Center of Egerton University and the Kenya Agricultural Research Institute (KARI) will provide trainers and other resources to support the CIMMYT managed project.

Given CIMMYT's expertise and experience in CMRT, CIMMYT will take the leadership in running the program during the first five years, within which time the local resource people should be identified and trained to take over the in-service training. It is expected that the national institutions will be responsible for running the program at the end of the fifth year. The national trainers are expected to do most of the training by the end of the third year.

During the first five year period of the CMRT Program, it is envisaged that the four institutions identified above will cover the entire cost of running the program in terms of physical facilities, infrastructure and administrative support, technical assistance, manpower development and training costs. In this period the national capacity will be developed to

continue the training program beyond the first five years. Following completion of the initial five years, CIMMYT is expected to continue to provide technical advisory services in training and in the development of training materials.

As the successful utilization of physical facilities financed under the IDAT amendment is dependent on the CIMMYT project activities, a Condition Precedent to commitment of A.I.D. funds for construction will require commitments from CIMMYT, Egerton and KARI for their share of project costs and submission by the GOK of an analysis that demonstrates how the CMRT Program will be financially self-sustaining after the initial five year period.

B. Rationale

The proposed CMRT Program originated from a consideration of the needs of the countries of Eastern Africa (Burundi, Ethiopia, Kenya, Rwanda, Somalia, Sudan, Tanzania and Uganda). CIMMYT is considering a similar project for countries of Southern Africa, but that project will be developed later. It is expected that during the intervening period, the CMRT Program could satisfy the demand from national agricultural research systems (NARS) in Southern Africa. It is anticipated that the bulk of the trainees will come from Kenya and other countries in the region.

Kenya has been selected as a regional site for the CMRT Program because its needs for training are greater and its agricultural research system is more advanced than other countries in the region. There are many countries in Eastern and Southern Africa where the NARS are in their early stages of development, but a highly sophisticated national in-service training effort cannot be justified at this point in time. In Kenya, the current National Agricultural Research Project (NARP) of KARI emphasizes adaptive research work which requires substantial trained manpower. According to the revised KARI strategy, eight Regional Research Centers (RRC) are mandated to carry out Crop Management Research throughout Kenya. In addition, a number of National Research Centers (NRC) also collaborate in one way or another in adaptive research work.

KARI feels strongly that a national training capacity in CMR should be developed to increase the training opportunities and to provide regular in-service training to the young scientists in the national agricultural research system. KARI also believes that the national higher learning institutions should play a significant role in meeting the training needs of the country. For this and other related reasons, KARI strongly supports CIMMYT's new strategy of decentralizing the production

agronomy training courses based in Mexico and under a Regional Crop Management Research Training Center initiating such courses in Kenya.

It is expected that other countries in the region will use the in-service training facility developed in Kenya to train their researchers. Although KARI will be the primary client of this training program, the training facilities will be kept open to countries in the region, provided funding requirements are worked out to accommodate both national and regional needs.

C. Relationship to IDAT and Other A.I.D. Projects

While short-term training workshops and collaborative research related to management improvement efforts involving KARI, EU and CIMMYT are taking place in Kenya under the IDAT and the National Agricultural Research Projects, development of a more formal and focused effort in this area is now appropriate for three major reasons.

First, KARI, officially restructured in 1986, has recently achieved a level of managerial and administrative capability where cost-effective strategies for manpower development and adaptive research work are clearly operational priorities. Under the revised KARI strategy, eight Regional Research Centers (RRC) in addition to several national centers are mandated to carry out crop management research in various locations in Kenya. Second, Egerton University has been directed to develop into the predominate center of agricultural excellence in Kenya, combining degree level training in agriculture with an integrated program of research and extension. Finally, the Board of Directors of CIMMYT, as part of their long-term strategy for decentralizing its activities, has formally endorsed CIMMYT's commitment to the establishment of the Crop Management and Research Training Program as described in this document.

While other options have been considered for developing the CMRT Program in Kenya, the ongoing collaboration and commitment of these three institutions to the program concept provides a strong argument to support this proposal.

The location at Egerton University is appropriate because of its existing mandate and land resources, its close proximity to desirable agro-ecological zones for the applied research and training on farms, and because several of KARI's national and regional research centers are located within reasonable distance to the university.

The IDAT PP specifically mentions that in achieving the objectives of the Project's Research and Outreach Component, coordinated activities with relevant Kenya agricultural research units and potential linkages to International Agricultural Research Centers (IARCs) such as CIMMYT could accelerate the achievement of these objectives.

D. Relationship to A.I.D. Agricultural Strategies

A major objective of A.I.D.'s agricultural strategy in Kenya is to support mechanisms to more fully integrate Kenya's agricultural research and academic training activities in a manner which is directly supportive of A.I.D.'s assistance objectives within the IDAT Project. The Africa Bureau Plan for supporting agricultural research and faculties of agriculture highlights priorities for support in African countries where linkages between these related objectives can be identified. An Africa Bureau project, Strengthening African Agriculture Research and Faculties of Agriculture (SAARFA) directly relates to the program concept laid out in this paper. Funds for CIMMYT's involvement under a SAARFA II have already been budgeted; however, the project is not scheduled to be authorized until FY90.

IV. Project Amendment Description

Under this project amendment, A.I.D. will finance the construction at Egerton University of: 1) two classrooms designed to accommodate 30 students each; 2) twelve staff offices; 3) one agricultural research laboratory; and 4) one 30 room dormitory complex required for the new CMRT Program.

The objective of the CMRT Program is to develop a sustainable institutional capacity for Kenya and regional in-service training in crop management research which will increase the quality, relevance and effectiveness of crop management research and its outreach activities. This program will facilitate the integration of research, teaching and extension by strengthening existing relationships between Egerton, KARI and CIMMYT through collaborative research and training.

The program will:

- o Develop a national and regional capacity to offer CMRT on a sustainable and continuous basis for Kenya and regional participating countries, which will increase the quality, relevance and effectiveness of adaptive research through training and collaborative research.

- o Assist National Agricultural Research Systems (NARS) of participating countries in their efforts to increase agricultural production and raise rural incomes through the activities of better trained personnel in crop management research.
- o Develop the trainees' skills, capacities and confidence so that they will be able to undertake farmer-oriented applied research projects in their respective national programs. To do so, the participants will become familiar with the research process on experiment stations but especially in farmers' fields, since special emphasis will be given to on-farm research. Graduates of the courses will be able to organize and conduct CMR programs directed at solving the main production problems faced by the farmers in their respective countries.
- o Develop training materials that will fill the needs of the project, but that could also be used elsewhere in Kenya and the region.
- o As a secondary objective, to assist research supervision for post graduate students undertaking their research thesis work in Kenya.

A. Project Purpose

The project purpose remains unchanged. It is: 1) to create at Egerton University an agricultural education institution of excellence serving the needs of Kenya and Africa, and 2) to establish permanent institutional relationships between Egerton and U.S. universities.

By promoting the coordination of activities by Egerton University and Kenya agricultural research units such as KARI and by strengthening linkages with International Agricultural Research Centers such as CIMMYT, this proposed amendment supports the objectives of the IDAT project's Research and Outreach component.

B. Expected End of Project Status

The End of Project Status (EOPS) for the IDAT Project will change due to the addition of the CMRT program. This change will affect only the Educational Materials, Research and Outreach component of the project. In addition to the existing general EOPS statement relating to this component -- "functioning research/outreach programs through the Agricultural Resources Center and its subdivisions" -- the addition of the CMRT Program will be evaluated at the purpose

level on the basis of progress towards achieving eventual sustainability by the end of the five year CIMMYT/CMRT project.

At the end of the full five year CMRT Program, a sustainable institutional capacity for conducting CMRT will have been established if the transition has been made in national institutions managing the CMRT Program, with CIMMYT adjusting its role to advisory services in training and the development of training materials. Additional indicators of sustainability will be the level of demand from the region for participation in the program, an indication that Kenya and participating country institutions consider the investment in the CMRT Program as having major benefits for their own NARS. Finally, the ability of the program to be financially self-sufficient for the training and administrative costs of the program will constitute an additional indicator of sustainability. Monitoring of the full five year CMRT Program will be the joint responsibility of USAID/Kenya (through expected follow-on programs with Egerton) and REDSO/ESA through its continuing affiliation with CIMMYT.

C. Outputs

Expected outputs by the end of the IDAT project are:

- o Completion of construction of the physical facilities.
- o Operational CMRT Program managed by CIMMYT, with most of the training conducted by Egerton and KARI staff.
- o A plan for shifting responsibility for managing the CMRT program to the Agricultural Research Center of Egerton University.
- o A plan for financial sustainability of the CMRT Program.

Expected outputs from the CIMMYT/CMRT Program include:

- o CMRT with a primary focus on maize and wheat-based systems will be established at Egerton University using both formal and on-farm training methodology in research and offering at least one training session per year.
- o Training materials will be developed for use by Egerton University and the collaborating NARS in the region.
- o Approximately 150 research and extension personnel will be trained in CMR during the major courses conducted for approximately 7-8 months each year. The facilities will also be available for use by CIMMYT and other IARCs active in the region (CIAT, CIP, etc.) for short-term courses

during the "off-season" of the CMRT Program. This could provide additional upgrading for 600-1,000 individuals in various crop production and research activities.

- o An average of five graduate students from KARI and Egerton will be supervised in thesis research each year, providing 25 graduate theses over the activity's five year implementation period.
- o Four experienced trainers (2 from Egerton and 2 from KARI) will be fully prepared and experienced to continue the CMRT Program.

D. Inputs

USAID/Kenya Under the IDAT Program

- 1) 2 classrooms
- 2) 12 staff offices
- 3) 1 agricultural laboratory complex
- 4) 1 dormitory complex for trainees (30 self-contained rooms) and visiting lecturers.

Under the CIMMYT/CMRT Program

o CIMMYT

- 1) Coordination and management of the courses
- 2) Two full-time training officers (one of them will also act as project coordinator)
- 3) Management of funds
- 4) Training of 2 training officers from EU and 2 from KARI in Mexico for a period of 6-8 months
- 5) Backstopping support
- 6) Visiting lecturers
- 7) Procurement of equipment, vehicles, audio-visual aids and computers
- 8) Training materials already available in the region and at CIMMYT Headquarters
- 9) Development of new training materials as needed
- 10) Search for sources of funding
- 11) Genetic materials

o KARI-EU-CIMMYT, jointly

- 1) Setting the policies and management of the project
- 2) Joint selection of the trainers
- 3) Selection of participants

o Egerton University

- 1) Two full-time CMRT trainers including salaries and benefits
- 2) Visiting lecturers on specific subjects
- 3) Existing campus facilities at EU
- 4) Experiment station land, ARC restaurant/cafeteria, leisure facilities, library, medical and hospital facilities, book-store, sports and recreational facilities.
- 5) Maintenance of all capital facilities dedicated to the CMRT
- 6) Land preparation for conducting experiments and field operators

o KARI

- 1) Full-time training officers including salaries and benefits
- 2) Visiting lecturers from the institution
- 3) Training funds for KARI participants
- 4) Training materials
- 5) Genetic materials

V. Implementation Plan

A. Conditions, Covenants and Negotiating Status

There are two conditions precedent to the commitment of A.I.D. funds for construction. The first requires that A.I.D. receive letters from Egerton, KARI and CIMMYT officials authorized to commit funds that obligate each institution to funding its share of project costs as identified in the attached Project Budget (Annex 11). The second requires the GOK to submit an analysis that demonstrates how the CMRT will be financially self-sustaining after the initial five year period.

