

United States Agency for  
International Development (AID)  
Quito, Ecuador



PD-1117-069  
57198  
Agencia de los Estados Unidos para  
el Desarrollo Internacional (AID)  
Quito, Ecuador

May 27, 1988

DIR	
A/DIR	
RLA	✓
RCO	
O/PE	
EXO	
O/CONT	✓
IFD	5
GDO	
KDO	2
FHD	
EHUDO	
UIH	
RF	
MIR	
EMB	
WASH	15

Ing. Gonzalo Vorbeck  
Presidente, Directorio  
Fundación para el Desarrollo Agropecuario  
FUNDAGRO  
Av. de los Shyris y Rio Coca  
Edificio EUROCENTRO  
Ciudad

Subject: Cooperative Agreement No. 518-0068-A-00-8106-00

Dear Ing. Vorbeck:

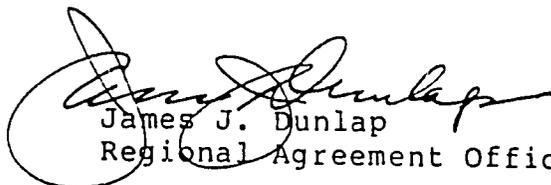
Pursuant to the authority contained in the Foreign Assistance Act of 1961, as amended, the Agency for International Development (hereinafter referred to as "A.I.D.") hereby grants to the Fundación para el Desarrollo Agropecuario (hereby referred to as "FUNDAGRO" or "Recipient"), the sum of \$2,817,000 to provide support for a program in establishing an improved and integrated agricultural research, extension and education system, as described in the Schedule of this Agreement and the Attachment 2, entitled "Program Description."

This Agreement is effective and obligation is made as of the date of this letter and shall apply to commitments made by the Recipient in furtherance of program objectives during the period beginning with the effective date and ending April 30, 1993.

This Agreement is made to FUNDAGRO on condition that the funds will be administered in accordance with the terms and conditions as set forth in Attachment 1, entitled "Schedule", Attachment 2, entitled "Program Description," and Attachment 3 entitled "Standard Provisions," which have been agreed to by your organization.

Please sign the original and each copy of this letter to acknowledge your receipt of the Agreement, and return the original and all but one copy to the Regional Contracting Office, USAID/Ecuador.

Sincerely yours,

  
James J. Dunlap  
Regional Agreement Officer

Attachments:

- 1. Schedule
- 2. Program Description
- 3. Standard Provisions

ACKNOWLEDGED:

FUNDAGRO

BY:

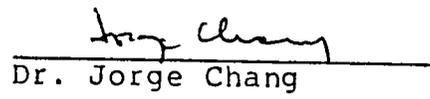
  
Ing. Gonzalo Vorbeck

Title: Board Director

Date:

5/27/88

BY:

  
Dr. Jorge Chang

Title: Executive Director

Date:

5/27/88

FISCAL DATA

Appropriation:	<u>72-1181021</u>
Budget Plan Code:	<u>LDNA-88-25518-KG13</u>
PIO/T No.:	<u>518-0068-3-80028</u>
Project No.:	<u>518-0068</u>
Total Estimated Amount:	<u>\$7,000,000</u>
Total Obligated Amount:	<u>\$2,817,000</u>

Funding Source:

     A.I.D./W

  X   USAID

A. Purpose of Agreement

The purpose of this Agreement is to provide support for the agricultural research, extension and education project, as more specifically described in Attachment 2 to this Agreement entitled "Program Description."

B. Period of Agreement

1. The effective date of this Agreement is the signature date of the cover letter. The expiration date of this Agreement is April 30, 1993.
2. Funds obligated hereunder are available for program expenditures for the estimated period from the effective date until approximately April 30, 1990.

