

**AGENCY FOR  
INTERNATIONAL  
DEVELOPMENT**



**ANNUAL BUDGET SUBMISSION  
FY 1979**

821

**ROCAP**

**DEPARTMENT  
OF  
STATE**

MAY 1977



ROCAP  
FY 1979 ANNUAL BUDGET SUBMISSION

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A. SUMMARY NARRATIVE STATEMENT - SUPPLEMENTARY COMMENTS

ROCAP has separately submitted a Narrative Summary Statement which discusses the assumptions upon which this ABS is based. The following additional comments supplement that message.

Section 102 (d) is concerned with host country commitment and progress towards development goals. ROCAP's regional projects support and strengthen national efforts to develop, implement and/or evaluate activities directly related to 102 (d) concerns.

For example, ROCAP's Nutrition project with INCAP is helping develop the capacity within the region's countries to identify their individual nutrition problems (directly related to infant mortality) and to take the steps necessary to correct them. Currently underway in this project is a study of the sociodemographic dimensions of national nutrition planning. This study is trying to determine how to generate, interpret, and utilize sociodemographic data in nutrition planning.

Other related INCAP studies (some TAB-sponsored) in recent years have included one on the relationships of birth-weight, maternal nutrition, and infant mortality; a study of the influence of maternal nutrition on fetal growth in pre-industrialized countries, and an inquiry into the relations of maternal supplementary feeding during pregnancy to birth weight and other socio-biological factors.

Under the ROCAP-supported SIECA Institutional Assistance project, that organization is carrying out (or will soon begin) several studies related to Section 102 (d) concerns. Among these is a study of unemployment and underemployment in Central America which includes substudies on employment in the agriculture sector and in the housing construction industry, an analysis of the interrelationship between employment and poverty, and employment and the utilization of productive capacity in the region's industry. This study

also will analyze the effect of alternate regional development policies on income and employment.

Several other ROCAP-assisted activities bear on Section 102(d) areas of interest. For example, the Small Farm Cropping System project is supporting research in each of the Central American countries to develop multiple-cropping recommendations to increase small farm agricultural productivity. The Soil Fertility project approaches the same goal through country research of fertilizer alternatives. A project in horticultural research scheduled to begin in 1978 will add momentum to the diversification efforts of the countries, all of whom are beginning to pay more attention to the benefits of fruits and vegetables in increasing production (and income) on small farms. A related activity planned for 1979 will add livestock to the list of subjects for which guidance will be prepared for small farming systems.

In the area of improving data bases, and country capability to collect and evaluate data, ROCAP has been active. Acting on behalf of the C.A. bilateral missions, ROCAP has assisted TAB in the design of a project to identify and test "poverty indicators". This project (to begin in 1978) will try to develop reliable measurements against which the effect of programs on the poor can be assessed. SIECA, the Secretariat for the Integration Movement, will participate, and play an important role in disseminating to each C.A. country the lessons learned through this innovative effort. ROCAP also is supporting IICA in a current activity to improve, strengthen and standardize each country's capacity for collecting agricultural information, processing it for needed uses, storing and retrieving it, and disseminating reliable data to the agriculture sector. This activity will help all countries in the region improve the data base required for analyses relevant to agricultural development.

Country/Program ROCAP

TABLE I

Long Range Program Plan  
(S millions)

	<u>1978</u>	<u>1979</u> <u>Request</u>	<u>Planning Period</u>			
			<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
<u>Food/Nutrition</u>						
Grants	2.7	5.7	3.2	1.8	2.0	2.0
Loans	15.0	27.0	15.0	-	20.0	20.0
<u>Education</u>						
Grants	.6	.4	-	-	-	-
<u>Selected Development</u>						
<u>Activities</u>						
Grants	-	.6	.3	.3	-	-
Loans				15.0		
<u>Total Functional</u>						
<u>Accounts</u>						
Grants	3.3	6.7	3.5	2.1	2.0	2.0
Loans	15.0	27.0	15.0	15.0	20.0	20.0

DAP DOCUMENTATION SCHEDULE\*

PROGRAM YEAR	DOCUMENTS TO BE USED AS BASIS FOR PROGRAM PLANNING	DATE APPROVED OR SENT TO AID/W
FY 1979	Original DAP DAP Revision Analytical Description of Poor Majority Summary Strategy Statement Sector Assessment (Specify): _____ Other (Specify): _____	<u>October 1973</u> <u>December 1975</u>  <u>May 1977</u>    
FY 1980	Original DAP      A new DAP may be prepared during DAP Revision Analytical Description of Poor Majority Summary Strategy Statement Sector Assessment (Specify): _____ Other (Specify): _____	<u>FY 1978</u>       
FY 1981	Original DAP DAP Revision Analytical Description of Poor Majority Summary Strategy Statement Sector Assessment (Specify): _____ Other (Specify): _____	       

\* Required for FY 1979; optional for FY 1980 and FY 1981.

Country/Program ROCAP

TABLE II

Funding Levels for FY 1977, FY 1978, FY 1979  
(in \$000)

	<u>FY 1977</u>	<u>FY 1978</u>	<u>FY 1979</u>
<u>Food/Nutrition</u>			
Grants	2,454	2,702	5,722
Loans	-	15,000	27,000
<u>Education</u>			
Grants	538	607	405
<u>Selected Development</u> <u>Activities</u>			
Grants	46	30	580
Total			
Grants	3,038	3,339	6,707
Loans	-	15,000	27,000