A covenant provides that the parties agree that no more than \$1.6 million of A.I.D. funds will be used for implementation of the CMRT Program.

A.I.D. has received a copy of a letter dated August 14, 1989 from EU to the Ministry of Finance (MOF) which requests the MOF to request A.I.D. to authorize an additional \$1.6 million to the IDAT Project. The MOF request for these additional funds has been received and is dated August 18, 1989. This request for assistance forms Annex 3 to this Amendment.

B. Implementation Arrangements

The USAID/Kenya funded facilities construction will be carried out by Egerton University using host country contracting mechanisms. EU is fully conversant with A.I.D. rules and regulations regarding procurement of both goods and services. This capability was well developed beginning in 1978 with the Agricultural Systems Support Project. EU handled all commodity procurement and managed, under host country contracts, the \$23 million of construction activities at the university. The \$1.6 million to be added through this amendment will fund staff offices, a classroom building, a dormitory for trainees, a laboratory, and the architectural and engineering design services.

The CMRT program will be managed by an independent unit with the Agricultural Resources Center of EU. Since the CMRT courses will not be a part of the normal EU courses, they will not be bound by university regulations. Neither will they initially be a part of KARI's or CIMMYT's normal activities. Nevertheless, the structure, management and policy of the CMRT Program should be in harmony with the Egerton University policy as viewed by the University Senate and Council. A Program Management Committee (PMC) will be responsible for the running of the program in terms of policies and management. The program's funds will be administered by CIMMYT until it phases out of the CMRT Program.

A nine member PMC will be constituted with equal representation from KARI, EU and CIMMYT (two members from each institution), plus one senior officer representing each of the Ministries of Research, Science and Technology; Education; and Agriculture. These three last members will be ex-officio.

The PMC will be nominated and structured as soon as the project begins (end of February 1990). Each institution represented on the PMC will have one vote, except that the Chairman will vote only to break a tie. Meanwhile, an ad-hoc committee was constituted, composed of two KARI staff, two EU staff (one of them being the Senior Assistant Registrar A&R) and two CIMMYT staff.

During the five years of operation of the CMRT Program, the management of the courses will be CIMMYT's responsibility, with the support of the Program Management Committee. Day-to-day management of the program will be under the leadership of a Program Coordinator who, initially, will be one of the CIMMYT training staff. There will also be an administrative manager to assist the Program Leader. By the time of the mid-term review, a joint coordinator should be selected from the four

(Egerton/KARI) trainers. In the post mid-term review phase, this joint coordinator will gradually take over the coordinating function. CIMMYT could phase out of the program earlier depending on the outcome of the annual reviews.

With the exception of inputs to be provided by EU and KARI during the first five years of the program, CIMMYT will be responsible for financial management and maintenance of accounts for the training program. CIMMYT's budget will be provided by funds from the Africa Bureau's SAARFA project, their own 25% required contribution plus other donor contributions.

During the mid-term review, issues related to the sustainability of the CMRT activity after the initial 5 year program will be evaluated. Egerton University will have ultimate responsibility regarding the CMRT program. Within Egerton, the Deputy Vice Chancellor for Research and Extension will be principal officer accountable for the program. It is envisioned that variable costs for training and overhead will be met by training fees however an analysis of this issue will be carried out as a CP to AID's initial disbursement. Maintenance and replacement of capital equipment will be the responsibility of Egerton University, following the initial 5 year phase. If in the course of the mid-term evaluation and subsequent annual reviews, continued input from CIMMYT is deemed a requirement, funding for their involvement is expected to be provided by CIMMYT's regional office in Nairobi.

The USAID/Kenya Office of Agriculture project officer for the current IDAT project will monitor the CMRT Program as part of regular project management. REDSO/ESA's Engineering and Procurement officers will provide assistance in monitoring the construction activities. In addition, the REDSO/ESA Agriculture Office responsible for regional CIMMYT activities will monitor the five year CIMMYT/CMRT program.

C. Evaluation and Audit Arrangements

The evaluation plan for the original IDAT project remains unchanged with the exception of additional requirements related to the CMRT Program.

Annual reviews and a mid-term evaluation will be carried out during the five year CMRT Program. The mid-term evaluation will be conducted by an external review team comprised of three members, one appointed by each of the participating institutions. The findings of the external review team will then be analyzed and appropriate recommendations incorporated into the ongoing CMRT Program. The timing of the mid-term evaluation will be at the end of the second CMRT course.

The Project Management Unit (PMU) in collaboration with CIMMYT will establish an accounting system that covers all aspects of the CMRT unit. Periodic audits of the financial management and accounting system will be carried out and their findings made available to all institutions and primary donors involved.

VI. Project Analyses

A. Institutional and Technical Analysis

For 22 years CIMMYT has dedicated a substantial part of its efforts to strengthening the scientific capabilities and skills of scientists from developing countries. In particular, CIMMYT's headquarters-based CMRT program has been unique in developing young scientists in the area of crop management research. The impact of this program on the development of human resources and appropriate research methodologies being incorporated in NARS has been substantial. However, the Mexico-based program reaches only a fraction of the potential audience from KARI and other NARS within the region.

An attractive option for Kenya and the region is to develop their own capacity and responsibility for CMR training and its incorporation in their regular programs. CIMMYT's past record clearly demonstrates their capability in managing this process.

Only recently has KARI obtained the top level management to analyze and make commitments to the importance of CMRT for increasing the effectiveness of their own research system. Additional efforts by KARI to forge formal linkages with Kenyan universities and private/parastatal firms provide evidence of their commitment for collaborative efforts in leveraging both human and financial resources for addressing priority research issues. Examples of these efforts include KARI's contributions to the University of Nairobi-based sorghum research coordinating body in addition to joint research endeavors with the Pyrethrum Board and current negotiations with the Kenya Seed Company on cost-sharing options for maize research. KARI is emphasizing adaptive research work which requires substantial trained manpower and, under a system of revised mandates, eight Regional and several National Research Centers are beginning to carry out crop management research in Kenya.

Egerton University, despite severe teaching pressures from substantial new student intake, is committed to carrying out its mandate as Kenya's premier agricultural teaching institution for incorporating adaptive research with its teaching and extension mission. EU has already incorporated

elements of adaptive research methodologies and procedures in the curricula at the diploma and degree levels. EU and KARI are already collaborating in research programs on cereal crops and adaptive on-farm research. In these activities, EU also collaborates with CIMMYT. While the management demands on EU and on the programs currently run out of the ARC need to be carefully considered, the proposed management structure of the CMRT as an independently administered program managed on a day-to-day basis by CIMMYT, should not unduly increase the management burden on EU.

B. Financial Analysis

The facilities to be constructed under this IDAT Project Paper Amendment are similar to the facilities constructed at Egerton University under the Agricultural Systems Support Project between 1978 and 1985. The facilities are included in the existing master plan for development and expansion of Egerton University and the cost estimates for construction are based on recent experience at the University. A REDSO/ESA engineer has reviewed the construction plans and has determined that the cost estimates are reasonable and the implementation plan feasible (see FAA Section 611(a) determination in Annex 6). The following Table 2 summarizes the construction cost estimates used for this amendment. Detailed cost estimates are found in Annex 1. Table 3 describes the Methods of Implementation and Financing.

Table 2

Summary of Estimated Construction Costs

Office/Classroom Building	KShs. 8,460,000
Dormitory/Dining Building	15,750,000
Staff Flats (6)	7,560,000
Laboratory	4,500,000
Infrastructure Services	5,440,000
Architectural & Engineering Design	5,422,000
Sub-total	47,132,000
Contingencies	4,713,000
TOTAL	51,845,000
(@ KShs. 21.5 = \$1.00)	\$2,411,395
	=====

A.I.D. will provide \$1,600,000 for the construction costs with the balance to be provided by the GOK through Egerton University.

Table 3

<u>Component</u>	<u>Method of Implementation/Financing</u>	<u>Cost</u>
Construction	Host Country / Direct Reimbursement Contract to the Host Country	\$1,600,000

This PP Amendment will result in a new total project cost of \$23,342,400, in which the A.I.D. contribution will be increased by \$1,600,000 to a new total of \$7,200,000. This increase will raise the total GOK contribution to \$14,041,700. The GOK contribution to IDAT will increase by \$1,470,000. Table 4 below summarize the IDAT Financial Plan (see Annex 2 for details).

Table 4

<u>IDAT Project Financial Summary (\$000)</u>				
	A.I.D.	UIUC	Egerton	TOTAL
Current Funding	5,600.0	2,100.7	12,571.7	20,272.4
This Amendment	1,600.0	0	1,470.0	3,070.0
TOTAL	7,200.0	2,100.7	14,041.7	23,342.4

An estimated \$9,228,000 will be contributed to the CMRT Program by CIMMYT, KARI and Egerton University under the separate five year CIMMYT/CMRT project. A detailed cost summary for the CIMMYT/CMRT project is attached in ANNEX 11

C. Environmental Considerations

The environmental impact of the project, as designed in the original Project Paper, was given a categorical exclusion. The determination was based on the fact that no USAID-funded construction activities were envisioned. Since the amendment will fund construction activities, a new Initial Environmental Examination (IEE) was prepared. A copy of the IEE, which has been approved by the Africa Bureau Environmental Coordinator, is attached.

Office/Classroom Building

Two Classrooms	265 sq. metres
Twelve Office Spaces	160 sq. metres
Storage Area	40 sq. metres
Sanitary Facilities	40 sq. metres
Hallways	200 sq. metres
Sub-Total	<u>705 sq. metres</u>

Cost Estimate at Kshs. 12,000/= per sq. metre = KShs. 8,460,000

Dormitory/Dining Building

30 rooms with bathrooms	750 sq. metres
2 Lounges	150 sq. metres
3 Efficiency Apartments	125 sq. metres
Storage	50 sq. metres
Laundry Room	100 sq. metres
Dining Room	180 sq. metres
Kitchen	120 sq. metres
Kitchen Services	100 sq. metres
Sub-Total	<u>1,575 sq. metres</u>

Cost estimate at Kshs. 10,000/= per sq. metre = Kshs. 15,750,000

Staff Flats

6 Flats at 150 sq. metres (self contained)	900 sq. metres
---	----------------

Cost estimate @ KShs. 8,400/= Kshs. 7,560,000

Laboratory

1 Laboratory with bathroom and storage	500 sq. metres
--	----------------

Cost estimate @ KShs. 9,000
Sub-Total KShs. 4,500,000
KShs. 36,270,000

Infrastructure Services

Electricity and Water connection)	
Roads	
Telephone at 15% of the total	<u>KShs. 5,440,000</u>
Sub-Total	<u>KShs. 41,710,000</u>

Architectural & Engineering Design Services (13%) KShs. 5,422,000
Sub-Total KShs. 47,132,000

Contingencies (10%) KShs. 4,713,000

Total KShs. 51,845,000

The Budget for physical facilities (rounded) KShs. 52 million which at exchange rate of KShs. 21.5 to the dollar = \$2.42 million.