C. Amount of Agreement and Payment

1. The total estimated amount of this Agreement for the period shown in B.1 above is \$7,000,000.
2. A.I.D. hereby obligates the amount of \$2,817,000 for program expenditures during the period set forth in B.2. above and as shown in the Agreement Budget below.
3. Payment shall be made to the Agreement in accordance with procedures set forth in Attachment 3 Standard Provision, entitled "Payment-Periodic Advance."
4. Additional funds up to the total amount of the Grant shown in C.1 above may be obligated by A.I.D. subject to the availability of funds, and to the requirements of the Standard Provision of the Grant, entitled "Revision of Grant Budget."

D. Agreement Budget

The following is the Agreement Budget, including local cost financing items, if authorized. Revisions to this budget shall be made in accordance with Standard Provision of this Agreement, entitled "Revision of Grant Budget."

AGREEMENT BUDGET  
(\$ 000)

	<u>FX (1)</u>	<u>LC (2)</u>	<u>Counterpart</u>	<u>Total</u>
<b>I. INSTITUTIONAL SUPPORT</b>				
A. Salaries/Benefits (18 staff)	0	918.0		918.0
B. Tech. Assistance	450.0	0		450.0
C. Special Programs	100.0	200.0		300.0
D. General Support		187.0		187.0
E. Materials/Equipment	70.0	222.5		292.5
F. Travel	50.0	148.0		208.0
G. Endowment (oversight)	64.0			64.0
SUBTOTAL	744.0	1,675.5		2,419.5
AMOUNT OBLIGATED (3)	297.0	670.0		967.0
<b>II. SUBPROJECTS</b>				
A. COFFEE				
1. T.A.	335.0	516.0		851.0
2. Training	195.0	240.0		435.0
3. Materials/Oper.	85.0	279.0		364.0
SUBTOTAL:	615.0	1,035.0		1,650.0
AMOUNT OBLIGATED (3)	263.0	414.0		677.0
B. YUCA				
1. T.A.	117.0	110.0		227.0
2. Training	135.0	150.0		285.0
3. Materials/Oper.	25.0	158.0		183.0
SUBTOTAL:	277.0	418.0		695.0
AMOUNT OBLIGATED (3)	111.0	167.0		278.0
C. DAIRY				
1. T.A.	256.0	375.0		631.0
2. Training	240.0	275.0		515.0
3. Material/Oper.	79.0	182.0		261.0
SUBTOTAL:	575.0	832.0		1,407.0
AMOUNT OBLIGATED (3)	230.0	333.0		563.0
COUNTERPART CONTRIBUTION TO SUBPROJECTS			1,906.0	1,906.0
TOTAL SUBPROJECTS	1,467.0	2,285.0	1,906.0	5,658.0
AMOUNT OBLIGATED (3)	604.0	914.0		1,518.0

	<u>FX (1)</u>	<u>LC (2)</u>	<u>Counterpart</u>	<u>Total</u>
III. EVALUATION/AUDIT	120.0	170.0		290.0
AMOUNT OBLIGATED (3)	48.0	68.0		116.0
IV. OTHER COSTS	50.0	165.0		215.0
AMOUNT OBLIGATED (3)	20.0	66.0		86.0
V. CONTINGENCIES (5%)	112.0	211.5	94.0	417.5
AMOUNT OBLIGATED (3)	<u>44.0</u>	<u>86.0</u>		<u>130.0</u>
TOTAL EST. AMOUNT:	2,493.0	4,507.0	2,000.0	9,000.0
AMOUNT OBLIGATED (3)	1,013.0	1,804.0		2,817.0

NOTES: (1) "FX" refers to foreign exchange, ie., U.S. Dollar costs.

(2) "LC" refers to Local Currency, ie., Sucre costs. Budget exchange rate is 1 US \$ = S/300 sucres.

(3) "Amount Obligated" shows the distribution of the initial \$2,817.000 obligation. It is estimated that this obligation will be adequate for approximately 2 years.