AGENCY FOR INTERNATIONAL DEVELOPMENT ABS/CP SUMMARY - TABLE III				1. TRANSACTION CODE A = ADD C = CHANGE D = DELETE			2. ABS/CP DOCUMENT CODE 6			
3. COUNTRY/ENTITY ROGAP		4. DOCUMENT REVISION NO.		5. OPERATIONAL YEAR FY 78		6. BUREAU/OFFICE A. SYMBOL B. CODE [05]		7. GEOGRAPHIC CODE [596]		
8. TYPE DATA 1 = ABS 2 = ABS REVISION 3 = CP 4 = CP NOTIFICATION				9. TYPE ASSISTANCE 1 = PROJECT 2 = PROGRAM						
10. PROJECT SEQ. - UENCE NO.	11. PROJECT TITLE (40 CHARACTERS MAXIMUM)	12. QTR. FOR OBLIG.	13. EST. FY. AUTH. OBLIG. FINAL	14. APPRO. PRIA-TION	15. PRIMARY PURPOSE CODE	16. LOAN GRANT IN-CL. CAT. NO.	17. AMOUNTS IN \$ 000			
							BY	BY	BY	LOP
	<u>Food and Nutrition</u>									
	<u>Ongoing Activities - Grants</u>									
0065	Nutrition Programs	2	79	FN	384	CC	30	500	480	1600
0073	Regional Horticultural Crop Development	2	80	FN	141	CC		439	456	1322
0074	Regional Agricultural Trade*	1	81	FN	134	CC		1563	1164	3615
0000	Technical Support		NA	FN		CC	200	200	200	
	<u>Ongoing Activities - Loans</u>									
0074	Regional Agricultural Trade*	1	78			L		15000		15000
	<u>New Activities - Grants</u>									
0077	Regional Seed Production		80	FN	214	GN			1000	1500
0078	Small Farm Cropping Analogs		82	FN	211	GN			1020	2502
0079	Small Farm Animal Systems		82	FN	210	GN			730	1693
0080	Regional Small Farm Mass Media Training		82	FN	252	GN			300	1245
0081	Regional Grains Handling		82	FN	159	GN			372	635
	<u>New Activities - Loans</u>									
0076	Regional Agricultural Trade II		79	FN	134	L			15000	15000
0077	Regional Seed Production		79	FN	214	L			12000	12000

18. DATE DOCUMENT RECEIVED IN AID 10

AGENCY FOR INTERNATIONAL DEVELOPMENT ABS/CP SUMMARY - TABLE III				1. TRANSACTION CODE <input type="checkbox"/> A = ADD <input type="checkbox"/> C = CHANGE <input type="checkbox"/> D = DELETE				2. ABS CP DOCUMENT CODE 6			
3. COUNTRY/ENTITY				4. DOCUMENT REVISION NO. <input type="checkbox"/>		5. OPERATIONAL YEAR FY <input type="checkbox"/>		6. BUREAU/OFFICE SYMBOL [ ] I. CODE [ ]		7. GEOGRAPHIC CODE [ ]	
8. TYPE DATA <input type="checkbox"/> 1 = ABS <input type="checkbox"/> 3 = CP 2 = ABS REVISION 4 = CP NOTIFICATION						9. TYPE ASSISTANCE <input type="checkbox"/> 1 = PROJECT 2 = PROGRAM					
10. PROJECT SEQ. - UENCE NO.	11. PROJECT TITLE (40 CHARACTERS MAXIMUM)	12. OTR. OBLIG.	13. EST. AUTH. FINAL	14. APPROPRIATION	15. PRIMARY PURPOSE CODE	16. GRANT INFL. CATER	17. AMOUNTS				
	<u>Education &amp; Human Resources Development</u>										
	<u>Ongoing Activities</u>										
0040	SIECA Institutional Assistance	1	79	EH	797	GC	415	387	175	2674	
0066	Transfer of Technology	3	79	EH	750	GC	90	200	210	720	
0000	Technical Support		NA	EH		GC	30	20	20		
	<u>Selected Development Activities</u>										
0000	Technical Support		NA	SD		GC	30	20	20		
	<u>New Activity</u>										
0072	Regional Seismic Instrumentation Network		81	SD	754	GC			560	755	

18. DATE DOCUMENT RECEIVED IN AID OF MM. 30. YY

COUNTRY/PROGRAM	PROJECT TITLE	INITIAL OBLIGATION	AS APPROVED FY 1976	REVISION	DATE PP/REVISION
ROCAP	Regional Nutrition		FY 1976		Feb. 1976
ONGOING PROJECT		FINAL OBLIGATION	AS APPROVED FY 1979	REVISION	DATE LAST PAR
BUDGET DATA - TABLE IV	PROJECT NUMBER 596-0065	TOTAL COST	AS APPROVED	REVISION	DATE NEXT PAR
		72-11X1023	1,760,000		June 1977

U. S. DOLLAR COST (↓ 000)

PROJECT INPUTS	ESTIMATED FY 1977			ESTIMATED FY 1978			ESTIMATED FY 1979		
	OBLIGATION	EXPENDITURES	PIPE-LINE	OBLIGATION	EXPENDITURES	PIPE-LINE	OBLIGATION	EXPENDITURES	PIPE-LINE
1. Nutritional Planning, Implementation, and Evaluation	30	300	330	500	500	330	480	500	310
2. Reconstruction		150							

1  
00  
1

HOST COUNTRY INPUT	PERSONNEL ON BOARD AS OF			PARTICIPANTS PROGRAMMED			1/ SHOULD BE CONSISTENT WITH LATEST APPROVED OYB LEVEL
	9/30/77	9/30/78	9/30/78	FY 1977	FY 1978	FY 1979	
2/ PERSONNEL ON BOARD AS OF				176			193
DH							
PASA							
CONTRACT							

2/ EXCLUDES CONSULTANTS PROGRAMMED FOR LESS THAN 90 DAYS  
 3/ LONG-TERM - INCLUDES 6 MONTHS OR MORE  
 4/ For funding period, indicate starting and ending date by month and year of obligations for each project element; e.g., 2/78-10/79.

NARRATIVE PROGRESS STATEMENT

Regional Nutrition (596-0065). INCAP has conducted analyses and has begun to assist cooperating country institutions in conducting the following activities:

Guatemala

1. First national seminar on Food and Nutrition;
2. Elaboration of Food Balance Sheets;
3. Assessment of the Nutrition Situation of Guatemala;
4. Evaluation of Sugar Fortification with Vitamin A;
5. Drafting National Policy Decree on Nutrition.

INCAP, at the government's request, also is participating in the nutrition component of the Health Sector Assessment that is being conducted with USAID/Guatemala.

El Salvador

1. Functional Classification of Nutrition Problems in El Salvador;
2. National Seminar on the Results of the Functional Classification of Nutrition Problems in El Salvador;

In addition INCAP has received a request from the Centro de Investigación y Desarrollo Agrícola to assist in a project designed to integrate agricultural and animal production with the purpose of improving nutrition for small farmers organized in cooperatives.