A.I.D. Project No. 615-0239
 Institutional Development for Agricultural Training (IDAT)
 Project No. 615-0239

ANNEX 2

ILLUSTRATIVE SUMMARY OF PROJECT COSTS BY EXPENSE CATEGORY AND SOURCE OF FUNDING
 (In \$ 000's)

ILLUSTRATIVE

<u>EXPENSE CATEGORY</u>	<u>Sixth Amendatory</u>			<u>Cumulative to date</u>			<u>Life of Project Funding</u>		
	<u>A.I.D.</u> <u>(\$)</u>	<u>GOK</u> <u>(equiv)</u>	<u>UIUC</u> <u>(\$)</u>	<u>A.I.D.</u> <u>(\$)</u>	<u>GOK</u> <u>(equiv)</u>	<u>UIUC</u> <u>(\$)</u>	<u>A.I.D.</u> <u>(\$)</u>	<u>GOK</u> <u>(equiv)</u>	<u>UIUC</u> <u>(\$)</u>
Technical Assistance	- 0 -	30.0	- 0 -	210.6	47.0	165.0	210.6	47.0	165.0
Training	- 0 -	400.0	- 0 -	1,601.6	1,144.6	419.5	1,601.6	1,144.6	419.5
Construction	1,600.0	370.0	- 0 -	1,600.0	10,370.0	- 0 -	1,600.0	10,370.0	- 0 -
Commodities	- 0 -	70.0	- 0 -	1,267.2	734.6	- 0 -	1,267.2	734.6	- 0 -
Sabbatic/Scholar	- 0 -	200.0	- 0 -	-569.1	725.5	1,242.0	569.1	725.5	1,242.0
Coordination	- 0 -	200.0	- 0 -	830.7	344.5	175.0	830.7	344.5	175.0
Research Grants/ Outreach	- 0 -	200.0	- 0 -	930.0	675.5	- 0 -	930.0	675.5	- 0 -
Evaluation/Audit	- 0 -	- 0 -	- 0 -	90.0	- 0 -	- 0 -	90.0	- 0 -	- 0 -
Inflation/ Contingency	- 0 -	- 0 -	- 0 -	100.8	- 0 -	99.2	100.8	- 0 -	99.2
<u>TOTAL</u>	1,600.0	1,470.0	- 0 -	7,200.0	14,041.7	2,100.7	7,200.0	14,041.7	2,100.7

REPUBLIC OF KENYA
 OFFICE OF THE VICE-PRESIDENT AND MINISTRY OF FINANCE

Telegraphic Address:
 FINANCE-NAIF.OBI
 Telephone: 33/111
 When replying please quote
 Ref. No. EA/FA 188/9/02
 and date



THE TREASURY
 P.O. Box 30007
 NAIROBI

18th August 1989
 KENYA

The Director
 USAID/Kenya
 NAIROBI.

Dear Mr. Sinding

RE. INSTITUTIONAL DEVELOPMENT FOR AGRICULTURAL TRAINING (IDAT):
REQUEST FOR FUNDING \$ 1.6 MILLION

You will recall that during the annual preparation of the 1989/90 draft estimates, your officials indicated to Treasury that USAID was keen to fund a joint KARI, Egerton University and International Maize & Wheat Improvement Centre (CIMMYT) collaborative project based at Egerton University (EU) as an addition to the current IDAT.

It is confirmed now by both KARI and EU that this project will involve research in wheat, maize and farming systems research. It is also expected that infrastructural development to realize the intended objectives of the project (crop Management Research Training) include residential housing, hostel, classrooms, office accommodation, laboratories and extension to the Agricultural Resources Centre.

Although the funds earmarked for this project estimated in FY 1989/90 at \$1.6 Million was inadvertently omitted at the printing stage of the 1989/90 Annual Estimates, the GOK supports the project.

We could, however, include it in supplementary Estimates later this FY. It is also understood that this will be a direct 100% grant funding. If this proposal is acceptable to you, do confirm by way of a letter, at your earliest convenience, your concurrence with us.

Yours sincerely

G. KIOKO wa LUKA
 for: PERMANENT SECRETARY/TREASURY

USAID/KENYA

C&R

3 AUG 89 15 54Z

RECEIVED

DATE RECD	8-23
REPLY DUE	8-31
ACTION DESIG	AGR
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R/EXO	
RFMC	
RHUSD	
RIG/A	
RIG/I	
PROG	1
PRJ	1
HRD	
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AGR	
CONT	1
EXO	
PER	
GSO	
DMB	
C&R	
RF	1
CHRON	1
TOTAL	7

859/68

22

5C(2) - PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A includes criteria applicable to all projects. Part B applies to projects funded from specific sources only:
 B(1) applies to all projects funded with Development Assistance;
 B(2) applies to projects funded with Development Assistance loans; and
 B(3) applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT? Yes

Yes

A. GENERAL CRITERIA FOR PROJECT

1. FY 1989 Appropriations Act Sec. 523; FAA Sec. 634A. If money is sought to obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified? A Congressional Notification expired on August 8, 1989 with no objections.
2. FAA Sec. 611(a)(1). Prior to an obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance, and (b) a reasonably firm estimate of the cost to the U.S of the assistance? Yes. Adequate engineering and financial plans have been carried out and there are firm estimates of the costs to the U.S.
3. FAA Sec. 611(a)(2). If legislative action is required within recipient country, what is basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance? No legislation is required.

4. FAA Sec. 611(b); FY 1989 Appropriations Act Sec. 501. If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)
- N/A
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?
- Yes
6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.
- No. The project is a country-specific activity.
7. FAA Sec. 601(a). Information and conclusions on whether projects 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.
- By improving the management and technical capabilities of future civil servants and other members of the agricultural community who deal directly with small farmers, it is expected that farm productivity will be increased thereby increasing the flow of international trade fostering private initiative and competition, encouraging development, discouraging monopolistic practices and improving technical efficiency of agriculture.
8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage
- The additional activity being authorized will be conducted under a host country contract.

private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

9. FAA Sec. 612(b), 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 U.S. are utilized in lieu of dollars.

The host country is contributing 47% of the project cost in local currency.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

The U.S. does not own excess Kenya Shillings.

11. FY 1989 Appropriations Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. procures of the same, similar or competing commodity?

N/A

12. FY 1989 Appropriations Act Sec. 549. Will the assistance (except for programs in Caribbean Basis Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work clothes or leather wearing apparel?

No

13. FAA Sec. 119(g) (4)-(6) & (10). Will the assistance (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas? No
14. FAA Sec. 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)? N/A
15. FY 1989 Appropriations Act. If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government? N/A
16. FY 1989 Appropriations Act Sec. 538. If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.? N/A
17. FY 1989 Appropriations Act Sec. 514. If funds are being obligated under the appropriation account to which they were not appropriated, has prior approval of the Appropriations Committees of Congress been obtained? N/A

18. State Authorization Sec. 139.

Yes

(as interpreted by conference).
Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project
Criteria

(a) FY 1989 Appropriations Act
Sec. 548. (as interpreted by
conference report for original
enactment). If assistance is for
agricultural development activities
(specifically, any testing or
breeding feasibility study, variety
improvement or introduction,
consultancy, publication,
conference, or training), are such
activities (a) specifically and
principally designed to increase
agricultural exports by the host
country to a country other
than the United States, where the
export would lead to direct
competition in the third country
with exports of a similar
commodity grown or produced in
the United States, and can the
activities reasonably be expected
to cause substantial injury to U.S.
exporters of a similar agricultural
commodity; or (b) in support of
research that is intended primarily
to benefit U.S. producers?

a. No
b. No

(b) FAA Secs. 102(b), 111, 113, 281(a).
Describe extent to which activity
will (a) effectively involve the poor
in development by extending access to
economy at local level, increasing
labor-intensive production and the
use of appropriate technology,
dispersing investment from cities
to small towns and rural areas, and
insuring wide participation of the
poor in the benefits of development
on a sustained basis, using
appropriate U.S. institutions;
(b) help develop cooperatives,
especially by technical assistance,
to assist rural and urban poor to
help themselves toward a better life,
and otherwise encourage democratic
private and local governmental

- a. The project is directed at
improving agricultural research
and training that will in turn
assist small farmers (poor) in
Kenya.
- b. The project is not directed at
cooperatives development.
- c. The project receives approximately
50% of its financial support from
the host country.
- d. The project targets assistance to
female students, thereby improving
their status and qualifications to
work with the Kenyan women to
increase their productivity.
- e. The project assists a Kenyan
university that is the preeminent
agricultural university in East
Africa.

institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.

c. FAA Secs. 103, 103A, 104, 105, 106, 120-21; FY 1989 Appropriations Act (Development Fund for Africa). Does the project fit the criteria for the source of funds (functional account) being used?

Yes. The funding source is the "Sub-Sahara Africa Development Assistance" account.

d. FAA Sec. 107. Is emphasis placed on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

Egerton university is particular - well known for its practical curriculum and emphasis on teaching appropriate technology in agriculture.

e. FAA Secs. 110, 124(d). Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?

Yes. The host country is contributing 47%.

f. FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?

The project has been designed to improve an important agricultural education institution and to stimulate research which will ultimately benefit the small farmer, the poor majority of Kenya, by increasing his/her productivity.

g. FAA Sec. 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 civil education and

Egerton University will work closely with the University of Illinois at Urbana Champaign to ensure that Egerton's needs are met. Egerton is particularly interested in expanding the intellectual skills of its faculty and staff in both teaching and management areas.

training in skills required for effective participation in governmental processes essential to self-government.

The skills provided to an Egerton graduate directly influence the agricultural civil service cadre and their ability to be effective participants in governmental processes.

h. FY 1989 Appropriations Act Sec. 536. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions?

No

Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilization?

No

Are any of the funds to be used to pay for any biomedical research which rates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

No

i. FY 1989 Appropriations Act. Is the assistance being made available to any organization or program which has been determined to support or participate in the management of a program of coercive abortion or involuntary sterilization?

No

If assistance is from the population functional account, are any of the funds to be made available to voluntary family planning projects which do not offer, either directly or through referral to or information about access to, a broad range of family planning methods and services?

N/A

- j. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? **Yes**
- k. FY 1989 Appropriations Act. What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)? **None**
- l. FAA Sec. 118(c). Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16? Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible:
(a) stress the importance of conserving and sustainably managing forest resources;
(b) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (c) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; **Yes**
N/A

(d) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (e) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded; (f) conserve forested watersheds and rehabilitate those which have been deforested; (g) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (h) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (i) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network or protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (j) seek to increase the awareness of U.S. government agencies and other donors of the immediate and long-term value of tropical forests; and (k) utilize the resources and abilities of all relevant U.S. government agencies?

m. FAA Sec. 118(c)(13). If the assistance will support a program or project significantly affecting tropical forests (including projects involving

N/A

the planting of exotic plant species), will the program or project (a) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land, and (b)/take full account of the environmental impacts of the proposed activities on biological diversity?

n. FAA Sec. 118(c)(14). Will assistance be used for (a) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; or (b) actions which significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas?

No

o. FAA Sec. 118(c)(15). Will assistance be used for (a) activities which would result in the conversion of forest lands to the rearing of livestock; (b) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undergraded forest lands; (c) the colonization of forest lands; or (d) the construction of dams or other water control structures which flood relatively undergraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the

a. NO
b. NO
c. NO
d. NO

rural poor and will be conducted in an environmentally sound manner which supports sustainable development?