E. Reporting and Evaluation

1. FUNDAGRO shall monitor performance under the Agreement and where appropriate, ensure that time schedules are being met, projected work units by time periods are being accomplished, and other performance goals are being achieved. This review shall be made for each program, function or activity as set forth in the award document.
2. FUNDAGRO shall submit a performance report that briefly presents the following information for each program, function, or activity involved:
  - a. A comparison of actual accomplishments with the goals established for the period, the findings of the investigator, or both. If the output of programs can be readily quantified, such quantitative data should be related to cost data for computation of unit costs.
  - b. Reasons why established goals were not met.
  - c. Other pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit cost.
3. The required performance reports shall be submitted quarterly, on a schedule that coincides with Financial Status Reports.
4. Between the required performance reporting dates, events may occur that have significant impact upon the program. In such instances, FUNDAGRO shall inform AID as soon as the following types of conditions become known:
  - a. Problems, delays, or adverse conditions that will materially affect the ability to attain program objectives, prevent the meeting of time schedules and goals, or preclude the attainment of work units by established time periods. This disclosure shall be accompanied by a statement of the action taken, or contemplated, and any AID assistance needed to resolve the situation.
  - b. Favorable developments or events that enable time schedules to be met sooner than anticipated or more work units to be produced than originally projected.

F. Special Provisions

1. The applicable Optional Standard Provisions are indicated on the checklist page included in Attachment 3 to the Agreement.

2. Local cost financing is authorized for items as shown in the Grant Budget.
3. All costs chargeable to this Agreement shall be direct costs. There is no provision for indirect costs such as overhead.
4. In accordance with US Government cost principles applicable to this Agreement, USAID funds may not be used for fund raising activities.

G. Substantial Involvement Understandings

1. Prior to the initial disbursement under the Agreement, or to the issuance by AID of documentation pursuant to which disbursement will be made, FUNDAGRO shall, except as the Parties may agree in writing, furnish to AID in form and substance satisfactory to AID.
  - a. evidence that the endowment fund has been established and that initial disbursement of GOE counterpart (PL-480 local currencies) has been made; and,
  - b. a detailed work plan and budget for activities during the first year of the project.
2. Prior to the initial disbursement under the Agreement for the Dairy Priority Commodity Program (PCP), or to the issuance by AID of documentation pursuant to which disbursement will be made, FUNDAGRO shall, except as the Parties may agree in writing, furnish to AID in form and substance satisfactory to AID, evidence that the dairy RELU has been formed and includes the key players in the REE system.
3. Prior to the disbursement of any funds under the Agreement after January 1, 1989, or to the issuance by AID of documentation pursuant to which disbursement will be made, FUNDAGRO shall, except as the Parties any agree in writing, furnish to AID in form and substance satisfactory to AID:
  - a. evidence that selected Ministers and/or pertinent high level officials of the GOE have been invited and accept responsibilities as members of FUNDAGRO's External Advisory Committee;

- b. evidence that an Associates Program has been constituted;
  - c. evidence that an endowment fund oversight committee has been constituted; and
  - d. evidence that FUNDAGRO, with the help of outside consultants, has a) conducted a baseline data survey for the three PCPs; b) determined measurable indicators for the end-of-project status; c) developed a monitoring/review process for measurement of progress towards the end-of-project status over the life of the project; and d) revised the project logical frame work accordingly.
4. FUNDAGRO agrees, except as AID may otherwise agree in writing, that it will take actions to comply with any and all recommendations which may result from the pre-award audit.
  5. FUNDAGRO agrees to submit, in form and substance satisfactory to AID, detailed annual work plans and budgets no later than January 15 of each year during the life of the project.
  6. Finally, FUNDAGRO agrees that it will honor any AID request to suspend disbursements for project activities and/or reimburse for any unexpended outstanding balances should a determination be made, based on objective criteria utilized in periodic project evaluations, that public and/or private sector support to FUNDAGRO is insufficient to ensure project viability.

#### H. Title to Property

Title to commodities purchased under this Agreement shall vest in the Recipient.

#### I. Authorized Geographic Code

In general, the authorized source code is 000, the United States, plus Ecuador.

Specifically for vehicles, the source must be 000. Guidance on exceptions is set forth in the Commodity Procurement Plan set forth in the Project Paper, which is incorporated herein by reference, as well as in the Standard Provisions.

