

I. PROJECT IDENTIFICATION

PROJECT TITLE: Assistance in Economic Fertilizer Use for Small Farmers

APPENDIX ATTACHED: YES NO

2. PROJECT NO. (M.O. 1093.2): ~~59815 995-476~~

RECIPIENT (specify): 598-13-120-001

4. LIFE OF PROJECT: BEGINS FY 1975, ENDS FY 1980

5. SUBMISSION: ORIGINAL (9/19/74), REV. NO. DATE

REGIONAL IA/DR INTERREGIONAL

II. FUNDING (\$000) AND MAN MONTHS (MM) REQUIREMENTS

A. FUNDING BY FISCAL YEAR	D. TOTAL \$	C. PERSONNEL		D. PARTICIPANTS		E. COMMODITIES \$	F. OTHER COSTS \$	G. PASA/CONTR.		H. LOCAL EXCHANGE CURRENCY RATE \$ US (U.S. OWNED)		
		(1) \$	(2) MM	(1) \$	(2) MM			(1) \$	(2) MM	(1) U.S. GRANT LOAN	(2) COOP COUNTRY (A) JOINT (B) BUDGET	
PRIOR THRU ACTUAL FY	262.6	104.4	51	-	-	32.0	52.7					
OPRH FY 75	262.6	104.4	51	-	-	32.0	52.7					
BUDGET * FY 76	410.7	138.1	120	-	-	3.0	71.5					
BUDGET +1 FY												
BUDGET +2 FY												
BUDGET +3 FY												
ALL SUBQ. FY												
GRAND TOTAL												

I. OTHER DONOR CONTRIBUTIONS

A) NAME OF DONOR	(B) KIND OF GOODS/SERVICES	(C) AMOUNT

III. ORIGINATING OFFICE CLEARANCE

DRAFTER: Charles A. Breitenbach, TITLE: Regional RDO, IA/DR/RD, DATE: 10/16/74

CLEARANCE OFFICER: Carl F. van Haeften, TITLE: Chief, Rural Development Division, DATE: 10/16/74

IV. PROJECT AUTHORIZATION

1. CONDITIONS OF APPROVAL

The funding requirements projected above are for the entire cost of project activities other than those in the Central American region. The latter activities are to be funded by POCAP under a task order to start on January 1, 1975, the date of initiation of this project.

* It is expected that by 7/1/75 it should be possible to have completed specific task orders with most of the USAID Missions to which the project will be extending assistance. As a consequence in FY 76 the actual funding required from the IA Bureau will be less than the budget projected (a total of \$410.7). The Bureau's share will be \$410.7 less the value of the task orders signed.

2. CLEARANCES

BUR/OFF.	SIGNATURE	DATE	BUR/OFF	SIGNATURE	DATE

3. APPROVAL AAS OR OFFICE DIRECTORS

SIGNATURE: _____ DATE: _____

TITLE: _____

4. APPROVAL A/ID (See M.O. 1025.1 VI C)

SIGNATURE: _____ DATE: _____

ADMINISTRATOR, AGENCY FOR INTERNATIONAL DEVELOPMENT

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Annex I - The Core Budget

Assistance in Economic Fertilizer Use for Small Farmers

I. Introduction

A. History of the Project

A major part of the project now entitled, "The Evaluation and Improvement of Soil Fertility in Latin America" (AID/la-646), began in June 1963 under a worldwide contract with North Carolina State University (NCSU) titled, "The Fertilizer Requirements of Countries of Latin America" (AID/csd-287). The original project was terminated on June 30, 1970. It was replaced by two new projects with NCSU initiated in January of 1970 with a six month overlap between the old and the new. These projects are first, a continuation of the old project which is regional in scope (AID/la-646) and is administered in the Latin America Bureau, and second, a research project titled, "Agronomic-Economic Research on Tropical Soils" (AID/csd-2806). Its purpose is to investigate means of bringing soils considered difficult to manage into production. AID csd-2806 is administered by the Technical Assistance Bureau.

The Latin America Bureau project contract (AID/la-646) is designed to develop competence in the evaluation of soil fertility problems through laboratory soils analyses and fertilizer utilization trials. The contract has been in operation in eight countries: Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panama, Ecuador, and Brazil and has four full-time technicians working in these eight countries. These technicians plus specialists from the NCSU campus have also influenced soil fertility programs in many countries not now directly associated with the program.