- p. FY 1989 Appropriations Act. If assistance will come from the Sub-Saharan Africa DA account, is it (a) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant; (b) being provided in accordance with the policies contained in section 102 of the FAA; (c) being provided, when consistent with the objectives of such assistance, through African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in sub-Saharan Africa; (d) being used to help overcome shorter-term constraints to long-term development, to promote reform of sectoral economic policies, to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities, to being about appropriate sectoral restructuring of the Sub-Saharan African economies, to support reform in public administration and finances and to establish a favorable environment for individual enterprise and self-sustaining development, and to take into account, in assisted policy reforms, the need to protect vulnerable groups; (e) being used to increase agricultural production in ways that protect and restore the natural resource base, especially food production, to maintain and improve basic
- a. Yes. The assistance will promote improvements in the productivity of small-farmers.
- b. Yes
- c. PVO participation is not consistent with project objectives.
- d. Yes. The assistance is designed to address long-term inefficiencies in planning and implementation of farming activities.
- (e) Yes

transportation and communication networks, to maintain and restore the nature resource base in ways that increase agricultural production, to improve health conditions with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care, to provide increased access to voluntary family planning services, to improve basic literacy and mathematics especially to those outside the formal educational system and to improve primary education, and to develop income-generating opportunities for the unemployed and underemployed in urban and rural areas?

q. FY 1989 Appropriations Act Sec. 515. If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same general region as originally obligated, and have the Appropriations Committees of both Houses of Congress been properly notified?

N/A

2. Development Assistance Project Criteria (Loans Only)

N/A. The project is grant funded.

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.

N/A

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise annual

N/A

production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?

- c. FAA Sec. 122(b). Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities? N/A

- 3. Economic Support Fund Project Criteria N/A
 - a. FAA Sec. 531(a). Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA? N/A
 - b. FAA Sec. 531(e). Will this assistance be used for military or paramilitary purposes? N/A
 - c. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? N/A

Revised August, 1989
0382G

IMPLEMENTATION SCHEDULE

<u>DATE OF ACTION</u>	<u>ACTION</u>
August 1989	- Project Agreements Signed.
September 1989	- GOK/EU selects local consultancy team for A & E work. - GOK/EU submits architect's preliminary plans to AID.
October 1989	- GOK requests RFTP's.
November 1989	- GOK evaluates RFTP's, and recommends A & E - AID approves A & E firm. - Nomination of participants for training in Mexico.
December 1989	- A & E submits preliminary plans to GOK/AID.
January 1990	- GOK evaluates and recommends to AID for approval. - AID review plans and approves.
February 1990	- A & E submits detailed Designs and Contract documents.
March 1990	- GOK reviews the design documents and recommends to AID for approval. - AID reviews and approves the designs.
April 1990	- Departure of participants to Mexico for S.T. training. - GOK invites bids from construction contractors. - A & E evaluates bids.
May 1990	- GOK reviews bids and recommends to AID - AID reviews and approves. - Award of construction.

- June 1990 - Construction begins.
- September 1990 - Constitution of project management committee.
- October 1990 - Purchase of office equipment and household furniture.
- January 1991 - All construction completed.
- February 1991 - Participants return from Mexico.
- Arrival of CIMMYT personnel.
- Project Team move and settle at Egerton University.
- March 1991 - First intake of participants for CMRT S.T. course.
- January 1992 - First intake of participants for general S.T. course.
- March 1992 - Second intake of participants for CMRT S.T. course.
- November 1992 - Mid-term evaluation.
- January 1993 - Second intake of participants for general S.T. courses.
- March 1993 - Third intake of CMRT participants.
- January 1994 - Third intake of participants for general S.T. course.
- March 1994 - Fourth intake of CMRT participants.
- January 1995 - Fourth intake of participants for general courses.
- March 1995 - Fifth intake of participants for CMRT course.
- August 1995 - Final evaluation.
- December 1995. - End of project.

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UNITED STATES OF AMERICA
AGENCY FOR INTERNATIONAL DEVELOPMENT
U.S.A.I.D. MISSION TO KENYA

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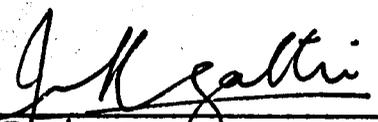
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INSTITUTIONAL DEVELOPMENT OF AGRICULTURAL TRAINING (IDAT)
(615-0239)

FAA SECTION 611(a) DETERMINATION

I, James Kigathi, Engineer, Engineering Division of the Regional Economic and Development Service Office, Eastern and Southern Africa Region (REDSO/ESA), do hereby determine pursuant to Section 611(a) of the Foreign Assistance Act of 1961, as amended, that:

- (1) Engineering, financial, and other plans necessary to carry out the proposed Institutional Development for Agricultural Training Project, and a reasonably firm estimate of the cost to the United States Government of providing such assistance, have been completed; and
- (2) No further legislative action is required within the Republic of Kenya.



Engineer,
Engineering Division
REDSO/ESA, Nairobi

Date: 8/23/89

ACTION: AIL-3 INFO: FCON POL/RLO

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Z.O. 12556: N/A

TAGE:

SUBJECT: IEE'S FOR KENYA-STRUCTURAL ADJUSTMENT
ASSISTANCE (615-0240) KENYA-INTERNATIONAL DEVELOPMENT
FOR AGRICULTURAL TRAINING (2 15-0239)

INFO: (A) FAX TRANSMISSION 8/15/89
(B) BOYD/TANTER TELCON 8/24/89

1. BUREAU ENVIRONMENTAL OFFICER CONCURS IN THE IEE
NEGATIVE DETERMINATION FOR SUBJECT PROJECT (615-0239)
ABOVE.

2. SEC ALSO CONCURS WITH IEE FOR PROJECT (615-0240),
SUBJECT TO THE FOLLOWING: ADD THE SECTION 216.2 LOWER
CASE (C)(1) LOWER CASE (I) TO PAGES 1 AND 2 FOR A
CATEGORICAL EXCLUSION. (FYI, THESE CHANGES WERE
INSERTED IN A.I.D./W COPIES FOR RECORD PURPOSES END
FYI). EAGLEBURGER

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INITIAL ENVIRONMENTAL EXAMINATION

OR

CATEGORICAL EXCLUSION

Project Country: Kenya
Project Title: Institutional Development for Agricultural
Training (615-0239)
Funding: FY(s) 89 - 93 \$1,600,000

IEE Prepared By: Dr. Edward McGowan, REO

Environmental Action Recommended:

Positive Determination

Negative Determination

X

Categorical Exclusion:

APPROVED

DISAPPROVED

DATE

Concurrence:

Bureau Environmental Officer: Bessie L. Boyd, AFR/TR/ANR

Clearance: RLA:SSpielman

[Signature]
Chief, RLA

DATE

15 Aug 89

Project Description:

Egerton University is the principal agricultural university in Kenya. The campus is located about 20km West of Lake Nakuru. The project includes expansion of existing physical plant within a small and confined area on campus grounds. This will involve construction of an added wing to existing dormitory facilities and expansion the of existing institutional kitchen. The project will also add a new conference building.

Focus on Environmental Consideration:

The construction site is entirely within the campus. A natural setting does not exist therefore construction will have no impact on the natural environment. Services and facilities are deemed more than adequate to absorb the additions. Cumulative impacts are not considered significant. Under proper design and engineering there will be no adverse impacts. Based on these considerations a Negative Threshold Determination is warranted.

**A PROPOSAL FOR A CROP MANAGEMENT
RESEARCH TRAINING PROJECT
FOR KENYA AND EASTERN AFRICA.**

KARI/EGERTON/CIMMYT TRAINING PROJECT

***KEC TRAINING PROJECT**

(DRAFT)

KENYA, AUGUST 1989.

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**A PROPOSAL FOR A CROP MANAGEMENT RESEARCH TRAINING PROJECT
FOR KENYA AND EASTERN AFRICA**

I.-INTRODUCTION

Improved technology is necessary to achieve progress in agriculture. In African countries, agriculture provides nearly two-thirds of their populations with employment and income. The countries of Eastern Africa need to develop a critical mass of researchers in order to produce the technologies that will enable their farmers to feed burgeoning populations that are growing at an average rate of about 3.3% per year.

Crop Management Research Training (CMRT) started at CIMMYT over two decades ago to fill a specific training need of agronomic scientists throughout the developing world. Technology development, its adaptation, verification and refinement based upon real farmer needs in developing countries are not taught at any university at any level. CIMMYT undertook to teach these methodologies and practical skills to a wide range of scientists with varying educational backgrounds and experience levels, in as short a period as possible. The driving force of CMRT has been to return these participants to their research agencies in a few months with a set of skills and practical knowledge that can be immediately applied to national research problems and crop production constraints.

CIMMYT's traditional headquarters-based Crop Management Research Training Courses (CMRT) are unique and important mechanisms for human resources development in the area of crop management research in developing countries' NARS.

The courses are designed to immerse students in the subjects, with a hands-on approach where each person is expected to participate in all phases of research planning, its field implementation, the data or laboratory analysis and transfer of results. For many of the younger participants this is the first time they have been required to do actual manual fieldwork, for others its the only time they have been able to participate in the full spectrum of research from start to finish. The training results have been highly satisfactory, thus the request to Kenya to place a training center in the country. Leading researchers in most of the developing countries that grow wheat or maize have been graduates of these courses.

In fact, more than 2000 young scientists have attended in-service training courses in Maize and Wheat Production, Crop Improvement (Maize and Wheat), or Experiment Station Management. More than 200 of them were young professionals from Eastern Africa and a sizable number from Southern

Africa. However, due to space limitations, these courses reach only a fraction of their potential audience.

It has been observed that the officers who have undergone such courses are more committed to field oriented research. The quantity and quality of their research outputs are high. Therefore the Kenya Agricultural Research Institute (KARI) and other National Agricultural Research Systems (NARS) of Eastern Africa strongly believe that more research officers should receive this training in addition to regular formal education, to improve the quality and the applicability of their research input.

In Kenya, the current National Agricultural Research Project (NARP) of the Kenya Agricultural Research Institute emphasizes adaptive research work which requires substantial trained manpower. According to the revised KARI strategy, eight Regional Research Centers (RRC) are mandated to carry out Crop Management Research throughout Kenya. In addition, a number of National Research Centers (NRC) also collaborate in one way or another in adaptive research work. The current allocation of one or two places per country in CIMMYT's production agronomy training programs in Mexico is grossly inadequate to meet the growing demand for trained personnel in CMR in Kenya and other countries of the region. The Kenya Agricultural Research Institute (KARI) feels strongly that a national training capacity in CMR should be developed to increase the training opportunities and to provide regular in-service training to the young scientists in the national agricultural research system. KARI also believes that the national higher learning institutions should play a significant role in meeting the training needs of the country. For this and other related reasons, KARI strongly supports CIMMYT's new strategy of decentralizing the production agronomy training courses based in Mexico and under a Regional Crop Management Research Training Center initiating such courses within Kenya.

This idea coincides with those from the Consultative Group for International Agricultural Research (CGIAR) and CIMMYT, who strongly believe that some National Agricultural Research Systems (NARS), such as KARI, which have achieved a reasonable level of institutional and scientific development, must assume a greater responsibility in the area of national commodity research. Two studies carried out by the CGIAR and its Technical Advisory Committee (TAC): The Impact Study, and The Future Priorities and Strategies by CGIAR, respectively, support the decentralization of in-service training in CMR to advanced NARS.