## PROGRAM DESCRIPTION

### A. BACKGROUND

A major characteristic of the agricultural sector of Ecuador is a low level of productivity. Average yields remain well below the actual yields obtained in neighboring countries and far below those obtained by the best farmers in Ecuador and those prevailing at the country's agricultural research facilities. Low yields translate into relatively high production costs per unit of output thus raising consumer prices.

Low productivity reflects, in part, the inability of Ecuador's Research, Extension and Education System (REE) to effectively generate and disseminate improved, appropriate technologies. While the basic infrastructure exists, the overall system is weak due to inadequate resources, lack of coordination and integration of REE activities, an inadequate science-based orientation throughout the system, and a failure to prioritize activities to assure a more effective use of limited resources.

The establishment of FUNDAGRO in October 1987 was the result of a process which started with a recommendation of the Presidential Agricultural Task Force in 1985 that a concerted effort be made to revitalize the weak technology development and transfer systems in the country. A high level science and technology commission composed of internationally known Ecuadorian and U.S. agricultural specialists was established to advise the Minister of Agriculture on ways to move toward a science-based agricultural development strategy. The concept of a private research and development foundation subsequently emerged and the Ecuadorian Agricultural Research Foundation (FEDIA), later FUNDAGRO, was officially created in June 1986.

### B. PURPOSE

To develop the capacity of the Foundation for Agricultural Development (FUNDAGRO) to serve as a catalyst for establishment of an improved and integrated agricultural research, extension and education (REE) system in selected commodities, which fortifies and expands upon existing public and private REE efforts to deliver a steady flow of productivity-increasing, cost-reducing technologies to a wide spectrum of farmer-client groups with special interest in small and medium size producers.

## C. PROJECT DESCRIPTION

### 1. Overview

The project will support the development of FUNDAGRO and its program through three major components. The first component will strengthen FUNDAGRO as an institution through long and short-term technical assistance and training in the following areas: prioritization of commodity and other programs for FUNDAGRO attention, research design, management information systems, management development, and evaluation and monitoring. As a complement to this project, PL-480 local currency generations will be used to capitalize an endowment fund and cover initial development office and fund-raising expenses. The second component involves support to FUNDAGRO's catalytic role in bringing together key public and private sector institutions involved in agricultural research, extension and education activities in the three selected commodity programs (coffee, milk and yuca). For each program, FUNDAGRO will establish special units of highly trained research and extension specialists who will guide research on key technological problems and train extension agents in the application of the improved technologies and appropriate transfer mechanisms. The third component will support FUNDAGRO's special programs for identified targets of opportunity for borrowing applied technologies which can be brought to bear on commodity production, marketing and consumption system constraints in Ecuador.

### 2. Administrative and Technical Strengthening of FUNDAGRO

Since its inception, the operational philosophy of FUNDAGRO has been to establish and maintain a small, highly qualified staff which could serve as a catalyst to assist other public and private sector entities in developing an integrated approach to agricultural research and extension. A good start has been made in this direction with the hiring of key staff such as the Executive Director (PhD, Agronomy, Iowa State), Program Director (PhD, Plant Breeding, Cornell), Research Coordinator (M.S., Ag. Economics, Missouri), Extension-Education Coordinator (M.S., Extension, Turrialba, and M.S., Education, Mayaguez) and the Evaluation Coordinator (PhD, Sociology, Florida). With the technical direction snapping up well, FUNDAGRO will need to establish a financial/administrative structure to handle what is anticipated to be an expanding program and project portfolio.

In order to carry out the three Priority Commodity Programs and the Special Programs activity to be funded under this Project, the FUNDAGRO staff will be increased to seven professionals and eleven support staff. A three person administrative and accounting staff

is being established to handle all office management, procurement, contracting and accounting services. In addition, a three person liaison office will be established in Guayaquil to handle procurement, contracting and liaison with the coffee and yuca programs which will be implemented on the coast. Funds will be provided for salary and travel of FUNDAGRO staff, travel for Board Members, administrative costs, communications, office furniture and equipment, and vehicles.