Honduras

1. Strengthening the National Food and Nutrition Planning Service (SAPLAN) of the National Planning Council;
2. Nutritional Surveillance;
3. Study of Food Consumption under the National Family Income and Expenditures Survey;
4. Sugar Fortification with Vitamin A;

5. Development of soy bean consumption in campesino groups in conjunction with national soy bean production project.

INCAP also assisted SAPLAN by reviewing 1) their 1977-78 plan of work; 2) the plan of work for drafting a National Nutrition Plan; 3) the decrees for formalizing SAPLAN; and 4) the sugar fortification program.

#### Nicaragua

1. Nutrition Planning Support;
2. Nutrition Surveillance System;
3. Integration of Nutrition in the Rural Development Program;
4. Reorganization of Hospital Food Services;
5. Implementation of Salt Iodization;
6. Epidemiological Surveillance of Salt Iodization;
7. Implementation of Sugar Fortification with Vitamin A.

INCAP staff assisted in drafting the First National Food and Nutrition Policy (NFNP) Document and the decree formalizing the Interministerial Commission and Technical Nutrition Committee. The decree was signed and the second draft of the NFNP was informally approved by the government.

INCAP forwarded to the government the final version of its part of the National Health Assessment.

#### Costa Rica

1. Evaluation of the Implementation of the Social Development and Family Allowances Law, with regard to Food and Nutrition;
2. Development of a Control and Evaluation System of Health, Food and Nutrition in the Administrative Development Project of the Health Ministry.

#### Panama

1. Food Balance Sheets;

2. Subregional Multisectorial Seminar on National Food and Nutrition Planning;
3. Nutritional Surveillance System;
4. Evaluation of the Complimentary Feeding Program;
5. Evaluation of Community Gardens;
6. High Risk Indicators.

COUNTRY/PROGRAM ROCAP	PROJECT TITLE Regional Horticulture Crop Development		INITIAL OBLIGATION	AS APPROVED FY 1978	REVISION	DATE PP/REVISION November 1977
ONGOING PROJECT BUDGET DATA - TABLE IV	PROJECT NUMBER 596-0073	APPROPRIATION R&N	FINAL OBLIGATION	AS APPROVED FY 1980	REVISION FY	DATE LAST PAR
U. S. DOLLAR COST (\$ 000)			TOTAL COST	AS APPROVED 1,322,000	REVISION	DATE NEXT PAR

PROJECT INPUTS	ESTIMATED FY 1977				ESTIMATED FY 1978				ESTIMATED FY 1979			
	OBLIGATION	EXPENDITURES	PIPE-LINE	FUND PERIOD (FR-TO)	OBLIGATION	EXPENDITURES	PIPE-LINE	FUND PERIOD (FR-TO)	OBLIGATION	EXPENDITURES	PIPE-LINE	FUND PERIOD (FR-TO)
T.A. in Horticultural Research and Marketing	439	215	224	1/78	456	426	254	1/79	479	439	159	6/80
Technical Training in Horticulture and Marketing (U.S./third country and local)	249	120	129	3/79	269	239	159	4/79	279	239	159	6/80
Research equipment and vehicles	93	12	81	9/78	93	113	61	1/79	93	113	61	1/79
Meetings, seminars, maintenance and support services	53	53	1/78	18	18	18	1/79	18	18	18	1/79	9/79
	44	30	14	1/78	76	56	34	1/79	76	56	34	12/79
	180				218							

PERSONNEL ON BOARD AS OF	PARTICIPANTS PROGRAMMED			1/ SHOULD BE CONSISTENT WITH LATEST APPROVED OVB LEVEL	2/ EXCLUDES CONSULTANTS PROGRAMMED FOR LESS THAN 90 DAYS	3/ LONG-TERM - INCLUDES 9 MONTHS OR MORE	4/ For funding period, indicate starting and ending date by month and year of obligations for each project element; e.g., 2/78-10/79.
	FY 1977	FY 1978	FY 1979				
DH	7	6					
PASA							
CONTRACT	8	8					

AID 1330-8 (2-77)

NARRATIVE PROGRESS STATEMENT

Regional Horticultural Crop Development (596-0073). The project paper for Regional Horticultural Development will be submitted in November, 1977. The funding shown in Table IV differs slightly from that shown in the PRP. First year funding (FY 1978) remains the same (\$439,000). Second year funding is decreased from \$464,000 to \$456,000. Funding for the third and final year is increased from \$357,000 to \$427,000. Thus the life of project budget totals \$1,322,000 in lieu of the \$1,260,000 shown in the PRP.

Principal budget items are technical assistance and training. Technical assistance includes a five-man professional team (in horticultural and economic disciplines) plus associated support personnel, of whom two are long-term. FY 1978 obligations finance 74 man-months of long-term services and 64 mm of short-term services in horticultural research and marketing. FY 1979 obligations finance 84 and 88 respectively. Training will be conducted both within the region and abroad, the latter constituting most of the training costs. Seven graduate students will begin training in FY 1978 and six will begin in FY 1979. Ongoing project activities generally are forward funded for three to six months with the exception of long-term training which is initially funded for the duration of the training (21 months).