Crop Management Research is often of a location-specific nature, so that decentralization of CMRT should be advantageous. KARI would also like the present Farming Systems Research (FSR) methodology offered by the CIMMYT

regional staff incorporated into the new Crop Management Research Training (CMRT).

There are many countries in Eastern and Southern Africa, where the National Agricultural Research Systems are in their early stages of development, but a highly sophisticated national in-service training effort cannot be justified at this point in time. These countries could use the in-service training facility developed in Kenya to train their researchers. Although KARI will be the primary client of this training program, the training facilities will be kept open to countries in the region, provided funding requirements are worked out to accommodate both national and regional needs.

This project originated from a consideration of the needs of the countries of Eastern Africa (Burundi, Ethiopia, Kenya, Rwanda, Somalia, Sudan, Tanzania and Uganda). CIMMYT is considering a similar project for countries of Southern Africa, but that project will be developed later. It is expected that in the intervening time, this CMRT project could satisfy the demand from Southern Africa NARS. Hence, the frequent reference to Eastern and Southern Africa in this document. However, it is anticipated that the bulk of the trainees will come from Kenya and other countries in the region.

Given CIMMYT's expertise and experience in this CMRT, KARI and Egerton University strongly believe that CIMMYT should take the leadership in running the program during the first five years, within which time the local resource people should be identified and trained to take over the in-service training. It is expected that the national institutions will be responsible for running the program at the end of the fifth year. The national trainers are expected to do most of the training by the end of the third year.

During the first 5-year period of the CMRT project, it is envisaged that the project will cover the entire cost of running the program in terms of physical facilities, infrastructural and administrative support, technical assistance, manpower development, training costs, etc. In this period the national capacity will be developed to continue the training program beyond the first five years. From then onwards, CIMMYT is expected to continue to provide technical advisory services in training and in the development of training materials.

The regional representatives of CIAT, CIP, IITA, ICRISAT, IBPGR also agree that opportunities exist for various forms of inter-center collaboration in training within the proposed framework. However, the mechanics and the modus operandi of actual cooperation will be worked out

later. They endorse the proposal that one IARC, namely CIMMYT, should take the leadership in initiating such a program.

II. - REGIONAL CROP MANAGEMENT RESEARCH TRAINING PROJECT
(also called KARI/EGERTON/CIMMYT or KEC Project)

1. BASIS FOR COLLABORATION BY KARI, EGERTON UNIVERSITY AND CIMMYT

a) Previous and present collaborative activities between the three institutions:

There has been a very close and a strong collaboration between KARI, EU and CIMMYT in various research and training activities. They have agreed to participate in a Crop Management Research Training (CMRT) project in maize and wheat, which to be based at EU. Egerton University accepts the challenge of becoming a national and regional training centre in CMR for Kenya and the rest of Eastern Africa. The linkage between KARI, EU and CIMMYT stems from a history of close and strong collaboration in various research and training activities, among which are the following:

EU has already incorporated elements of adaptive research methodologies and procedures in the curricula at the diploma and degree levels. EU is keen on conducting problem-oriented research in collaboration with KARI to provide useful information to the farming community in Kenya. KARI and EU are already collaborating in research programmes on cereals, oil crops and adaptive on-farm research. In this exercise, EU also collaborates with International Agricultural Research Centres (IARCs) including CIMMYT and other interested organizations. CIMMYT assists in these programmes within its mandated areas -- maize and wheat, in on-farm research procedures, germplasm, scientific information and training

- KARI, EU and CIMMYT closely collaborate in On-Farm Research with a Farming Systems Perspective (OFR/FSP). CIMMYT provides the training materials and supplements the funds required for in-country training courses and workshops. All the three institutions provide resource personnel for various training activities.

- A number of KARI scientists, particularly those from nearby research centres, participate in the teaching at EU.

b) New collaboration under the CMRT project

- Egerton University will initially provide the necessary infrastructural requirements to initiate the CMRT project but the project should develop the facilities (hostels, classrooms, laboratories, etc.) to run the program without depending too

much on the existing facilities. These will be complemented by new facilities planned under the project and funded by USAID (Kenya).

Both KARI and Egerton University will commit the manpower required at the beginning of the project in order to take over the training program at the end of the 5th year, or earlier, if possible.

CIMMYT is expected to provide two trainers and the necessary training materials for the initial 5-year period, and will be responsible for managing the training program. During this period, CIMMYT will assist the national program to develop some training materials based on local data and information. CIMMYT will pay particular attention to strengthening the research and training program management skills of trainers from KARI and Egerton University. In this context, the trainers will attend courses at CIMMYT Headquarters to help prepare these individuals.

Through such collaboration, the three institutions (KARI, CIMMYT and EU) have come to a common realization that there is an urgent need to increase in-service training opportunities and provide regular in-service training to young scientists in the national agricultural research system. This realization has resulted in the initiation of this CMRT project to be based at EU, which will further strengthen the linkages between KARI, EU and CIMMYT.

2. LOCATION OF THE TRAINING:

a) Egerton University

Egerton University is a modern, fast-growing Kenyan University located near the town of Njoro at 2200 m.a.s.l., 200 km. north-west of Nairobi, on the main highway connecting the capital city with Uganda. In terms of crop production, especially for wheat, the area around EU is recognized as one of the best developed and advanced in the country.

The university's principal officers are the Chairman of the Council, the Vice-Chancellor and three Deputy Vice-Chancellors for the areas of Administration and Finance, Academic Affairs, and Research and Extension. This last Vice-Chancellor also serves as Head of the Agricultural Resources Centre (ARC), to which the new CMRT Project will be attached.

Out of the 11 Departments which comprise the Faculties of Agriculture, Arts and Social Sciences, Education and Human Resources, and Science, the Departments of Agriculture and Biological Sciences offer study plans at the B.Sc level in Agronomy, Agri-Engineering and Agricultural Education and Extension. These are of particular interest for the CMRT Project since they are well staffed in terms of number of faculty lecturers, most of which have earned M.Sc, and Ph.D. degrees at North American and European Universities. They should be regarded as potential resource trainers on specific subjects.

The Egerton University campus presently accommodates more than 3,000 students (5% are foreign students) and more than 400 faculty members. It is adjacent to the 600 ha Tatton farm which serves as the crops experiment station of the university.

KARI's National Plant Breeding Station (NPBS), Njoro is close to EU. This fact has facilitated the research linkages between both institutions.

The campus facilities and services, which include a medical center and a hospital, cafeterias, dormitories, sport facilities, library, staff housing, schools for staff children, and extensive lawns and gardens comparable to the university campuses of many developed countries.

The growing cycle for crops such as wheat and beans, are short enough to fall within the time span of the CMR training courses to be offered, meaning that there should be no problem in conducting all the needed research experiments in these crops at the University Experimental Station or in nearby farmers' fields. There will be no time constraint with these two species in planning, planting, managing and harvesting experiments. Also, there will be sufficient time for analysis and interpretation of the results and planning of proposed experiments for the following cycle. Maize, is normally grown in the region as a full cycle crop in association with beans, mostly of the determinate bushy Type I. Only early varieties of maize could be grown to fit into the training cycle. This problem could be solved by conducting some or most of the maize OFR experiments in locations which are at lower altitudes and where the maize growing cycle fits within the time-frame of the CMRT course.

b) The rationale for selecting Egerton University

All parties concerned unanimously agreed that EU was the most appropriate location for the above-mentioned collaborative research and training activities in light of the following:

- a) EU is centrally located with respect to the major agro-ecological zones of Kenya and provides suitable crop management opportunities in both maize- and wheat-based systems.
- b) Although Egerton University is a national institution, it provides training opportunities for students from other countries in the region as well. This will facilitate the regional aspects of the CMRT project. The University would like to evolve as a "center of excellence", and this will facilitate regional participation in the training program.
- c) The current availability of land and other infrastructural facilities provides the basis for initiating and implementing the project. The University administration is committed to providing land and the available infrastructural facilities to start off the project.
- d) A number of national and regional research centers are in close proximity to the University and already many collaborative research and training programs are undertaken jointly by Egerton University staff and these centers. This new initiative will strengthen this collaborative relationship.
- e) Egerton collaborates with two other IARCs, besides CIMMYT: CIAT and CIP.

3. GENERAL OBJECTIVES OF THE PROJECT

The general objectives of the KEC project will be:

- a). To develop at Egerton University a national and regional capacity to offer CMRT on a sustainable and continuous basis for Kenya and other countries of Eastern and Southern Africa. This capacity will increase the quality, relevance and effectiveness of adaptive research through on-going training and collaborative research in participating countries in the region.
- b) To assist NARS of Eastern and Southern Africa in their efforts to increase agricultural production and raise rural incomes through the activities of better trained personnel in crop management research.
- c) To develop the trainees' skills, capacities and confidence so that they will be able to undertake farmer-oriented applied research projects in their

respective national programs. To do so, the participants will become conversant with the research process on experiment stations but especially in farmers' fields, since special emphasis will be given to on-farm research. Graduates of the courses will be able to organize and conduct CMR programs directed at solving the main production problems faced by the farmers in their respective countries.

- d) To develop training materials that will fill the needs of the project, but that could also be used elsewhere in Kenya and the region.
- e) To develop a curriculum that suits best the needs of CMR scientists from the Eastern and Southern Africa NARS and instructional materials.
- f) As a secondary objective, to assist research supervision for post graduate students undertaking their research thesis work in Kenya.

During the first cycle of CMRT activities, maize will be the target crop. It is envisaged that wheat will be added in the future cycles. Although the courses will be focussed on maize- or wheat-based cropping systems, it is expected that other IARCs will bring their crops which are common in the cropping systems found in the region, e.g. beans.