A U.S. Project Coordinator will be provided for the first three years to provide advice and guidance to FUNDAGRO and to maintain close liaison with USAID.

An endowment is to be established with initial support and capitalization from PL-480 generated local currencies. Upon establishment of the endowment, the Board of Directors of FUNDAGRO will create a three person endowment fund oversight committee which could be composed of the following types of individuals:

- The Director General or high official of an International Agricultural Research Center;
- The President or Executive Director of an international Private Voluntary Organization with experience in Latin American agriculture;
- The President, Director or high official of a respected U.S. or third country Foundation or Development Agency with experience in Latin American agriculture.
- A financial/investment specialist with experience in international foundations and/or endowment management and growth.

The Oversight Committee will be responsible for conducting an annual review of FUNDAGRO's operations to determine whether it is fulfilling its obligations under the terms of the original GOE/USAID grant of PL-480 local currencies and to provide their conclusions and recommendations to the Board of Directors of FUNDAGRO. Funds will be provided in this Project for travel, per diem and honoraria for members of the oversight committee.

### 3. Priority Commodity Programs (PCPs)

The centerpiece of FUNDAGRO's program over the life of this project will be its catalytic role in bringing together the key public and private sector institutions involved in agricultural research, extension and education activities in the three selected commodity programs (coffee, yuca and dairy). Each program integrates the

research, education and extension functions of several public and private entities and focuses their collective resources on overcoming production constraints in high-priority crops and livestock programs. This component will address the need to integrate, concentrate and focus REE efforts. The set of PCP's have been selected on the basis of a number of weighted scientific, economic and social variables, A.I.D. financing limitations, existence of organized farmer groups and a high probability of rapid and highly visible pay-offs in order to enhance FUNDAGRO's credibility and build its reputation as quickly as possible. Achieving success in the PCP's is important by itself, but in this case, contributes to the more fundamental project purpose of developing the credibility, viability, and funding base of FUNDAGRO.

These high-impact programs will contribute substantially to achieving the broader program goal: Developing linkages between research, education and extension entities; private sector involvement; highly visible results in key provinces; and, ultimately, increased incomes among a broadly based set of farmers with special emphasis on producers with small to medium size farms. These are all expected achievements from initial investments in the set of high-impact PCP's discussed below. Moreover, the PCP's will provide FUNDAGRO's Board of Directors a base of experience as it considers investment decisions outside the purview of the project. In short, project investments in the PCP's are catalytic, pilot activities which help to assure that FUNDAGRO will achieve its project purpose as well as contributing to the broader objective of increasing production and productivity in the agricultural sector with special focus on small and medium size producers.

FUNDAGRO resources will be directed toward one or more of the following functional activities and their linkage, integration and focus, in an effort to formulate, catalyze, provide leadership for, and complement a science-based agricultural development strategy. These highly interrelated functional activities will be financed for each high-impact PCP.

a. Functional Activities

i. Research: FUNDAGRO will continue providing supplementary resources to INIAP for each PCP to update research priorities, to cover some technical assistance costs, operational expenses, (agricultural inputs, research supplies, gasoline, etc.) bibliographic, communications, training and other complementary resource requirements. These programs have been designed in cooperation with INIAP. FUNDAGRO resources will be coordinated closely with those from INIAP, PROTECA and other donors. The majority of research trials will be conducted by INIAP in

conjunction with private associations, processing plants and farmers fields leading to increased validity and acceptance of improved technology. FUNDAGRO will make a concerted effort to encourage and support private producer associations to undertake some of their own research in collaboration with INIAP.

In addition, FUNDAGRO will provide external scholarship support to build the professional staff in priority program areas of INIAP; develop an inventory of research information outside of INIAP; and consider small research grants to dedicated researchers at selected universities (agronomy and animal science).

An important part of the FUNDAGRO research strategy will be to strengthen links between the national research effort and the international network of agricultural science, to assimilate the relatively large body of existing knowledge. National systems, even if relatively well financed and staffed, are relatively unproductive unless they have broad-based and enduring linkages into the international science network.