Until now normal operating procedure has been for the contract technicians to advise and assist the local personnel in the organization of a soil testing laboratory for the analysis of soil samples and in the proper development of fertilizer recommendations. There has been little effort to enact an outreach program to make use of these recommendations on large numbers of host country farms. The only major inputs provided by the project have been the services and support of the contract technicians and in some cases basic high-speed laboratory equipment for installation in the soils laboratories.

B. Findings of Project Review

Two evaluations of the NCSU contract (AID/la-646) have been completed, the first in April of 1973 and the second in February 1974. Both were unanimous in their findings that the program was successfully meeting the requirements of the NCSU contract, i.e. to establish a soils analysis and fertilizer recommendation capability in each participating country. The value of the soil fertility program has also been demonstrated by the large number of host governments who wish to continue ongoing projects or start new ones.

A major concern of the 1974 project evaluation was its finding that in most countries the work continued to be oriented towards the development and perfection of laboratory facilities for soils analysis. Although the project's recommendations for the use of fertilizers and soil amendment practices have helped increase both the yields and economic production of a number of crops, i.e. grains in Central America, potatoes in Ecuador, and horticultural crops in Brazil, its benefit has been chiefly to the well-to-do farmer. The latter has the knowledge to make use of the laboratory's recommendations and the capital with which to buy fertilizer and apply the required soil amendment practices.

The review found that the project has had only marginal benefit for small producers. An increased outreach effort with low-income farmers and with credit agencies which lend to the latter was considered necessary to fully utilize the soil fertility capabilities which have been created. The recommendation was made that Contract (AID/1a-646) be terminated and a new project be written to refocus this work. It is for that reason that the present FROP has been written.

C. Present Strategy

The new project will present a change of focus from the old soil fertility evaluation project with ICSU, scheduled to terminate on December 31, 1974. It will be more closely integrated into Mission and host country programs and planning. The use of improved seed, better agronomic practices, and the new technologies developed to increase farm production all require soil fertility evaluation and the use of proper soil amendment practices to achieve their maximum returns.

Recent fertilizer shortages and unstable commodity prices have created a special problem for the small and medium-scale farm producer which this project intends to confront. A special effort will be made to provide benefit/cost analysis information regarding the profitability of using specific soil amendment treatments and application rates on specific crops as the prices of fertilizer change. Information will be disseminated which will benefit the target farmer by reducing risk and increasing the efficiency of the soil amendment technology recommended for him.

The new project will emphasize a strong outreach effort to conduct fertilizer utilization trials and demonstrations on small farm fields. It will provide technical assistance in the use of fertilizer and fertilizer amendment practices to target group farmers. It will work closely with host country institutions supporting small farm credit associations and production cooperatives.

II. Goal

A. Statement of the Goal

To economically increase agricultural production, particularly on small farms, so as to improve the social well-being and income of the rural poor thereby increasing their participation in the national economy.

B. Measurements of Goal Achievements

That the goal is being achieved will be most readily discerned through the records of small farmer credit unions and rural cooperatives.

1. It is anticipated that the demand for rural credit will expand an average of 50% each year among farmers who have had their soils tested and have utilized recommended soil fertility practices until they reach their capacity for effective credit utilization.

2. It is anticipated that default in credit repayment will decrease among borrowers who have applied the fertilizer practices recommended for their conditions while proving to be high among borrowers negligent in the use of recommended practices.

3. Farm family real income should be materially improved on farms where recommended crops and improved seed is used together with new production technology and the approved soil fertility practices for the crop and soil type.

C. Assumptions About Goal Achievement

1. That the soils fertility program will be complemented by other programs with the same goal.

2. That the weather will favor production.

3. That adequate knowledge exists for increasing crop yields by recommended fertilizer practices, in concert with other agronomic technologies, that the practices are economically advantageous and that credit will be available for the purchase of the required inputs.

III. Project Purpose

A. Statement of Purpose

To upgrade within participating countries of Latin America an institutional capacity in soil fertility evaluation, soil response capability, and information dissemination so as to assist low income farmers in the economic use of fertilizers and soil amendment practices.

B. Conditions Expected at End of Project

That the following conditions have been met at the end of the project's activity will be determined in each participating country by a project evaluation review:

1. The demand for the services of the soil laboratories will be at or near capacity level.
2. At least 100 field trials and 200 demonstrations will be run per project soil testing laboratory.
3. As a matter of policy small farmer credit agencies will condition the extension of credit on the utilization of recommended soil amendment practices.
4. On-going working relations will have been established between the soil scientists and the farm credit institutions in each participating country.
5. Each country shall have established its own program to train the types and numbers of soils personnel required to assure the continuity of the program and its outreach assistance to low income farmers.
6. A series of linkages will have been developed between the soil fertility programs of participating countries and the International Research Centers.
7. Farm production will increase substantially on fertilized fields the first year of fertilizer use and will continue to do so in subsequent years until maximum economic returns have been approached.