COUNTRY/PROGRAM ROCAI		PROJECT TITLE Regional Agricultural Trade		INITIAL OBLIGATION	AS APPROVED	REVISION	DATE PP/REVISION
ONGOING PROJECT BUDGET DATA TABLE IV		PROJECT NUMBER 196-0074		FINAL OBLIGATION	AS APPROVED	REVISION	DATE LAST PAR
		APPROPRIATION P&N		TOTAL COST	AS APPROVED	REVISION	DATE NEXT PAR

U. S. DOLLAR COST (\$ 000)

PROJECT INPUTS	PROJECT TOTAL	ESTIMATED FY 1977			ESTIMATED FY 1978			ESTIMATED FY 1979				
		OBLIGATION	EXPENDITURE	PIPE-LINE	OBLIGATION	EXPENDITURE	PIPE-LINE	FUND PERIOD (FM-TO)	OBLIGATION	EXPENDITURE	PIPE-LINE	FUND PERIOD (FM-TO)
Training of Laboratory Personnel		48	12	36	9/78	12/79	36					
Regional Grades and Standards TA in Grades and Standards		220	130	90	4/78	220	110	200	4/79-			
Operational support for Grades and Standards		91	40	51	4/78-	79	90	40	3/80			
Equipment for Reference Laboratory		50	40	10	4/78	11/78	10					
HOST COUNTRY INPUT												
PERSONNEL ON BOARD AS OF												
DM	9/30/77 9/30/78 9/30/79											
PASA												
CONTRACT												

1/ SHOULD BE CONSISTENT WITH LATEST APPROVED OVS LEVEL.  
 2/ EXCLUDES CONSULTANTS PROGRAMMED FOR LESS THAN 90 DAYS  
 3/ LONG-TERM - INCLUDES 9 MONTHS OR MORE  
 4/ For funding period, indicate starting and ending date by month and year of obligations for each project element; e.g., 2/78-10/79.

AID 1330-8 (2-77)

NARRATIVE PROGRESS STATEMENT

Regional Agricultural Trade (596-0074). The Project Paper for Regional Agricultural Trade will be submitted upon agreement by the five Central American Republics to commitments which will support the expansion of intraregional agricultural trade. This could occur by October 1977. The funding shown in Table IV differs from that shown in the FY 1978 CP in the following manner: (a) FY 78 requirements are increased from \$1,350,000 shown in the CP to \$1,563,000, and (b) life of project costs for AID are increased from \$2,656,000 to \$3,615,000. Complete details for this increase appear in the PP; however, 90% of the increase is contained in the Agricultural Sanitation component of this program and is caused by consultant recommendations for a greater amount of technical assistance than had previously been planned. In addition to FY 1978 and 1979 requirements for this program, requirements for FY 1980 total \$621,000 and for FY 1981 total \$267,000.

Principal budget items are technical assistance, budget support and, in the initial year of the program, commodities. FY 1978 obligations finance 143 man months of services (9 in Policy Analysis, 32 in Trade Information, 60 in Agricultural Sanitation and 42 in Grades and Standards); for FY 1979 140 man months will be financed with the same distribution as the previous year except for the Policy Analysis activity for which 6 man months of services will be financed. Forward funding is reflected in Table IV and does not exceed six months except for long-term U.S. training which is funded for the entire program. The \$15 million loan portion of this program is not included in the table.

COUNTRY/PROGRAM	ROCAP		PROJECT TITLE	SIRCA Institutional Assistance		INITIAL OBLIGATION	AS APPROVED PY 1972	REVISION	DATE PP/REVISION
ONGOING PROJECT			PROJECT NUMBER	596-0040		FINAL OBLIGATION	AS APPROVED PY 1976	REVISION	DATE LAST PAR
BUDGET DATA			APPROPRIATION			TOTAL COST	AS APPROVED	REVISION	DATE NEXT PAR
TABLE IV							2,590,000		June 1977

U. S. DOLLAR COST (\$ 000)

PROJECT INPUTS	PROJECT TOTAL	ESTIMATED PY 1977 1/			ESTIMATED PY 1978			ESTIMATED PY 1979			
		OBLIGATION	EXPENDITURE	PIPE-LINE	OBLIGATION	EXPENDITURE	PIPE-LINE	FUND PERIOD (FM-TO)	OBLIGATION	EXPENDITURE	PIPE-LINE
Regional Research Training Assistance	418	447	134	387	394	127	1/78	175	228	74	1/79
Regional Research Operations	90	97	22	91	90	23	12/78	55	64	14	12/79
	328	350	112	296	304	104	1/78-12/78	120	164	60	1/79-12/79
HOST COUNTRY INPUT				114	118	120					
1/ PERSONNEL ON BOARD AS OF	9/30/77	9/30/78	9/30/79								
DM											
PASA											
CONTRACT											

1/ SHOULD BE CONSISTENT WITH LATEST APPROVED OVS LEVEL  
 2/ EXCLUDES CONSULTANTS PROGRAMMED FOR LESS THAN 90 DAYS  
 3/ LONG-TERM - INCLUDES 9 MONTHS OR MORE  
 4/ For funding period, indicate starting and ending date by month and year of obligations for each project element; e.g., 2/78-10/79.

NARRATIVE PROGRESS STATEMENT

SIECA Institutional Assistance (596-0040). The Special Research Unit of SIECA has produced and disseminated studies on balanced development within the Central American Common Market, benefits and costs of economic integration in Central America, unemployment and underemployment in the Central American manufacturing sector, surveys of producer prices in the five Central American countries, and studies dealing with the comparative advantage of each Central American country (with respect to the others) and for the region as a whole (in relation to the rest of the world). These studies will support ongoing and future planning in the region including agriculture sector project planning targeted at the small farmer. Contributions by the Central American Governments in project implementation include assistance in data collection using project-developed methodologies. Research to provide the basis for policy options for Central American integration is continuing on employment in the agriculture sector and in the housing construction industry, on effects of national policy decisions on prices, and on alternative policies promoting the integrated development of the agricultural sector.

COUNTRY/PROGRAM

PROJECT TITLE

INITIAL OBLIGATION

AS APPROVED FY 1976

REVISION FY

DATE PP/REVISION

**ONGOING PROJECT**

Transfer of Technology

FINAL OBLIGATION

AS APPROVED FY 1977

REVISION FY

DATE LAST PAR

**BUDGET DATA**

PROJECT NUMBER

APPROPRIATION

TOTAL COST

AS APPROVED

REVISION

DATE NEXT PAR

U. S. DOLLAR COST (\$ 000)

**PROJECT INPUTS**

**PROJECT TOTAL**

- 6 Provision of design and evaluation assistance for a technology transfer system
- 1 Network operation support
- 6 Technology transfer information services