FUNDAGRO has already entered into institutional agreements with the International Center for Tropical Agriculture (CIAT) as related to yuca, Instituto Interamericano de Cooperacion para la Agricultura (IICA) for technical assistance in various areas, the Universities of Kentucky and Arizona in nutrition as related to agriculture and is in the process of formulating an agreement with the International Potato Institute (CIP). Additional agreements with international organizations are expected in the near future for coffee and dairy and other commodity areas as FUNDAGRO matures and its portfolio expands. FUNDAGRO will also explore the possibility of establishing a fee based agricultural data bank linked to various U.S. and international data sources.

ii. Research-Extension Linkages: FUNDAGRO will provide resources and opportunities to help assure that research efforts are interpreted and appropriate recommendations are taught to extension agents. In the PCP's, this will be addressed explicitly by forming a Research-Extension Linkage Unit (RELU) in each of the PCP's, comprised of public and private sector institutions involved in technology generation, validation, transfer and use. The private sector link through producer organizations is important to maintain an adequate flow of appropriate technology and information to and from the producers as they are in the most favorable position to articulate the needs of their members and farmers will more readily adopt technology from colleagues. It will also help assure sustainability of the RELU and provide adequate beneficiary coverage.

The responsibilities of the RELUs are:

- 1) To help define production and research problems whose solution will increase production per unit and lower per unit cost of production;
- 2) To identify appropriate technologies that may contribute to the resolution of a specific problem or the strengthening of a program, using state-of-the-art and off-the-shelf technology from national and international sources, and to validate such technologies for Ecuadorian conditions when necessary;
- 3) To facilitate adaptive farm-level research and demonstrations that enable technology transfer agents to translate technological developments into productive farming systems recommendations;
- 4) To promote the training of researchers and extensionists in appropriate technology development and to effectively transfer such technology to their clients;
- 5) To facilitate and guide the process of human resources development to support the Priority Commodity Programs (PCPs);
- 6) To maintain an economic analysis capability that keeps track of the costs and benefits of various technology transfer options for clients and that is alert to policy issues affecting economic returns;
- 7) To coordinate REE activities among participating institutions which otherwise would remain isolated; and,
- 8) To institutionalize several important processes including program selection and prioritization, definition of research and extension workplans in accordance with client needs, implementation of second degree courses in research and extension, among others.

Each RELU will have a leader who is trained in the subject matter areas central to the PCP. This person will have had three-to-five years experience in applied research and some time serving as an extension subject matter specialist (one who has adapted research findings to a technology package suitable for transfer to producers; and who has trained extension field agents to successfully transfer the technology to their clients). Initially, if such a person is not recruitable locally, an equally qualified expatriate will be hired while an Ecuadorian national is receiving intensive training and preparation for the position.

Additional personnel for each RELU will be considered according to the needs in each PCP. Their specializations will include adaptive research and technology transfer capabilities at the Ph.D, MS and Ing. Agronomo levels. The RELU specialists may be employees from INIAP, MAG and private associations.

Given the resources that exist at experiment stations that lend themselves to both technology generation, adaptation and transfer, each RELU is "headquartered" at one of the experimental stations such as Pichilingue, Santa Catalina or Portoviejo. This should enhance research-extension linkages, of both public and private origin.

The RELU research and technology transfer specialists will interact with client groups of a particular PCP to identify client needs. The RELU specialists identify technology alternatives from prior research and design additional research to generate the needed technology. Technology verification trials will be conducted principally on client farms. Economic and feasibility evaluations will be made by RELU specialists according to the needs of the client. If no significant problems emerge, and the technology is judged to be appropriate to the client needs, extensionists will be trained in the new technology and recommended transfer methodology. "Learning by doing" will be emphasized so that the extensionist will have both skills and confidence in their abilities to transfer the technology. RELUs will also strengthen selected education institutions that provide training up to the Ingeniero Agronomo degree and options for specialized degrees. The RELU specialists will collaborate with members of Agricultural Faculties to design and guide research projects for students (including specialized degree students) relating their research to on-going efforts to resolve client problems. Scholarships, research grants, publication support, research supplies, etc., are all types of support to provide mutual benefits to the Faculties of Agriculture, their professors and students. RELU specialists may assist with curriculum refinement and give needed guidance in the establishment of curricula to prepare Technology Transfer Agents for public and private employment.