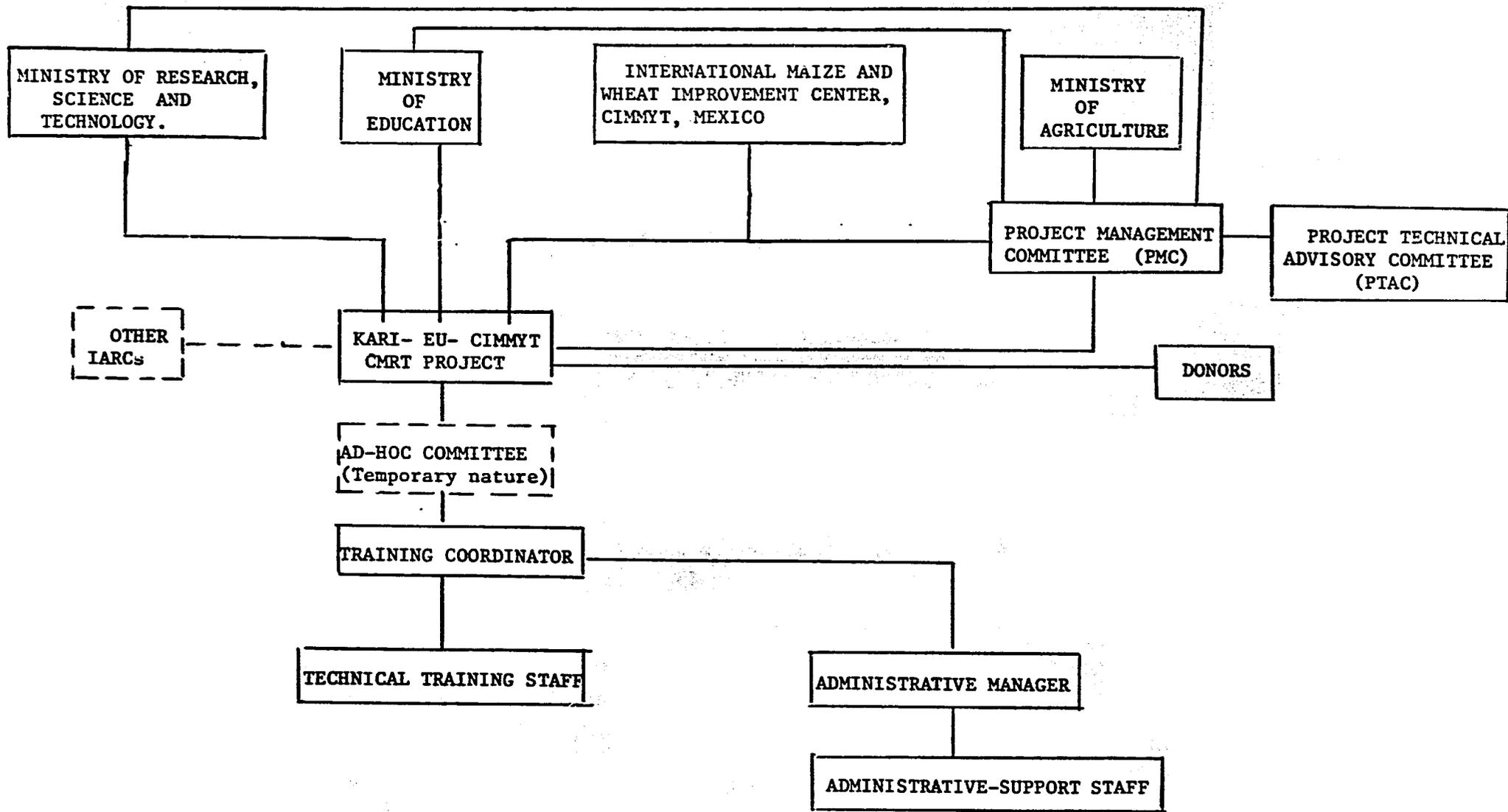
4. MANAGEMENT OF THE PROJECT

a) General Organization

The project will be an independent unit within the Agricultural Resources Centre (ARC) of EU. Since the CMRT courses will not be a part of the normal EU courses, they will not be bound by university regulations. Neither will CMRT initially be a part of KARI or CIMMYT normal activities. Nevertheless, the structure, management and policy of the CMRT Project will be in harmony with the Egerton University policy as viewed by the Senate and Council. An ad-hoc committee (AHC) was constituted to develop this CMRT project. It is composed of two KARI staff, two EU staff (one of them being the Senior Assistant Registrar A&R) and two CIMMYT staff.

A nine-member Project Management Committee (PMC) will be responsible for the running of the project in terms of policies and administration. Technical leadership will be provided initially by CIMMYT personnel. The project operational funds will be administered by CIMMYT until this International Center phases out the CMRT Project. The USAID/KENYA funds for infrastructural development, will be administered by the ARC of EU.

ORGANIZATIONAL STRUCTURE OF THE CROP MANAGEMENT RESEARCH TRAINING PROJECT (CMRT).



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The PMC will be constituted with an equal representation from KARI, EU and CIMMYT (two members from each institution), plus one senior officer representing each of the Ministries of Research, Science and Technology; Education; and Agriculture. These three last members will be ex-officio. Donors will be represented by observers.

The PMC will be nominated and structured as soon as the project is funded (end of February 1990), and preferably will be chaired by the representative of the Ministry of Agriculture. Each institution represented on the PMC will have one vote, except that the Chairman will vote only to break a tie.

The function of the PMC will be to oversee the implementation of the project proposal and implement modifications recommended by a Project Technical Advisory Committee (PTAC) and review panels. The Project Technical Advisory Committee (PTAC) will be appointed as soon as a working agreement is signed by the three institutions involved, and will be composed of:

- Deputy Director (Crops) KARI
- Head, Department of Agronomy, EU
- 1 representative of CIMMYT regional program in Eastern Africa
- The training coordinator

The function of the PTAC will be to review the training plans, their execution, and recommend pertinent modifications of a technical nature and so advise the PMC.

Day-to-day management of the project will be under the leadership of a Project Coordinator who, initially, will be one of the CIMMYT training staff. There will also be a CMRT project Administrative Manager to assist the technical training staff. The functions of the training coordinator will be:

- coordinate all training activities
- to oversee financial management
- to liase with the PMC, PTAC, donors EU, KARI, CIMMYT other IARCs and NARS.

b) Regional nature and sustainability of the Project

The project will not only serve the training needs of Kenya but the training of participants from Eastern and Southern Africa as well. As soon as it starts operating, CIMMYT will no longer accept in-service CMR trainees from Eastern and Southern Africa in the CMR courses offered in Mexico.

The courses should be self-financing in that the fees charged should cover the total recurrent costs involved, including those for operation and administration of the project. Regional involvement should be encouraged to sustain the project, anticipating that the training costs of the trainees from the region should be met by international sponsoring agencies and/or the NARS. Back-up funds to cover future operational costs will have to be built up through contributions from a wide spectrum of donors through fellowships to participants.

Sustainability will also be secured by selecting the staff very carefully, in terms of skills, knowledge, experience, attitude and commitment, so that the standard of training in the CMRT courses can be maintained. A high level of managerial skills in the key technical and administrative personnel is a must. It is also necessary that national trainers phase into project responsibilities as early as possible. The project should and must evolve to become an integral part of EU and KARI in-service training and research activities.

An on-going in-service CMRT capability will largely depend on the prestige attained by the project in the region and the high standards demanded in selecting the potential training candidates.

Sustainability will also depend on good promotion of the program in the region, which again will depend on the excellence of the program in producing highly qualified trained scientists who effectively apply their newly acquired skills on returning to their national programs. High quality training materials will also help.

Finally, annual and mid-term reviews and consequent adjustments and fine-tuning, should help ensure the devolution and continuity of the program.

c) Course management.

During the five years of operation of the CMRT project, the management of the courses will be CIMMYT's responsibility, with the support of the Project Management Committee and the Project Technical Advisory Committee (PTAC).

A mid-term review should be conducted by an external review team comprised of three members, one appointed by each of the participating institutions, plus donors' representatives. The findings of the external review team will then be analyzed by the PTAC and PMC and appropriate action taken. The timing of the mid-term review should be at the end of the second CMRT course. By the time of the mid-term review, a joint coordinator should be selected from

the 4 (Egerton/KARI) trainers who will gradually take over the coordinating function. CIMMYT could phase out of the project earlier depending on the outcome of the project annual reviews conducted by the PTAC.

d). Selection of technical and administrative staff.

Technical staff:

As stated before, it is proposed that each one of the three participating institutions, KARI, EU and CIMMYT, provide 2 trainers each. All trainers will be jointly selected by KARI, EU and CIMMYT. All technical staff will abide by the employment conditions of their respective institutions.

At least one of CIMMYT's trainers will be thoroughly grounded in On-Farm Research with a Farming System Perspective (OFR/FSP) with training in agronomy. KARI and EU trainers should be nominated not later than January 1990 for training at CIMMYT, Mexico. The best period for this training appears to be March 1 - October 26, 1990. In this way, the Kenyan trainers can go through one regular CMR course in maize production research, followed by assisting CIMMYT Mexico-based training staff in the preparation and execution of an advanced 6-7 week course in maize experimentation planned by CIMMYT for September-October, 1990. Between these courses, they will also interact with CIMMYT's experiment stations operations and with the research programs. The training of these trainers will not take more than 6 to 8 months for each individual.

During the off-season, time permitting, and once the project is operating, KARI and EU trainers might take responsibilities additional to CMRT. However, there will always be training materials to be prepared so diversion of their time from CMRT activities should be considered with caution.

Resource people from KARI, EU, CIMMYT, other NARS from the region and other IARCs will be invited on a short-term basis to participate in teaching CMRT, thus creating a regional pool of resource people to support the project. This is considered to be vital in terms of sustainability and regionality of the project.

Support staff.

The project will require the following support staff (all Kenyan) appointed by the CMRT Project, but payroll and benefits operations will be administered by the ARC of EU at cost:

- 1 Administrative Manager
- 1 Training Assistant (Diploma holder)
- 2 Secretaries
- 2 Drivers (with licence to drive buses)

- 1 Field labourer
- 1 Office messenger

The Administrative Manager will report to the Project Coordinator and his functions will be:

- Supervision of:
 - a) Administrative and financial activities of the CMRT Project which will have an independent bank account.
 - b) Maintenance of offices, vehicles and equipment and their inventory
 - c) Local purchases of goods and services
- Recruitment, deployment and supervision of project support staff
- Liaison with the ARC of EU

The Training Assistant will report to the Project Coordinator and his functions will be:

- Day-to-day preparation of materials and equipment for training in the classroom, laboratory and field
- Maintenance of project training equipment

The staffing pattern assumes that EU through ARC will provide dormitory and food services for the trainees and short-term trainers in the same manner as for other ARC visitors, so that additional project staff will not be needed for these services. Charges for these services will be at the standard ARC rates.

5. OUTPUTS FROM THE PROJECT.

The expected major outcome of the project is the development of a sustainable institutional capacity for regional in-service training in CMR which will increase the quality, relevance and effectiveness of crop management research and its outreach activities in participating countries of Eastern and Southern Africa.

During the first five years of the project, the outputs will be:

a) CMRT with a primary focus on maize- and wheat-based systems will be established at Egerton University, Njoro, Kenya, as a regular part of their agricultural sector assistance programmes using both formal and on-farm training methodologies in research.

b) Training materials will be developed for use by Egerton University and the collaborating NARS in the region.

c) Approximately 150 research and extension personnel will be trained in CMR during the major courses.

In addition, the facilities for this project will be available for use by CIMMYT and other IARCs active in the region (CIAT, CIP, IBPGR etc.) for short-term courses during the CMRT's "off-season". If 5-7 such short courses were conducted each year, with an enrollment averaging 25-30 persons, this would mean the professional upgrading of 625-1000 individuals in specific crop production and research activities.

d) An additional output of the project will be about 25 graduate theses supervised by CMRT instructional staff.

e) Four experienced trainers (2 from Egerton University and 2 from KARI) well-versed in CMR. At the end of the first 5-year phase of the project, the 4 trainers from KARI and Egerton should be fully prepared and experienced in in-service CMRT in order to continue the training at Egerton University. It is planned that these activities will continue at the same level, with CIMMYT regional staff providing essential backstopping.

6. INPUTS TO THE PROJECT

The major inputs from the participating institutions will be:

1.-Egerton University

-2 full time CMR trainers including their salaries and benefits, with increasing management and training responsibilities.