	ESTIMATED FY 1977	ESTIMATED FY 1978	ESTIMATED FY 1979	ESTIMATED FY 1977		ESTIMATED FY 1978		ESTIMATED FY 1979	
				OBLIGATION	EXPENDITURE	OBLIGATION	EXPENDITURE	OBLIGATION	EXPENDITURE
	90	190	92	200	250	42	210	252	-
	-	33	20	20	20	5/78	-	20	-
	50	120	30	100	120	10	110	120	to
	40	37	42	80	110	12	100	112	10/79
<b>HOST COUNTRY INPUT</b>									
1 PERSONNEL ON BOARD AS OF	55			35			40		
3 PARTICIPANTS PROGRAMMED									
NON-CONTRACT:									
LONG-TERM									
SHORT-TERM									
CONTRACTS									
LONG-TERM									
SHORT-TERM									

1/ SHOULD BE CONSISTENT WITH LATEST APPROVED OYS LEVEL SHOWN IN TABLE II

2/ EXCLUDES CONSULTANTS PROGRAMMED FOR LESS THAN 90 DAYS

3/ LONG-TERM - INCLUDES 9 MONTHS OR MORE

4/ For funding period, indicate starting and ending date by month and year of obligations for each project element; e.K., 2/78-10/79.

NARRATIVE PROGRESS STATEMENT

Transfer of Technology (596-0066). The purpose of the program is to establish a self-sustaining technology transfer system for the public and private sectors in Central America, emphasizing small and medium-scale enterprises. Assistance is being provided to the Central American Research Institute for Industry (ICAITI) in the assessment of technology needs in the region and in the establishment of procedures to procure (from the United States or elsewhere), adapt and apply relevant technologies to meet those needs. Eight people, including three ICAITI field representatives, have already received training in the U.S. The program is in full operation, the field representatives, who will work closely with Chambers of Industry, have been assigned to Guatemala, Costa Rica and El Salvador, and the industrial sectors within Central America appear to be responding in a positive way. Indications are that the self-sufficiency goals of the PTT can be met, i.e., the enterprises will be able to pay in full for the services they receive. The program is divided into an initial 18-months test period, which will terminate in April, 1978, and for which \$310,000 funding is approved, and a second phase of another 18 months. Intensive evaluations during and at the end of the test period will determine whether or not Phase II will be financed and implemented. If authorized, Phase II will require FY 1978 and 79 funding totaling \$410,000.

TABLE V - FY 1979 PROPOSED PROGRAM RANKING

RANK	DECISION PACKAGE / PROGRAM ACTIVITY / SUPPORT ITEM	DECISION UNIT	REVISION BY	CONSOLIDATED BY	RESOURCE REQUIREMENTS				PROGRAM FUNDING	
					OPERATION EXPENSES (000)	INCREMENT	CUMULATIVE	PI	DIRECT COSTS	CUMULATIVE
	<u>Decision Package - Minimum:</u>									
	Workforce and Operating Expenses (Assuming no FY 1979 Obligation)				425	27	29	27	29	
1	0074 Regional Agricultural Trade (GO)	F/N							1166	1166
2	0060 SLECA Institutional Assistance (GO)	F/R							175	1339
3	0073 Regional Horticultural Crop Development (GO)	F/N							456	1795
4	0066 Transfer of Technology (GO)	SDA							210	2005
	<u>Decision Package - Current:</u>									
5	0065 Nutrition Programs (GO)	F/N							480	2485
	<u>Decision Package - Proposed:</u>									
1										
2										
6	0076 Regional Agricultural Trade II (L)	F/N							15,000	17,485
7	0078 Small Farm Cropping Analogs (GN)	F/N							1,020	18,505
8	0081 Regional Grains Handling (GN)	F/N							372	18,877
9	0077 Regional Seed Production (GIAN)	F/N							13,000	31,877
10	0079 Small Farm Animal Systems (GN)	F/N							730	32,607
11	0080 Regional Small Farm Mass Media Training (GN)	F/N							300	32,907
12	0072 Selsmic Instrumentation Network (GN)	SDA							560	33,467

AGENCY FOR INTERNATIONAL DEVELOPMENT <b>PROJECT IDENTIFICATION DOCUMENT FACESHEET</b> TO BE COMPLETED BY ORIGINATING OFFICE	1. TRANSACTION CODE <input checked="" type="checkbox"/> A = ADD <input type="checkbox"/> C = CHANGE <input type="checkbox"/> D = DELETE	PID 2. DOCUMENT CODE 1
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3. COUNTRY/ENTITY ROCAP	4. DOCUMENT REVISION NUMBER [ ]	7. PROJECT TITLE (MAXIMUM 40 CHARACTERS) Regional Agricultural Trade II [ ]
5. PROJECT NUMBER (7 DIGITS) [ 596-0076 ]	6. BUREAU REFERENCE A. SYMBOL LA B. CODE [ 75 ]	

8. PROPOSED NEXT DOCUMENT A. <input type="checkbox"/> 2 = PRP <input checked="" type="checkbox"/> 3 = PP B. DATE [ 11 ] [ 3 ] [ 7 ] [ 2 ]	10. ESTIMATED COSTS \$000 OR EQUIVALENT, \$1 = 1 CA Peso ) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2">FUND SOURCE</th> <th>AMOUNT</th> </tr> <tr> <td>A. AID APPROPRIATED</td> <td></td> <td>15,000</td> </tr> <tr> <td>B. OTHER</td> <td>1.</td> <td>5,000</td> </tr> <tr> <td></td> <td>2. U.S. sub-borrow</td> <td>6,000</td> </tr> <tr> <td>C. HOST COUNTRY</td> <td></td> <td></td> </tr> <tr> <td>D. OTHER DONORS</td> <td></td> <td></td> </tr> <tr> <td colspan="2" style="text-align: right;">TOTAL</td> <td>26,000</td> </tr> </table>	FUND SOURCE		AMOUNT	A. AID APPROPRIATED		15,000	B. OTHER	1.	5,000		2. U.S. sub-borrow	6,000	C. HOST COUNTRY			D. OTHER DONORS			TOTAL		26,000
FUND SOURCE		AMOUNT																				
A. AID APPROPRIATED		15,000																				
B. OTHER	1.	5,000																				
	2. U.S. sub-borrow	6,000																				
C. HOST COUNTRY																						
D. OTHER DONORS																						
TOTAL		26,000																				

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION

a. INITIAL FY [ 7 ] [ 9 ]      b. FINAL FY [ ] [ ]