Basic salaries for INIAP and MAG specialists assigned to work in a RELU will be paid by the employing entity. FUNDAGRO will provide funds for technical assistance, private sector RELU personnel on a cost sharing basis, vehicles, extension equipment, training and related administrative expenses.

RELU operating budgets as well as contracts for grants with educational institutions will draw on the resources from each partner as appropriate to the activity and according to the institution's capabilities. Every reasonable effort will be made to obtain maximum client support for operating costs when projects are designed for their needs.

The innovative element of each RELU will be its catalytic impact upon the research, extension and the educational entities that relate to the PCP. Its unique contribution to the process is to provide effective information flows among research, extension and educational organizations and efficient utilization of their separate resources in solving client problems.

iii. Extension: FUNDAGRO resources will be focused on improving the quality and scope of extension efforts in priority locations, and in high-impact PCPs. Investments will be made in several pilot extension schemes in both the public and private sector to capitalize on existing extension programs and experiences.

Several private extension approaches are being considered for FUNDAGRO investments as integral elements of the PCPs: 1) alternative mechanisms for producer associations to establish and finance their own extension agents and to reach smaller producers who have potential for greater commercial production; 2) consulting firms comprised of agricultural scientists and technicians to serve the needs of small/medium commercial farmers; 3) extension agents and technical assistance tied to and financed by credit; and 4) agri-business firms making production contracts which include technical assistance and credit under pilot programs developed jointly with FUNDAGRO. The RELU would provide direct support to the private sector extension efforts.

This project will also support public sector extension efforts in the PCPs to assure that all farmers can benefit from improved technologies. FUNDAGRO will assist provincial MAG directors to develop programs that combine and focus the diverse efforts of various interest groups including: MAG agents (PROTECA), PVOs, cooperatives, community organizations, students serving their Año Rural; and U.S. Peace Corps Volunteers. These groups may also be involved in the private extension efforts mentioned above.

iv. Education: The REE project will assist in establishing linkages among key education, research and extension components. Help will be given to students in selected faculties to complete their theses as part of research and extension efforts in the high-impact PCPs. Also, more formal relationships are being considered between students and selected professors of faculties and FUNDAGRO for placement in PCPs for their Año Rural. Consideration is being given to linking two or three university faculties more directly into the REE system. Finally, consideration is being given to implementing a second degree program linking provincial university professors to both private and public extension efforts. Furthermore, the project will provide FUNDAGRO support for short-term external and domestic training in extension and education and long-term post-graduate training for 7 candidates in research. FUNDAGRO will also provide funds for publications and travel expenses related to the PCPs, and for strengthening libraries.

v. Private Sector Firms and Associations: Private sector participation and involvement is central to the proposed project. Farmers' associations are participants in executing various activities especially in extension but also in research and education. These entities will be fully operational partners with INIAP, MAG, PVOs and FUNDAGRO to assure the success of the project. The PCPs that are being considered for funding under this project have been identified in large part because of demonstrated success of current donor efforts with major private sector associations especially in coffee, yuca and dairy.

#### 4. Special Programs

The basic characteristic of the special program is best described as a search for targets of opportunities that lead to development efforts in potentially favorable crops. Ideas will be sought on traditional and non-conventional options for domestic and export markets that differ from those being considered in many countries. New agricultural production and export opportunities are being evaluated by public and private institutions, both locally and abroad (ANDE, CENDES, FEDEXPOR, CFN; Office of Strategic Materials, U.S. Department of Agriculture).

FUNDAGRO's role would be to link the technological production and processing feasibility with a potential market and producers who would be willing to underwrite some research trials.