C. Assumptions About Achievements of Purpose

1. That the host governments of participating countries place a high enough priority on the project to provide adequate numbers of counterpart technicians for in-service training so that an institutional capacity in soils fertility evaluation, recommendations, and technical assistance can be capacitated.
2. That the host governments will backstop their technicians with adequate travel and per diem allowances, vehicles, and commodity requirements.
3. That the soil fertility recommendations will be used by farmers as an integral part of small farm credit loan programs in each participating country.
4. That fertilizers and soil amendments will remain available in adequate supply at prices which prove compensatory for use by the small farmer on specific crops.

IV. Statement of Project Outputs

A. Outputs and Output Indicators

1. At least one functioning soil testing laboratory in each participating country by the end of the first year using standard analysis procedures and capable of running a minimum of 200 farmers' samples per day.

2. At least one operating greenhouse associated with every soil testing laboratory of the end of the first eighteen months capable of running a minimum of 25 soil response capability trials or 500 pot cultures at any one time.

3. By the end of the first year in each participating country, the project will have capacitated through in-service training a minimum of the following types and numbers of personnel each of whom shall be gainfully employed and working with the project:

<u>Professional Occupation</u>	<u>Nos. Persons Capacitated</u>	
	<u>at end 1st yr</u>	<u>in successive yrs</u>
Program Director	1	as required by country
Laboratory Director	1 each per participating lab	One for each new lab
Laboratory Analysts	2 per participating lab	2 for each new lab
Soil Fertility Trial & Demonstration Agents	2	2 for each successive year of project
Change Agents in Soil Fertility	10	10 each 2nd & 3rd yr

4. By end of first year each change agent will have held at least one workshop to inform rural credit agents and field promotion workers about the soils program. After his first year each change agent will hold a minimum of two workshops per year for small farmers.

5. In each participating country a maximum of ten field trials will be planted by the end of the first year and no less than 20 farm demonstrations will be run on target farms by the end of the first year. After his first year, each soil fertility field trial and demonstration agent will run a minimum of 15 field trials and supervise no less than 30 target farm demonstrations.

To assure that the magnitude of outputs projected is actually achieved in any one country will require the continued in-country review and inspection of the USAID Rural Development Officer and the contractor's regional director. This will be formalized each year in an annual contractor's report. After each two years of contract operation, AID/W should conduct a project evaluation review.

B. Assumptions About Achievement of Outputs

1. That there exists capable persons within the country with adequate scientific training to be capacitated for the technical positions in soils analysis and fertilizer response testing.
2. That an adequate field staff can be capacitated quickly, preferably from field promotion workers and that participating farmers will cooperate with them.
3. That once capacitated the trained personnel will be retained in their positions.
4. That viable small farm credit lending associations exist in the participating countries which are so structured as to be able to utilize the soil fertility recommendations of this project.

V. Project Inputs

A. Total Core Budget

It is anticipated that the cost of this project, outside of the Central American region, will be \$2,298,600 for the five years of proposed project activity. After the first six months of project initiation, each USAID Mission should start to pay for the project activities in its country through individual task order arrangements (See Mission Inputs, Section B below).

A budget of \$262,600 in LA Bureau regional grant funds is projected for the initial six months of project activity, January 1, 1975 through June 30, 1975 (FY 75).

A budget of \$410,700 is projected for the seventh through eighteenth months of project activity, July 1, 1975, through June 30, 1976 (FY 76). It will be made up jointly of LA Bureau regional grant funds and Mission grant funds provided under special task order arrangements.

This core budget which excludes the Central American countries will pay for the professional contract staff and the contract consultant provided, the operational costs related to their maintenance, and a small amount of commodities to be used in direct support of the contract's field personnel. No participant training is contemplated under the technical assistance costs of the core budget (See Annex I, The Core Budget).

B. Mission Inputs

USAID Missions in countries participating in the project will be expected to provide logistic support for the economic fertilizer use project. The RDO and his staff will be responsible for periodic reviews of project outputs to assure that these are being achieved in accord with Section IV-A of this PROP. Missions may, at their discretion, provide additional commodities to those indicated in the Core Budget. At the discretion of individual missions participant training may be provided from the respective USAID's training funds.