- Visiting lecturers on specific subjects

- Project facilities:

Classroom/office complex consisting of:

	<u>Area m²</u>
. 2 classrooms	170
. 1 computer room	40
. 1 Training storage and document assembling room	30
. 12 offices for trainers, administrators, secretaries	150
. 1 files and storage room	15
. 1 Library	30
. 1 Audio-visual room	35
. 1 Gents and Ladies toilets	30

Total	500

- Laboratory complex

- Dormitory complex consisting of:

. 1500 m² building (30 self contained rooms, and dining/recreation facilities)

. 60 m² total for 3 efficiency apartments for

- short-term visiting lecturers
- . 720 m² total for 6 apartments for the trainers and their families.
- Existing campus facilities at EU:
 - Experiment station land
 - ARC restaurant/cafeteria, classrooms, meeting rooms, leisure facilities
 - Library, medical and hospital facilities, bookstore, sports and recreation, etc.
- Services at cost:
 - Maintenance of all project facilities including vehicles and equipment
 - Land preparation for conducting experiments, and field operators
 - Accommodation of trainees and trainers (at standard charges).
 - Payroll and benefit operations for support staff
- Logistical and administrative support

b) KARI.

- 2 full-time training officers including their salaries and benefits with increasing management and training responsibilities
- Visiting lecturers from the institution
- Training funds for KARI participants
- Search for new funding sources
- Training materials
- Genetic materials

c) CIMMYT.

- Coordination and management of the courses
- 2 full-time training officers (one of them will also act as project coordinator)
- Part-time of one regional economist based in Nairobi funded from other sources.
- Management of technical assistance and operational funds
- Training of 2 training officers from EU and 2 from KARI in Mexico for a period of 6-8 months
- 3 week consultancy by senior CIMMYT CMRT specialist for project proposal preparation.
- Backstopping support
- Visiting lecturers
- Assistance in the procurement of equipment, vehicles audio-visual aids, computers, etc.
- Training materials already available in the region and at CIMMYT Headquarters
- Development of new training materials as needed
- Search for sources of funding
- Genetic materials .

NOTE: all the above CIMMYT inputs will be funded by donors.

d) KARI-EU-CIMMYT, jointly

- Setting the policies and management of the project through the PMC and the PTAC
- Joint selection of the trainers
- Selection of participants

e) Donors

- Funds for setting up the infrastructure at Egerton: Dormitories for 30 trainees, 6 apartments for the trainers, 3 Short-term visitors efficiency apts., classrooms, offices and laboratories, and furnishings and equipment for the above
- Funds to cover the cost of 30 fellowships per year
- Operational funds for office and field operations, including support staff costs
- Vehicles (buses, field vehicles, cars and motor-cycles) for operation of the project, as budgeted
- Funding of CIMMYT inputs as stated above

f) Other IARCs

- Other courses in CMR, according to mandates of IARC
- Trainers
- Visiting lecturers
- Fellowships and selection of trainees
- Training materials
- Genetic materials

g) NARS

- Search for sources of funding for their participants, aided by CIMMYT and other IARCs, if necessary
- Proposals of candidates for training
- Provision of adequate job positions for returning training participants in the area of specialization in which they have been trained.
- Visiting lecturers.
- Eventual visit to their programs of training participants from other NARS when considered beneficial by the CMRT staff to complement their training
- Participation in mid-term review and PTAC on the request of the parties involved.

7. PROFILE OF A TYPICAL TRAINEE

- a) National of country of Eastern and Southern Africa
- b) B.Sc. degree holder or equivalent, preferably in agricultural subjects
- c) English proficient
- d) Aged 22-40 years

- e) Employee of National Agricultural Research Institute or National Extension Service or similar parastatal bodies. Occasionally may be from private sector organization.
- f) Assurance from parent organization of continued activity in CMR upon the completion of training.
- g) Nominated by national government in most cases.

8. CROP MANAGEMENT RESEARCH TRAINING COURSE TIMETABLE

It is expected that the first course will concentrate on Maize CMR only, both as a single crop and as a part of a multiple cropping system common in the vicinity of EU, in which maize is grown in association with beans.

This first course will have an 8-month duration, starting the first week of March, 1991 and ending the last week of October of the same year. These dates are tentative and might be slightly adjusted as soon as the cropping systems used by the farmers in the vicinity of EU are observed in more detail through surveys and/or existing data, confirming that it is possible to obtain a normal crop of maize within the stated time-frame. It must also be considered that some time will be required at the onset of the course for the planning and preparation of the trials, and another period of time following harvest, in which the data must be analysed and interpreted and used in the planning of the following cycle's OFR activities.

Hopefully, from the second cycle onwards, beans and possibly wheat will be added to the course curriculum but, being shorter season crops, their inclusion will not affect the course dates.

9. COURSE CURRICULUM FOR THE 1991 MAIZE TRAINING CYCLE

The courses will follow, as much as possible, the model developed by CIMMYT for CMRT with the corresponding adjustments which are necessary for adapting course content to the circumstances of client Eastern African countries. This means that the courses must emphasize the principle of "hands-on-training", devoting not less than 50% of the time to field and lab activities. The remainder will be taken up by classroom activities that supplement practical experience with the corresponding relevant scientific knowledge. A large amount of fieldwork will show trainees the practical application of the scientific theory. They will also learn and appreciate the dignity of fieldwork and the satisfaction and pride that comes with completing an important task, especially if the instructors participate actively in all the field operations. Thus, to maintain the practical nature of the course, a total commitment to the project is required by EU, KARI, CIMMYT and the trainers.

In other words, the main CMRT program traits must be:

- Learning-by-doing
- Emphasis on finding short-term sustainable solutions to farmers production problems.
- A commodity-based research focus, which should take into account other crops which are normally grown in association with maize. Wheat is normally grown as a sole crop in the region by both large- and small-scale farmers. The wheat component of this CMRT will concentrate on technology for small-scale farmers.

In defining the course content in general terms, the current CMRT Project took into consideration the long experience attained at CIMMYT in the in-service training courses offered at headquarters in Mexico, plus the vast experience from in-country training activities performed by CIMMYT's regional programs.

Added to this, are the results of surveys of former trainees who expressed their opinions about the structure and contents of courses in which they had participated. Their reactions were considered in terms of the level of difficulty at which the subjects were presented, appropriateness of the subjects, balance between classroom and field and laboratory activities, and the degree of adoption by them of the philosophy which underlies CIMMYT's approach towards research and agricultural development.

The curriculum has been designed to fulfil the objectives of the CMRT course which are:

a) To develop the participants' skills, capacities and confidence, so that they will become well-suited to undertake farmer-oriented, applied research projects in their respective countries. Trainees will have an adequate understanding of the crop and its environment to recognize and prioritize production problems in the field.

b) To become familiar with the research process on experiment stations and on farmers' fields, for special emphasis will be placed on OFR. Trainees will acquire knowledge of experimental techniques to allow them to design, execute and analyse experiments and interpret results.

c) To gain competence in the application of microeconomic tools to understand farmers' circumstances.

The completion of the above will enable the participants to organize and conduct efficient CMR programs directed at solving the main production problems faced by the farmers under their own circumstances, in their respective countries or regions. These goals should be possible since the participants will possess the ability to:

- diagnose field problems
- propose suitable solutions for solving them, and
- verify technology by field experimentation, evaluate their agronomic and economic feasibility and extend those found to be suitable.

The course will tentatively consist of 34 weeks, totalling about 170 working days. It is recommended that roughly 50% of the time, that is 85 days, be committed to classroom teaching activities and laboratory work and that the remaining 85 be dedicated to field work.

The classroom conferences will ensure a good scientific base, whereas a large amount of practical field and laboratory work will show the trainees the practical application of the scientific theory being taught to them. The curriculum stated below is of a tentative nature only, as adjustments are expected through a revision process by the interested parties.

10. GENERAL SUBJECTS AND ACTIVITIES AND TIME ALLOCATION

A. Field Activities

	<u>NO. DAYS</u>
- Diagnosis, Surveys	13
- On-Farm Research Experiments*	30
- On-Station Experiments (OSR)	8
- Visit to other programs' experiments	5
- Case studies in farmers fields	10
To be further programmed	19
Total	85

B. Lecturers**, Laboratory, Study Sessions and Miscellaneous Activities

	<u>HOURS</u>
- SOILS:	30
. Soils of Eastern and Southern Africa	
. Physical properties	
. Chemical properties	
. Evaluation of soil fertility	
. Management in relation to maize as monocrop and in multiple cropping systems	
. Management for sustainability of production	
- THE MAIZE PLANT:	35
. Botanical description	
. Variability in maize: plant and grain types	
. Climatic requirements	
. Stages of growth and development	
. Physiological aspects of maize growth, development and production	
. Environmental and management effects on growth, development and production	
. Corn production techniques	

* Trainees will plant, manage and harvest a sizable number of experiments in farmers' fields, ranging from exploratory trials designed to investigate technologies aimed at solving the main production constraints, to experiments designed to verify the validity and acceptance of improved technologies for making recommendations.

** All topics refer to maize and crops grown in association with it. Relatively small adjustments to the contents will have to be made as other crop species are included in the curriculum.

- WEEDS: 20
 - . Biology
 - . Identification
 - . Control Methods in monocropping and intercropping
 - . Design of weed control experiments

- DISEASES AND INSECTS: 20
 - . Identification of important diseases and insects
 - . Damage and losses caused by diseases and insects
 - . Methods of control.
 - . Design of disease and insect control experiments

- STATISTICS & EXPERIMENTAL DESIGN: 50
 - . Basic concepts
 - . Statistical hypotheses
 - . Experimental Designs and Analyses
 - . Tests of Significance and mean separation
 - . Factorial Experiments and interactions
 - . Across Locations/years analyses for various designs
 - . Regression Analysis
 - . Yield stability analysis
 - . Interpretation of results

- USE OF MICROCOMPUTERS (PC): 40
 - . Getting acquainted with computers
 - . Learning basics of disk operating systems
 - . Use of statistical software and spreadsheet
 - . Word processing

- ECONOMICS: 50
 - . Farmers' circumstances
 - . Analysis and interpretation of secondary data
 - . Data Collection Methods
 - . Informal and formal surveys
 - . Analysis and interpretation of survey data
 - . Economic analysis interpretation of experimental results

- CROPPING SYSTEMS: 15
 - . Maize-based cropping systems
 - . Socio-economic factors
 - . Competition and complementarity

- SEEDS AND GRAINS:	15
. Maize production statistics in Eastern and Southern Africa	
. Cultivars for Eastern and Southern Africa	
. Seed production and seed quality	
. Storage and losses in storage	
- FARM EQUIPMENT:	40
. Calibration	
. Use and practice including maintenance	
. Planning equipment needs and specifications	
. Small-scale and large-scale equipment	
- PREPARATION OF FIELD EXPERIMENTS:	40
. Design	
. Field books	
. Seed and other input preparation	
. Logistics in OSR and OFR	
- DISCUSSIONS ON FIELD EXPERIMENTS:	25
. Observations and data to be collected	
. Progressive study and analysis of results	
. Planning following visits	
. Planning of future experiments	
- SEMINARS:	40
. Presented by trainees on their countries and/or special topics	
- STUDY SESSIONS	100
. Directed and supervised	
. Homework assignments	
- MISCELLANEOUS ACTIVITIES:	75
. Registration	
. Welcome to participants	
. Administrative matters	
. Preliminary and final evaluation tests	
. Orientation to life at EU	
. Other (to be programmed)	
TOTAL	520 hr or 85 days

IN-SERVICE TRAINING IN CROP MANAGEMENT RESEARCH KENYA AND EASTERN AFRICA
PROJECT INVOLVING EGERTON UNIVERSITY, KARI, CIMMYT