FUNDAGRO will apply the following criteria to determine which special crops to support: availability of technology, market potential, return on investment, credit availability, local interest and private sector involvement, employment generating potential, small farmer involvement, rapid impact and FUNDAGRO credibility.

In considering and developing these options FUNDAGRO will undertake the following activities:

- a. An inventory of the available production/processing knowledge (what, who, where, etc);
- b. An inventory of economic and marketing knowledge (what, who, where, etc);
- c. An inventory of local investors that might support exploratory adaptive studies and pilot efforts;
- d. An assessment of social impact;

e. Design and monitor adaptative research trials that could lead to a pilot effort; and,

f. Conduct workshops and seminars to explore developmental alternatives.

For promising special programs, an effort will be made to attract world class scientists to identify technology and marketing options that might apply to Ecuador. Working with Ecuadorian counterparts selected by FUNDAGRO, these scientists will prepare an intensive seminar on the commodity. The seminar will cover the production, marketing and consumption (PMC) system for the commodity. Invited to attend will be leading farmers, agribusiness personnel, university faculty members, extension personnel and research scientists. The presentations will begin with a detailed description of the most advanced technology and/or other appropriate technologies being used by the most progressive, lowest cost producers, processors and marketers in the world.

That is to say, the initial focus will be on technology already in use somewhere else. The progression of the seminar will be such that a realistic starting point for the country will be presented first, i.e., an initial focus on presently applied technology that can be borrowed.

The primary thrust of the state-of-the-art seminars will be to display technology that might be borrowed soon. But it will not stop there. The seminars will also recommend research projects that ultimately, in most cases, must be undertaken to build new technology appropriate to Ecuadorian conditions. Basic information gathered as a result of these seminars might eventually lead to the structuring of larger programs.

To implement this concept, FUNDAGRO would require at least one full time experienced person (preferably a person with contacts in research, marketing, and promotional institutions both public and private) supplemented by short-term assistance. The office would be associated with the program director within FUNDAGRO, with adequate travel, secretarial, research adaptation and seminar support. The recommended budget for the office of special programs totals \$300,000 for five years.

As an office seeking targets of opportunities, a major output would be the identification, inventory of data, pilot actions and the private sponsorship of action programs. Another important output would be awareness by private sector entrepreneurs of new investment opportunities.

#### D. EVALUATIONS AND AUDIT

The cooperative agreement includes funding for three external evaluations to be carried out over the life of project in accordance with the evaluation plan included in the Project Paper.

Annual audits are to be carried out, with project funding, by any major local auditing firm affiliated to a reputable American accounting and auditing company. Additionally, a pre-award audit will be initiated shortly with the assistance of RIG/Tegucigalpa. This audit will examine FUNDAGRO's capacity to undertake the REE activities contemplated, with particular emphasis to be placed on personnel and contracting procedures in addition to the institution's general accounting internal controls and financial management systems. FUNDAGRO will be expected to address any recommendations included in the audit report within a reasonable time period after the report's emission. Conditionality on subsequent disbursements will be tied to compliance with any such recommendations and included in the Cooperative Agreement with FUNDAGRO. The USAID Controller's Office will monitor the audit process and follow-up.

#### E. PROJECT IMPLEMENTATION RESPONSIBILITIES

Management of the grant will be the responsibility of the Board of Directors of FUNDAGRO headed by the Chairman of the Board. The Executive Director will be charged with overseeing the daily operations of the Foundation and the various program/project activities to be carried out by the staff and contracted technical advisors. He will also coordinate these activities closely with the USAID project manager.

The Agricultural and Rural Development office will carry out the implementation responsibilities within USAID. Additional Mission support will be provided by the Project Committee and by other USAID offices as appropriate (e.g. PPD, EXO, CONT and RCO).

#### F. RELATIONSHIP TO THE PROJECT PAPER

Background analysis (technical, institutional, financial, economic and social) for this project as well as "detailed procurement" plan and cost estimates are contained in the Project Paper for the Agricultural Research, Extension and Education Project (518-0068). This Project Paper represents an amplification of the program description herein and, therefore, should be referenced as such in the Cooperative Agreement.