The entire U.S. contribution for the project in the five Central American republics will be financed under a ROCAP task order, to be written against the proposed new contract. As a consequence, the costs of the Central American operation do not appear in the Core Budget.

As explained in Section VI-A, it is not anticipated that the U.S. contribution for work outside of Central America can be financed under task order agreements for the first 6 months of the new project. Except possibly in those countries considered to be least developed, every effort will be made to assure that each participating USAID or recipient government will be required to pay for the project activities within its country no later than July 1, 1975. Provisions for individual country task orders will be made during the first 6 months of project operation. As a consequence the LA Bureau's share of the proposed core budget for FY 1976 (a total of \$410,700) will be \$410,700 less the sum total value of the task orders signed (see face sheet).

C. Counterpart Inputs from Each Participating Country

1. Personnel Services

Each cooperating host country is expected to provide a minimum of the personnel listed under Section IV, A-3 as counterparts to be capacitated under the contract's regional director and to be responsible for the administrative and operational activities of the individual programs. Certain countries may also reimburse the U.S. Government for the contractor's costs.

2. Training

Each host government will provide the budget required for regional workshops, short and long-term in-country assistance required for those workshops, and the necessary funds for host government personnel to be trained both in the U.S. and in third countries.

3. Commodities

Each host government is expected to provide the necessary equipment and apparatus for the establishment of a minimum of one soils laboratory and the shelf items necessary for its optimum function during and after the project. During the second year each government will provide a greenhouse for pot culture studies. The host governments are expected to provide necessary equipment such as vehicles for the use of their counterpart technicians as well as seed, fertilizer, and other soil amendments and pesticides for field trials and demonstrations. It will also be each host government's responsibility to arrange for the use of target farmers' fields on which to run yield trials and demonstrations.

Most training materials and most operational costs involved in reaching the farmers with new information are expected to be borne by the host government.

4. Other Costs

All costs of host government cooperating technicians including salaries, benefits, in-country travel and per diem, maintenance and operation of vehicles and equipment are expected to be the responsibility of the participating government.

VI. Course of Action

It is intended that this project initiate work at first in four areas of concentration. These are: (1) the Caribbean area, (2) Paraguay and Uruguay, (3) Panama, Ecuador, and (4) Colombia. The Regional Soil Fertility Directors who are to serve these areas will be stationed respectively in Santo Domingo, Asuncion, Quito, and Bogota. In FY 1976 it is anticipated that the Regional Director in Colombia may extend his area of concentration to include either Peru or Bolivia.

During the first six months of project operation it will be necessary to fund the four Regional Directors and a limited amount of commodity assistance out of the Core Budget. When the amount of time the Regional Directors are to spend in each country has been defined, as a result of the program which is developed in each country, it is intended that their work will be funded under specific country task orders as explained in section V-B above. As quickly as possible during the first six months of project operation a procedure will be set up by which to fund the Project Directors proportionately on a country-by-country basis. Only the on-campus expenses of the backstop personnel at Raleigh and possibly some assistance to the least developed countries is expected to continue to receive funding under the core budget.

In the case of the Central American countries assistance will be funded from the start under a task order. This will be possible because in Central America, unlike the other proposed areas of concentration, there exists an institutional arrangement through which to deal with the area on a regional basis, namely ROCAP. As a consequence the Central American program will be funded by ROCAP beginning on Jan. 1, 1975. Therefore it is not included as part of the Core Budget.

Because the different countries to be served under this project will have achieved different levels of capacity in soil fertility evaluation and recommendation the course of action for individual countries will not be defined in the present document. Paraguay, perhaps the least developed country to be served, will have to start with the establishment of a soil testing laboratory. Other countries such as Panama and Ecuador which already have had several years of participation under the terminating soils fertility program should be able to start an outreach program of assistance to small farmers without delay.

Upon arriving at their post of assignment, each Regional Director will have as his first assignment the responsibility of working out with the USAID and the respective host government a phased time plan of the program in each of the countries for which he is to be responsible. These programs are to be completed within the first four months after the Regional Director is assigned in the field and shall be approved by both the country RDOs and Mission Directors and by AID/W.

The purpose of the required plans will be to outline a strategy in each country for providing assistance to an expanding number of small farm credit borrowers in economic fertilizer use and soil amendment practices. An efficient application of soil amendment practices will be the critical factor in the success of new technologies for crop production under present fertilizer shortages and consequent high prices. Thus the plan shall illustrate first the type of information that will be extended to farmers and how it is to be made available. Second it should define the host government organizations within each country, i.e. Ministry of Agriculture, Peace Corps, and rural banks, cooperatives, etc. through whom the project anticipates extending assistance and in each case a plan of work with that organization should be provided. Finally the plan should provide a schedule of the total time which the Project Regional Director will spend in the country and an estimate of the man days of consultant's time requested. This will serve to provide the USAID Mission the information required to write its country task order against the basic contract.