11. PROPOSED CREDIT AID APPROPRIATED FUNDS (000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. FIRST FY		LIFE OF PROJECT	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN
(1) FN	1343						15,000
(2)							
(3)							
(4)							
		TOTAL					
				15,000		15,000	

12. SECONDARY TECHNICAL CODES (maximum six codes of three positions each)

010    042    000    000

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)

BF    [ ]    [ ]    [ ]    [ ]    [ ]

14. SECONDARY PURPOSE CODE

15. PROJECT GOAL (MAXIMUM 250 CHARACTERS)

[ To promote the role of regional criteria in decisions relating agricultural production and marketing in Central America. ]

16. PROJECT PURPOSE (MAXIMUM 400 CHARACTERS)

[ To promote expanded intraregional agricultural trade in Central America. ]

17. PLANNING RESOURCE REQUIREMENTS (staff/units)

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18. ORIGINATING OFFICE CLEARANCE

Signature: *[Signature]*

Title: Director

Date Signed: MM DD YY [ 05 ] [ 27 ] [ 77 ]

19. THIS DOCUMENT RECEIVED BY: [ ] FOR [ ] OF [ ]

PROJECT IDENTIFICATION DOCUMENT

III

Regional Agricultural Trade II

198-0078

I. Project Goal

The goal of the program is to strengthen the role of regional criteria in decisions affecting agricultural production and marketing in Central America, with attendant benefits in terms of efficiencies, lower consumer prices, increased supply security, improved production technology, and expanded market opportunities for producers, a large proportion of whom will be small farmers.

II. Project Purpose

The purpose of the program is to promote the expansion of Central American agricultural trade, which has lagged behind trade in industrial products. Progress to this end would give a badly-needed boost to Central American integration.

III. Problem Summary and AID Response

A. The Problem

This proposal represents the second tranche to the Agricultural Trade Promotion Program (ATPP) proposed for financing in late FY 77/early FY 78. As noted in RFP-1-13 (198-0074) and its supplement, trade in agricultural products largely stagnated in the 1963-74 period. The ATPP was designed to spur such trade through policy commitments, improved regional technical support services, and the establishment of an intraregional agricultural trade promotion fund within the Central American Bank for Economic Integration (CABEI).

The ATPP was conceived as a \$45.1 million program, with AID providing \$30 million in loans and \$3.6 million in grant funds. During preparation of the RFP, SMOA proposed that the loan portion of the program be tranchied, with the second tranche dependent upon (1) the degree to which the Central Americans had honored the policy and other commitments entered into under ATPP I, and (2) an assessment of overall progress in expansion of agricultural trade.

In support of the demand for this second tranche, SMOA

and CABEI have already identified a potential list of approximately \$50 million of private and public sector projects which are trade-related. As the possibilities of trade are widened, this list should grow, and demand for this specialized and professional financing should expand.

#### B. AID Response

Within the 18-month period following satisfaction of conditions precedent under ATPP II, ROCAP and SIECA will undertake an in-depth evaluation of the expansion of intraregional agricultural trade and the degree of follow-through by the CA governments in meeting their commitments under the program, and an estimation of the demand for and benefits which have resulted from these investments.

Should this evaluation demonstrate significant progress and continued demand, ROCAP will recommend that the additional financing be authorized. The types of investments to be financed in the private and public sectors will be similar to those proposed under the ATPP I, namely: production, marketing, storage, transport, export financing, services of price information, grades and standards, and agricultural sanitation. However, with demonstrated success under ATPP I, we would want to consider liberalizing the criteria governing fund use. In the loan component of ATPP I, there will be a significant, direct impact on agricultural trade expansion. It may make sense to use the ATPP II loan to establish a more generalized agricultural development fund in CABEI.

#### IV. Financial Requirements and Plans

ROCAP estimates that the second tranche should be timed to coincide with the full commitment of the first \$15 million. This is estimated to occur within the first 18 months of the loan. During this period, ROCAP and CABEI will also refine further demand projections. At this time, \$15 million additional is estimated to be required to maintain the program momentum developed under the first tranche. (There may be additional needs beyond this figure. We would hope, however, that demonstrated success in this program would induce other donor interest in the program. Such as the experience under Loan 514-L-010, which sparked considerable additional investment in export promotion activities.) AID requirements for the second tranche are estimated as follows:

AIF	215,000,000
CABEI	5,000,000
ICIs, Sub-Borrowers	6,000,000

Terms of the second loan would be similar to the first, i.e. most concessional interest rates and grace period, and up to 50 years for repayment.

#### V. Development of the Project

The ATPP evaluation plan will address the major components of the program. A major element will be an assessment of overall progress in agricultural trade expansion. SIERA will play an important role in this process. This evaluation will begin approximately six months after meeting conditions precedent, and every six months thereafter. Meanwhile, SIERA staff will be working closely with CABEI and other regional institutions to refine the program.

We anticipate that a RFR may be prepared after the first evaluation, or approximately during the summer of 1978. The RFR would discuss progress to date and would indicate the degree to which assumptions underlying ATPP I were being realized. Given AIF/W approval, SIERA would begin working on the RFR in anticipation of the 18-month review. Forwarding of the RFR to AIF/W would thus hinge upon results of that review and would allow for a quick AIF response to progress.

#### VI. Policy Issues

At this point, policy issues relate largely to IA government commitments and their effective implementation. As the program unfolds, and given significant new regional momentum in agriculture, ROCAF may wish to broaden these issues to encompass a role for CABEI in overall agricultural investment which would help re-enforce CABEI's role to support balanced development within Central America and would get the bank into agriculture in a significant way. A major object for the second tranche would remain promotion of intraregional trade, however.