	FIVE YEAR BUDGET ('000 DOLLARS)*					TOTAL
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	
	1990/91	1991/92	1992/93	1993/94	1994/95	
TRAINING KARI TRAINERS 2 PERSONS X 250 DAYS X \$60/DAY/PERSON + AIRFARE + 4 DAYS IN TRANSIT PER DIEM	36	-	-	-	-	36
TRAINING EGERTON UNIV. TRAINERS 2 PERSONS X 250 DAYSAYS X \$60/DAY/PERSON + AIRFARE + 4 DAYS IN TRANSIT PER DIEM	36	-	-	-	-	36
OPERATIONAL FUNDS (OFFICE) INCL. STAFF	80	84	88	93	97	442
OPERATIONAL FUNDS (FIELD) INCL. STAFF	60	63	66	70	73	332
STAFF VEHICLES	40	-	-	-	-	40
PROJECT VEHICLES	55	-	-	-	70	125
BUS (35-SEATER)	100	-	110	-	120	330
MOTORCYCLE	3	-	-	-	3	6
FIELD IMPLEMENTS AND EQUIPMENT	100	-	-	-	125	225
OFFICE, LABORATORY & TRAINING EQUIPMENT	165	-	-	-	200	365
TRAINING OFFICES/CLASSROOM FURNITURE & CURTAINS	35	5	-	-	5	45
FELLOWSHIPS (7 PER YEAR)	70	73	77	81	85	386

OVERHEAD	117	34	51	37	117	356
=====						
TOTAL	897	259	392	281	895	2,724
=====						

*This budget does not include technical assistance costs which are presently being negotiated

Footnotes to Budget:

1. Training for 4 trainers at CIMMYT HQ - 1 cycle of Maize Production training plus time to review the total CIMMYT research program and experiment station operations followed by participation in training during a more advanced short course in maize experimentation.
2. Large budget request for fifth year of project to ensure that the activities are sustainable by replacing most of equipment and vehicles.
3. Staff vehicles - 2 for CIMMYT staff in first year.
4. Project vehicles - 3 in first year, 3 in fifth year.
5. Buses - 1 in first, third and fifth years.
6. Motorcycles - 1 in first year and 1 in fifth year.
7. Field implements and equipment - list being prepared
8. Office, laboratory equipment - list being prepared
9. Fellowships - Fellowships included here for about 7 trainees from the region each year. Each fellowship for 8-month course valued at \$10,000 initially. Fellowships for other trainees to come from other sources outside immediate project funding. Possible sources include IDRC, IARCs through regional projects.
10. In budgetary projections an annual inflation rate of 5% was used with appropriate rounding.
11. No contingency funds are requested except in fellowships where a contingency line was included to help build-up future operating funds with a view to sustainability of the project (see the breakdown of costs covered by fellowships).

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Budget per Trainee (for 8 month cycle)

	<u>US\$</u>
International Travel	400
International per diem	100
Visits to other programs (7 days x 100)	700
Visits to other programs (extra airfare)	100
Pre-travel expenses (home country)	100
Medical Insurance and life insurance	400
Technical books	250
Photocopying study materials	150
Calculator	100
Photocopying materials selected by trainee	100
Stipend	800
Hostel charges and food	6,000
Travel per diem (in Kenya) 30 nights US\$10	300
Contingencies and fund build-up	500

Total	US\$ <u>10,000</u>

12 GLOSSARY OF ACRONYMS AND ABBREVIATIONS

ARC	Agricultural Resources Centre, Egerton University
CGIAR	Consultative Group for International Agricultural Research
CIAT	International Center for Tropical Agriculture (Centro Internacional de Agricultura Tropical)
CIMMYT	International Maize and Wheat Improvement Center (Centro Internacional de Mejoramiento de Maiz y Trigo)
CIP	International Potato Center (Centro Internacional de la Papa)
CMR	Crop Management Research
CMRT	Crop Management Research Training
EU	Egerton University (Kenya)
FSP	Farming Systems Perspective
FSR	Farming Systems Research
IARCs	International Agricultural Research Centres
IBPGR	International Board for Plant Genetic Resources
ICRISAT	International Center for Research in the Semi-Arid Tropics
IITA	International Institute of Tropical Agriculture
KARI	Kenya Agricultural Research Institute
KEC	KARI/Egerton/CIMMYT
NARP	National Agricultural Research Project (KARI, Kenya)
NARS	National Agricultural Research Systems
NRC	National Research Centers (KARI)
OFR	On-Farm Research

OSR On-Station Research
 PMC Project Management Committee (KEC Project)
 PTAC Project Technical Advisory Committee, KEC,
 Project
 RRC Regional Research Centers (KARI)
 TAC Technical Advisory Committee, in CGIAR System
 USAID US Agency for International Development
 USAID (KENYA) USAID Kenya Mission
 USAID-REDSO/ESA USAID Regional Economic Development
 Services Office for East and Southern
 Africa

13. TIME TABLE FOR VARIOUS EVENTS

- a) Agreement should be entered into by 31st January 1990 between:-
- CIMMYT and Egerton University
 - Egerton University - USAID
 - Egerton University - KARI
- b) Project proposal: was to be prepared by CIMMYT and be ready by end of August, 1989.
- The inputs by Egerton University, CIMMYT and KARI should be worked out as soon as the project has preliminary approval from the sponsor.
 - Budget for physical facilities should be worked out by Egerton University immediately.
- c) Discussions of the proposal by representatives of Egerton, CIMMYT and KARI should be carried out by last week of September, 1989.
- d) The proposal should be forwarded to the Donors by the first week of October, 1989.
- e) Suggested plan of action towards approval:
- Document should be received by end of August, 1989
 - Discussion by first week of September (7th Sept 1989)
 - Presentation to Egerton University Planning Committee be done by 29th September, 1989.
- f) Nomination of the nine-member Project Management Committee (PMC), not later than end of February 1990, or as soon as the project is funded.

- g) Appointment by KARI and EU of 2 trainees each, not later than January 1990, or as soon as a working agreement is signed by KARI, EU and CIMMYT.
- h) Training at CIMMYT, Mexico, of the above 4 trainers, scheduled to start March 5, 1990 and end October 26, 1990.
- i) Nomination of KARI and NARS training participants should be completed not later than December 1990.
- j) Course initiation: first week of March, 1991.



CENTRO INTERNACIONAL DE MEJORAMIENTO DE MAIZ Y TRIGO

INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER

P.O. Box 25171
NAIROBI, KENYA

25 August, 1989

USAID - Kenya
Union Towers
Nairobi

for attention of: Dr Maria Mullei

Dear Dr Mullei,

Following our several telephone conversations on Wednesday August 23, 1989, we have pleasure in enclosing a copy of a telex received this morning from Dr Donald L. Winkelmann, Director-General, CIMMYT concerning the CIMMYT commitment to the CMRT Project.

Also enclosed are 4 more copies of the draft project proposal document as requested.

With best regards,

Yours sincerely,

P. Anandajayasekeram
Regional Liaison Officer

A.F.E. Palmer
Regional Maize Agronomist

Encls:



Centro Internacional de Mejoramiento de Maíz y Trigo
International Maize and Wheat Improvement Center
Apdo. Postal 6-641, 06600 México, D.F., México

August 23, 1989.

Dr. A. F. E. Palmer
P. O. Box 25171
Nairobi, Kenya

RECEIVED

25 AUG 1989

CIMMYT NAIROBI

A. F. E. Palmer

Dear Fred:

With respect to your FAX of 22Aug know that CIMMYT and CGIAR System regard the Kenya based CMRT project highly. CIMMYT will work assiduously to account for roughly 1. million dollars of the five year budget, including efforts to gain support from specific donors. While it is not immediately evident how we will do that, you may assure relevant parties of our commitment to the project. Know that several of us will be in Kenya in mid-September and expect to discuss the project throughly with all involved at that time.

Sincerely yours,

Donald L. Winkelmann

Donald L. Winkelmann
Director General

DR MARIA MULLEN
USAID (K)

25.08 00:47

22040 ILRAD

FROM : 157:CGI201
RECIPIENT : 98722040

TEXT:

ATTN: FRED PALMER, OUTREACH STAFF
CIMMYT REGIONAL PROGRAM
FROM: DEPARTAMENTO TELECOMUNICACIONES,
CIMMYT

DATE: 24-AUG-1989 09:25:32
REF: CIM-EXP-24AUG89-TE01

TELEX : 0234900005787 CIM UI OR 1772023 CIMTME

SUBJECT: MESSAGE FROM DR. D. WINKELMANN
(24AUG0001)

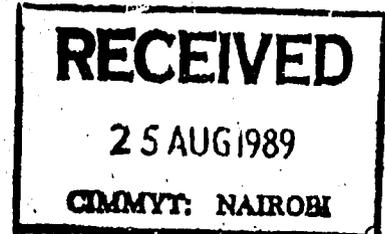
TO: DR. A. F. E. PALMER

DEAR FRED:

WITH RESPECT TO YOUR FAX OF 22AUG KNOW THAT CIMMYT AND
CGIAR SYSTEM REGARD THE KENYA BASED CMRT PROJECT HIGHLY.
CIMMYT WILL WORK ASSIDUOUSLY TO ACCOUNT FOR ROUGHLY 1.
MILLION DOLLARS OF THE FIVE YEAR BUDGET, INCLUDING EFFORTS
TO GAIN SUPPORT FROM SPECIFIC DONORS. WHILE IT IS NOT
IMMEDIATELY EVIDENT HOW WE WILL DO THAT, YOU MAY ASSURE
RELEVANT PARTIES OF OUR COMMITMENT TO PROJECT. KNOW
THAT SEVERAL OF US WILL BE IN KENYA IN MID-SEPTEMBER AND
EXPECT TO DISCUSS THE PROJECT THROUGHLY WITH ALL INVOLVED AT
THAT TIME.

SINCERELY YOURS,

DONALD L. WINKELMANN
DIRECTOR GENERAL



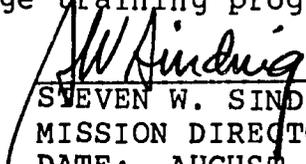
A. F. E. Palmer

Institutional Development for Agricultural
Training (IDAT)
615-0239

Project Paper Amendment 3
FAA Section 611(e) Certification

As the principal officer of the Agency for International Development in the Republic of Kenya, having taken into account the maintenance and utilization of project capital assistance in Kenya previously financed by the United States, particularly the Agricultural Systems Support Project which financed over \$23 million in capital investment at Egerton University, between 1978 and 1985, I hereby certify that in my judgment the Government of Kenya has the financial and human resource capability to maintain and utilize effectively the capital assistance to be carried out under this project. In making this determination, I am taking into account Egerton University's exemplary record of planning, budgeting for and carrying out necessary maintenance on the existing physical facilities and the proven ability of Egerton, CIMMYT and KARI to manage training programs.

SIGNED:


STEVEN W. SINDING
MISSION DIRECTOR
DATE: AUGUST 30, 1989

0391G

Summary of CIMMYT/CMRT Project Costs (\$000)

(five years)

<u>Component</u>	<u>CIMMYT</u>	<u>KARI</u>	<u>Egerton</u>	<u>Total</u>
Technical Assistance	1,587			1,587
Training	527	1,150	1,000	2,677
Construction			82	82
Commodities	1,306		79	1,385
Operation & Maintenance	890		1,000	1,890
Local Personnel		107	1,500	1,607
Total	4,310	1,257	3,661	9,228