VII. Justification for Continuing the Work Under a Third NCSU Contract

It is recommended that the work contemplated under this PROP not be submitted for public bid. NCSU has demonstrated its capacity to cooperate well with host governments in Latin America. Its technicians have had considerable experience in the region and speak Spanish well. By continuing in this work, they will be able to build on the experience they have acquired already. It would be difficult to achieve the same acceptance as this NCSU contract has earned were a new contractor to be substituted. In addition, a capable backstopping organization has been developed on the NCSU campus through a 211-d grant designated to develop the University's capacity to provide assistance in soils fertility in the Latin American area. It is in AID's interest to make use of that facility.

In view of the above, we consider NCSU to be the best available contractor qualified to undertake the program which this PROP contemplates. It is in the best interest of the U.S. Government to make use of the NCSU facility as it would entail considerable delay and no doubt additional costs to utilize another contractor.

ANNEX 1.

The estimated core budget is presented below:

THE CORE BUDGET

Estimated FY 75 Projected FY 76 Estimated
5 yr. total

MM (\$000) MM (\$000)

Salaries

Contract Total 45 73.5 100 198.1

A. On Campus

Project Director	6	13.5	12	32.1
Laboratory Director	6	11.0	12	26.1
Admin. Asst.	6	5.0	12	11.9
Bilingual Sec.	6	4.0	12	9.2
Bilingual Sec.	6	4.0	12	9.2
Consultants	3	6.0	12	14.4

B. Off Campus

Regional Dir. (Ecuador)	6	10.0	12	23.8
Regional Dir. (S.A.)			12	23.8
Regional Dir. (Paraguay/Uruguay)	6	10.0	12	23.8
Regional Dir. (Santo Domingo)	6	10.0	12	23.8
<u>TOTAL</u>	<u>31</u>	<u>73.5</u>	<u>120</u>	<u>198.1</u>

1047.5

C. Overhead

On Campus (47.01%)	18.0	41.6	222.3
Off Campus (23.50%)	13.0	25.8	139.3

D. Travel and Transportation 46.0 34.3 239.2

E. Allowances 27.4 36.4 204.0

TOTAL 104.4 138.1 801.6

I. Other Direct Costs

Retirement, Comp. Ins.	23.7	40.3	221.8
Out of Pocket	29.0	31.2	173.6
<u>TOTAL</u>	<u>52.7</u>	<u>71.5</u>	<u>395.4</u>

II. Commodities

Lab. & Office Equip. (Para.)	8.0		8.0
4 vehicles (2Eq., 1P, 1D.R.)	24.0		24.0
Lab., Field Equip.		3.0	18.0
<u>TOTAL</u>	<u>32.0</u>	<u>3.0</u>	<u>50.0</u>
<u>TOTAL</u>	<u>262.6</u>	<u>410.7</u>	<u>2298.6</u>

PROJECT DESIGN SUMMARY
 URBAN FRUIT GROWING

EXTENSION OF THE FRUIT TREE
 PROGRAMS IN THE URBAN AREAS
 U. S. DEPARTMENT OF AGRICULTURE
 WASHINGTON, D. C. 20250

Lib. of Project
 From FY 1975 to FY 1980
 Title U. S. Fruit
 Date Revised

Project Title & Number: Extension of Fruit Tree Programs for the Urban Areas

NARRATIVE SUMMARY	OBJECTIVELY MEASURABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p>To substantially increase agricultural production, particularly on small farms, so as to improve the overall well-being and income of the rural poor thereby increasing their participation in the national economy.</p>	<p>Measures of Goal Achievement:</p> <p>1. It is anticipated that the demand for rural credit will expand an average of 50% each year among farmers who have had their soils tested and have utilized recommended soil fertility practices until they reach their capacity for effective credit utilization.</p> <p>2. It is anticipated that demand in credit programs will increase among farmers who have applied the fertilizer practices recommended for their conditions while proving to be high among farmers negligent in the use of recommended practices.</p> <p>3. Farm family and income should be substantially improved on farms where recommended crops and improved seeds are used together with new production technology and the approved soil fertility practices for the crop and soil type.</p>	<p>That the goal is being achieved will be most readily discerned through the records of small farmer credit unions and rural cooperatives.</p>	<p>Assumptions for achieving goal targets:</p> <p>1. That the whole fertilizer program will be complemented by other programs with the same goal.</p> <p>2. That the weather will favor production.</p> <p>3. That adequate knowledge exists for increasing crop yields by recommended fertilizer practices in concert with other agronomic technologies, that the practices are economically advantageous, and that credit will be available for the purchase of the required inputs.</p>