AGENCY FOR INTERNATIONAL DEVELOPMENT <b>PROJECT IDENTIFICATION DOCUMENT FACESHEET</b> TO BE COMPLETED BY ORIGINATING OFFICE	1. TRANSACTION CODE <input type="checkbox"/> A = ADD <input type="checkbox"/> C = CHANGE <input type="checkbox"/> D = DELETE	PID 2. DOCUMENT CODE 1
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3. COUNTRY/ENTITY ROCAP	4. DOCUMENT REVISION NUMBER <input type="checkbox"/>
5. PROJECT NUMBER (7 DIGITS) <input type="checkbox"/> 596-0078 <input type="checkbox"/>	6. BUREAU/OFFICE A. SYMBOL LA <input type="checkbox"/> B. CODE <input type="checkbox"/>
7. PROJECT TITLE (MAXIMUM 10 CHARACTERS) <input type="checkbox"/> Small Farmer Marketing Analogs <input type="checkbox"/>	

8. PROPOSED NEXT DOCUMENT

A.  2 = PRP  
 3 = PP

B. DATE  MM  YY  
 04  78

10. ESTIMATED COSTS  
 (\$000 OR EQUIVALENT, \$1 = 1 CA Peso)

FUNDING SOURCE	BARSERF
A. AID APPROPRIATED	2,502
B. OTHER U.S.	1,098
1. CA	
2.	
C. HOST COUNTRY	508
D. OTHER DONORS	
TOTAL	4,108

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION

a. INITIAL FY  7  9      b. FINAL FY  8  2

11. PROPOSED BUDGET AID APPROPRIATED FUNDS (\$000)

A. APPRO- PRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. FIRST FY 79		LIFE OF PROJECT	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN
(1) FM	211B	023		1020		2502	
(2)							
(3)							
(4)							
TOTAL				1020		2502	

12. SECONDARY TECHNICAL CODES (maximum six codes, of three positions each)

070       967

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)

BF       R/AG       INDK

14. SECONDARY PURPOSE CODE

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)

To increase small farmer production and income.

16. PROJECT PURPOSE (MAXIMUM 400 CHARACTERS)

To develop a methodology which, through the use of analysis, can provide alternative yield and income predictability necessary for small farmer management decisions and be applicable to untasted new farms with similar ecological situations.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)

18. ORIGINATING OFFICE CLEARANCE Signature: <i>[Signature]</i> Title: Director	19. DATE DOCUMENT RECEIVED BY: A.I.D. USE FOR AID/W DOCUMENTS, NOT FOR DISTRIBUTION Date Signed: MM DD YY <input type="checkbox"/> 05 <input type="checkbox"/> 27 <input type="checkbox"/> 77
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PROJECT IDENTIFICATION DOCUMENT  
P111

Small Farm Cropping Analysis  
(SP6-2078)

I. The Problems and Proposed Response

An estimated seventy five percent of the approximately one million small farms in Central America are at present employing multiple cropping and or sequential plantings. These production systems are often extremely complex consisting of one or more basic food crops (corn, beans, rice, sorghum), one or more vegetables, and an assortment of fruit trees and trees for firewood or fence posts. The combinations vary according to the local ecological, economic, agronomic and infrastructure situation as well as the past experience, education and tradition of individual farmers.

National governments and agricultural researchers until very recently have ignored complex small farm production patterns and concentrated almost all of their research on single crops, usually basic food crops, following temperate climate research in the U. S. and Europe. In 1973, CATIE at Turrialba, Costa Rica, began a large formal experiment in multiple cropping using 54 combinations of corn, sweet potato, rice, cassava and beans. In 1974, Dr. Peter Hilderbrand, working in El Salvador, began some innovative demonstration plots mixing corn, radishes, tomatoes, cucumbers and cabbage, primarily to evaluate economics and labor utilization in multiple cropping. These initial Central American efforts, though largely exploratory from the scientific standpoint, demonstrated that improved production methods and better marketing information can make significant improvements in cropping systems and can substantially increase small farm income in the areas where the field experiments are carried out.

ROCAP, in 1975, initiated a regional multiple cropping research program with CATIE and cooperating I. A. countries. CATIE has increased its interdisciplinary staff conducting multiple cropping research to sixteen Ph. D. technicians and has signed memoranda of understanding with the five C. A. countries. In 1977-78, CATIE, with the collaboration of national agricultural research institutions, will carry out over one hundred field experiments in more than ten areas. Sixteen cropping systems selected for different area specific situations will be estab-

lished and further tested. Some of these, in 1976 77 trials in Nicaragua, showed a potential increase in family income over neighboring small farm empirical systems of more than 300%. At the completion of the initial small farm cropping systems project, a minimum of 10 cropping systems will be produced.

Considerable progress has been made by CATIE during the past four years in understanding the small farmer decision making process, developing an interdisciplinary research team, and developing techniques for conducting research leading to area-specific technological packages. During the conduct of this research, improved tech packs have been developed for application on small farms, using a range of commodities and production practices for specific areas.

A recent review of the work in progress under the existing ROCAP-funded project concluded that, using an interdisciplinary research approach conducted in the five countries, results are applicable and can return superior income in similar ecological situations. This existing state of the art, however, will not permit extrapolation to dissimilar ecological situations without considerable further testing, nor can yield and economic returns be estimated.

## II. The Proposed Solution to the Problem

In order to make future research in cropping systems of broad utility throughout the C. A. region under a range of ecological, economic and social conditions, a new research methodology must be developed. This methodology must be capable of extrapolating results to untested small farm situations and must provide quantitative yield estimates of a high order of predictability.

With this new methodology, a new approach to cropping systems research will be available for use by national researchers. The results of this CATIE research program will provide an improved tool to extension agents in developing with individual small farmers better decisions on what type of sequential and multiple cropping systems are most adapted to individual small farmer situations.

ROCAP proposes to undertake a new research activity in multiple cropping which can potentially redirect future research methods and organization of the five C. A. countries into a truly regionwide system. This approach will be capable of significantly reducing area-specific investigation and will expand the potential for regionwide generalization. CATIE's expertise and research results developed

during the 1975-1978 small farm cropping systems program will serve as the core element in this new initiative augmented by additional research and testing of the new methodology to be evolved.

#### A. Project Description

CATIE cropping systems staff employed in the initial research program will be continued and supplemented by additional expertise in order to develop the data base on which a model for the new methodology can be evolved and field tested during the four year period of this program.

Field research will be undertaken on a selected group of major factors affecting use of improved cropping systems by small farmers in Central America. These may include, but not be limited to, such constraining factors as farmer capability to adopt new methods of production, farm labor supply, water availability, temperature, soil type, capital availability for input purchase, market demand, topography, access to basic infrastructure, etc.