PROJECT DESIGN SUMMARY
LOCAL

Life of Project:
From FY 1975 to FY 1980
Total U.S. Funding _____
Date Prepared: _____

Project Title & Number: Assistance in Economic Fertilizer Use for Small Farmers

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose:</p> <p>To upgrade within participating countries of Latin America an institutional capacity in soil fertility evaluation, soil response capability, and information dissemination so as to assist low income farmers in the economic use of fertilizers and soil amendment practices.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ol style="list-style-type: none"> 1. The demand for the services of the soil laboratories will be at or near capacity level. 2. At least 100 field trials and 200 demonstrations will be run per project soil testing laboratory. 3. As a matter of policy small farmer credit agencies will condition the extension of credit on the utilization of recommended soil amendment practices. 4. On-going working relations will have been established between the soil scientists and the farm credit institutions in each participating country. 5. Each country shall have established its own program to train the types and numbers of soils personnel required to assure the continuity of the program and its outreach assistance to low income farmers. 6. A series of linkages will have been developed between the soil fertility programs of participating countries and the International Research Centers. 7. Farm production will increase substantially on fertilized fields the first year of fertilizer use and will continue to do so in subsequent years until maximum economic returns have been approached. 	<p>That the following conditions have been met at the end of the project's activity will be determined in each participating country by a project evaluation review.</p>	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 1. That the host governments of participating countries place a high enough priority on the project to provide adequate numbers of counterpart technicians for in-service training so that an institutional capacity in soils fertility evaluation, recommendations, and technical assistance can be capacitated. 2. That the host governments will backstop their technicians with adequate travel and per diem allowances, vehicles, and commodity requirements. 3. That the soil fertility recommendations will be used by farmers as an integral part of small farm credit loan programs in each participating country. 4. That fertilizers and soil amendments will remain available in adequate supply at prices which prove compensatory for use by the small farmer on specific crops.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 1975 to FY 1980
Total U.S. Funding _____
Date Prepared: _____

Project Title & Number: Assistance in Economic Fertilizer Use for Small Farmers

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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS		MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																					
<p>Outputs:</p> <p>1. At least one functioning soil testing laboratory in each participating country by the end of the first year using standard analysis procedures and capable of running a minimum of 200 farmers' samples per day.</p> <p>2. At least one operating greenhouse associated with every soil testing laboratory of the end of the first eighteen months capable of running a minimum of 25 soil response capability trials or 500 pot cultures at any one time.</p> <p>3. By the end of the first year in each participating country, the project will have capacitated through in-service training a minimum of the following types and numbers of personnel each of whom shall be gainfully employed and working with the project:</p>	<p>Magnitude of Outputs:</p> <p>Nos. Persons Capacitated</p> <table border="1" data-bbox="567 784 975 1128"> <thead> <tr> <th data-bbox="567 784 756 807"></th> <th data-bbox="567 807 756 831">at end 1st yr</th> <th data-bbox="567 831 975 854">in successive yrs</th> </tr> </thead> <tbody> <tr> <td data-bbox="89 784 567 807"><u>Professional Occupation</u></td> <td></td> <td></td> </tr> <tr> <td data-bbox="89 823 567 854">Program Director</td> <td data-bbox="611 831 631 854">1</td> <td data-bbox="756 831 975 854">as required by country</td> </tr> <tr> <td data-bbox="89 870 567 901">Laboratory Director</td> <td data-bbox="567 878 756 917">1 each per participating lab</td> <td data-bbox="756 878 975 901">1 for ea new lab</td> </tr> <tr> <td data-bbox="89 932 567 964">Laboratory Analysts</td> <td data-bbox="567 940 756 980">2 per participating lab</td> <td data-bbox="756 940 975 964">2 for ea new lab</td> </tr> <tr> <td data-bbox="89 1003 567 1050">Soil Fertility Trial & Demonstration Agents</td> <td data-bbox="611 1011 631 1034">2</td> <td data-bbox="756 1011 975 1058">2 for ea successive yr of project</td> </tr> <tr> <td data-bbox="89 1066 567 1097">Change Agents in Soil Fertility</td> <td data-bbox="611 1074 642 1097">10</td> <td data-bbox="756 1074 975 1121">10 each 2nd & 3rd year</td> </tr> </tbody> </table>			at end 1st yr	in successive yrs	<u>Professional Occupation</u>			Program Director	1	as required by country	Laboratory Director	1 each per participating lab	1 for ea new lab	Laboratory Analysts	2 per participating lab	2 for ea new lab	Soil Fertility Trial & Demonstration Agents	2	2 for ea successive yr of project	Change Agents in Soil Fertility	10	10 each 2nd & 3rd year	<p>To assure that the magnitude of outputs projected is actually achieved in any one country will require the continued in-country review and inspection of the USAID Rural Development Officer and the contractor's regional director. This will be formalized each year in an annual contractor's report. After each two years of contract operation, AID/W should conduct a project evaluation review.</p>	<p>Assumptions for achieving outputs:</p> <p>1. That there exists capable persons within the country with adequate scientific training to be capacitated for the technical positions in soils analysis and fertilizer response testing.</p> <p>2. That an adequate field staff can be capacitated quickly, preferably from field promotion workers and that participating farmers will cooperate with them.</p> <p>3. That once capacitated the trained personnel will be retained in their positions.</p> <p>4. That viable small farm credit lending associations exist in the participating countries which are so structured as to be able to utilize the soil fertility recommendations of this project.</p>
	at end 1st yr	in successive yrs																							
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Change Agents in Soil Fertility	10	10 each 2nd & 3rd year																							
<p>4. By end of first year each change agent will have held at least one workshop to inform rural credit agents and field promotion workers about the soils program. After his first year each change agent will hold a minimum of two workshops per year for small farmers.</p>																									
(continued)																									

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PROJECT SUMMARY
ECONOMIC FERTILIZER USE

Lif Project: _____
From: _____ to FY _____
Total U.S. Funding: _____
Date Prepared: _____

Project Title & Number: Assistance in Economic Fertilizer Use for Small Farmers

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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Output: (continued)</p> <p>5. In each participating country a maximum of ten field trials will be planted by the end of the first year and no less than 20 farm demonstrations will be run on target farms by the end of the first year. After his first year, each soil fertility field trial and demonstration agent will run a minimum of 15 field trials and supervise no less than 30 target farm demonstrations.</p>	<p>Magnitude of Outputs:</p>		<p>Assumptions for achieving outputs:</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 1975 to FY 1980
Total U.S. Funding _____
Date Prepared: _____

Project Title & Number: Assistance in Economic Fertilizer Use for Small Farmers

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Inputs:</p> <p>A. Total Core Budget</p> <p>The cost of this project, outside the Central American region, will be \$2,298,600 for the 5 yrs of project activity. After the first 6 mos, each USAID Mission should start to pay for the project activities in its country through individual task order arrangements.</p> <p>A budget of \$262,600 in LA Bureau regional grant funds is projected for the initial 6 mos. of project activity 1/1/75 thru 6/30/75 (FY 75).</p> <p>A budget of \$410,700 is projected for the 7th thru 18th mos. of project activity, 7/1/75 thru 6/30/76 (FY 76). It will be made up jointly of LA Bureau regional grant funds and Mission grant funds provided under special task order arrangements.</p> <p>This core budget which excludes the Central American countries will pay for the professional contract staff and contract consultants, the operational costs related to their maintenance, and a small amount of commodities for direct support of the contract's field personnel. No participant training is contemplated under the core budget.</p> <p>B. Mission Inputs</p> <p>USAID Missions in participating countries will provide logistic support for the project. Missions may provide additional commodities to those in the Core Budget. At the discretion of individual missions participant training may be provided from the USAID's training funds.</p> <p>The U.S. contribution for the project in the Central American republics will be financed under a ROCAP task order. Con-</p>	<p>Implementation Target (Type and Quantity)</p> <p>1. In Central America, unlike the other proposed areas of concentration, there exists an institutional arrangement through which to deal with the area on a regional basis, namely ROCAP. As a consequence the Central American program will be funded by ROCAP beginning on Jan. 1, 1975. Therefore it is not included as part of the Core Budget.</p> <p>2. It is intended that this project initiate work at first in four areas of concentration. These are: (1) the Caribbean area, (2) Paraguay and Uruguay, (3) Panama, Ecuador, and (4) Colombia. In FY 76 it is anticipated that the Regional Director in Colombia may extend his area of concentration to include either Peru or Bolivia.</p> <p>3. During the first 6 mos. of project operation it will be necessary to fund the four Regional Directors and a limited amount of commodity assistance out of the Core Budget. As quickly as possible during the first 6 mos. of project operation, a procedure will be set up by which to fund the Project Directors proportionately on a country-by-country basis. Only the on-campus expenses of the backstop personnel at Raleigh and possibly some assistance to the least developed countries is expected to continue to receive funding under the core budget. (continued)</p>	<p>1. That the AID inputs (core budget and Mission) have been achieved according to schedule will be verified by an in-house review at the end of the first 6 mos. and each year thereafter.</p> <p>2. It will be the responsibility of the Regional Director to verify that host country inputs are provided as agreed upon. He will report this back to the respective AID Mission so that the Mission may take remunerative measures should these be necessary.</p>	<p>Assumptions for providing inputs:</p> <p>1. Assumptions regarding Mission inputs</p> <p>a. It is assumed that ROCAP will start financing the soil fertility program in the five Central American countries from the initiation of the basic contract, beginning 1/1/75, under a task order written against a basic ordering agreement.</p> <p>b. That except if exemptions have been specifically granted, all Missions outside of Central America will finance their country soil fertility programs by means of a task order on the basic contract within six months after the program begins; that they understand this requirement and have corresponded in good faith.</p> <p>2. Assumptions regarding Host Government inputs</p> <p>a. That the host governments will appropriate adequate funds for the personnel, commodities, and other expenses which they will require to adequately backstop their contributions to their country soils fertility program.</p> <p>b. That there exists capable persons within the country with adequate scientific training to be capacitated for the technical positions required in soils analysis and the testing of fertilizer responses.</p> <p>c. That once capacitated the trained personnel will be retained in their positions.</p>

STATE OF DESIGN SUMMARY
LAC MCA PROJECT

Line Project: _____
 From: _____; FY: _____
 Total U.S. Funding: _____
 Date Prepared: _____

Project Title & Number: Assistance in Economic Fertilizer Use for Small Farmers

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Inputs: (continued)</p> <p>sequently the costs of the Central American operation do not appear in the Core Budget. It is not anticipated that the U.S. contribution for work outside Central America can be financed under task orders during the first 6 mos. of the new project. Except possible in countries considered least developed, every effort will be made to assure that each USAID or recipient govt is required to pay for its project activities by no later than 7/1/75. As a consequence the LA Bureau's share of the proposed core budget for FY 76 will be \$410,700 less the sum total value of the task orders signed (see face sheet).</p> <p>C. Counterpart Inputs from each Participating Country</p> <p>1. <u>Personnel Services</u> Each cooperating host country is to provide a minimum of personnel (see outputs No. 3) as counterparts to be capacitated under the contract's regional director.</p> <p>2. <u>Training</u> Each host govt will provide the budget for its regional workshops, short and long-term in-country assistance for those workshops, and the funds for host govt personnel to be trained in the U.S. and third countries.</p> <p>3. <u>Commodities</u> Each host govt is to provide the equipment and apparatus for a minimum of one soils lab and the shelf items necessary for its function during and after the project. During the second year each govt will provide a greenhouse for pot culture studies. The host govts are to provide</p> <p>(continued)</p>	<p>Implementation Target (Type and Quantity)</p> <p>4. Upon arriving at their post of assignment, each Regional Director will have as his first assignment the responsibility of working out with the USAID and the respective host government a phased time plan of the program in each of the countries for which he is to be responsible. These programs are to be completed within the first 4 months after the Regional Director is assigned in the field.</p>		<p>Assumption for providing inputs:</p>

PROJECT DESIGN SUMMARY
 ECONOMIC FERTILIZER USE

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Project Title & Number: Assistance in Economic Fertilizer Use for Small Farmers

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Inputs: (continued)</p> <p>equipment such as vehicles for their counterpart technicians as well as seed, fertilizer, and other soil amendments and pesticides for field trials and demonstrations. It will be each host government's responsibility to arrange for target farmers' fields on which to run yield trials and demonstrations.</p> <p>Most training materials and most operational costs involved in reaching the farmers with new information will be borne by the host government.</p> <p>4. Other Costs All costs of host government cooperating technicians including salaries, benefits, in-country travel and per diem, maintenance and operation of vehicles and equipment are to be the responsibility of the participating government.</p>	<p>Implementation Target (Type and Quantity)</p>		<p>Assumptions for providing inputs:</p>