Each factor selected will be tested across minimum maximum gradients in C. A. for a group of selected crops including basic grains and vegetables. Resulting data will be analyzed and a mathematical model developed and tested using cropping systems in previously tested as well as untested situations. The results will be organized into a keyed set of questions which extension agents can pose to individual small farmers resulting in two to five cropping systems alternatives for the crops selected for testing the new methodology, among which the farmer can select the one he prefers.

Development of the methodology can, in a continuing phase, permit CATIE to teach national counterparts how to use this tool, pool results from the five national research initiatives in other crops, and further expand the use of the method to new cropping combinations.

#### B. Project Outputs

1. A generalized methodology for cropping systems research and for extrapolating the results to new ecological situations.
2. Recommendations of cropping systems alternatives for small farmers.

3. Yield forecasting and estimation of income derived from alternate systems under different conditions.
4. Determination of essential environmental variables to systematically classify ecological and small farm situations as the basis for establishing ecological analogs.
5. Training of national and international personnel to insure continuity of research under the systems approach as well as use and dissemination of already generated methodology.

### III. Financial Requirements

This project is expected to cost a total of \$4,108,000 during a four year period beginning in April 1977. ROCFA contributions for professional and sub-professional expertise, equipment, other costs and training is estimated at \$2,502,000.

The in-kind counterpart contribution of CATIE is estimated at \$1,098,000, and national counterpart will be about \$508,000. More precise estimates will be developed during the preparation of the Project Review Paper.

The estimated short term and full time IPRA contracted U. S. university collaboration for specific studies or the full time participation in the project must be negotiated with IPRA during the PRP development but will probably exceed \$100,000 annually.

### IV. Development of the Project

Since CATIE is presently working with ROCFA on the small farm cropping systems project, it will be possible to develop this project with a minimum of delay. Data developed during the initial study are available, and the majority of the CATIE and ROCFA professionals now working in multiple cropping will continue on this new program. This staff is presently considered to be the best qualified cropping systems staff in Latin America and one of the best worldwide.

CATIE already has working agreements in all five C. A. countries, and counterpart research and extension activity is expected to expand significantly during the next several years. In addition, CATIE has working agreements with CIM (International Center for Tropical Agri-

culture) and CIP (International Potato Center), and the present chairman of the board of CATIE is the former director of CIMMYT (International Center for Improvement of Corn and Wheat), assuring CATIE's ability to call on these three Latin American international centers for assistance on special problems if required.

All of the Central American IBERA Rural Development Officers have been to CATIE and support the cropping systems research being carried out by CATIE. Several countries are developing bilateral projects to increase national support for the ongoing IBERA CATIE project.

The proposed project implementation schedule is as follows:

Preparation of PIF	May 1977
PIF submission to AII/W	June 1977
AII/W approval of PIF	August 1977
Preparation of PRP	March 1978
Submission of PRP to AII/W	April 1978
Approval of PRP by AII/W	June 1978
Preparation of PP	September 1978
AII/W approval of PP	October 1978
Initiation of project	April 1979

at termination of current  
multiple cropping project

#### V. Assumptions and Issues

It is assumed that the results of this research will be of interest to national planners, researchers, extension agencies, and small farmers. Receptivity to the present IBERA CATIE project is increasing and countries are expanding their counterpart staffs and budgets.

It is assumed that IAB/AGR and/or IA PP will finance additional specialized technical expertise, e.g. in the evaluation of the state of the art of present small farmer production practices; water use, climatological and soil analoging; water conservation methods; marketing; and pest and weed control, either on a repeated short term or a full time basis.

During project development IBERA will examine whether, after four years, enough momentum in the five countries should have been

achieved to obviate or reduce any requirement for continuing support from CATIE. If it is judged that ultimate success hinges on CATIE's ability to continue to guide this process, ROCAP will examine obtaining Central American Government commitments to provide sufficient funds to support a sustained program as a condition precedent to going ahead with this project.

Regional Cropping Systems Failings

Proposed Four Year Budget

I. ROCAP Costs

A.	<u>Full time professional staff</u>	Total 4 years costs
	12 senior researchers a/30,000/year	1,440,000
	3 junior researchers a/12,000/year	144,000
		<u>\$1,584,000</u>
B.	<u>Sub Professionals</u>	
	3 secretaries a/4,000/year	48,000
	2 data clerks a/4,000/year	32,000
	1 communication assistant a/8,000/year	32,000
	field labor	35,000
		<u>\$ 147,000</u>
C.	<u>Short Term Consultants</u>	200,000
D.	<u>Equipment</u>	
	Vehicles - 4 pick-ups and 1 sedan	36,000
	Office and calculating equipment	15,000
	Laboratory, field and scientific equipment	60,000
		<u>111,000</u>
E.	<u>Other Costs</u>	
	Travel and per diem	130,000
	Plant Materials	10,000
	Communications	30,000
	Computer time (C. A. and U. S.)	70,000
	Conferences and workshops	60,000
		<u>300,000</u>

F.	<u>Training (U. S. and Ind. Country)</u>	
	10 Two year scholarships (MSc level for national researchers @ \$,000/year)	<u>100,000</u>
	Total four year cost	<u><u>32,500,000</u></u>

II. Counterpart Costs

CATIE

A.	<u>Professional</u>	
	6 senior professionals @ \$0,000/year	700,000
B.	<u>Sub-professional</u>	
	2 secretaries @ \$4,000/year	80,000
	5 research assistants @ \$3,000/year	150,000
	field labor	<u>50,000</u>
	Personnel costs, total	\$ 930,000
C.	<u>Other Costs</u>	
	Office space and furniture	80,000
	Field research land and equipment	20,000
	Electricity, water, etc.	15,000
	Laboratory space and equipment	80,000
	Misc., supplies, equipment & maintenance	<u>60,000</u>
	Other Cost Total	\$ 255,000
	Total CATIE Contribution	\$1,185,000

National Contribution (Total 5 countries)

20 Medium level professionals	500,000
Vehicles, Maintenance, etc.	100,000
Travel and per diem	40,000
Laboratory analysis (soils and plants)	20,000
Land use, soil preparation, etc.	<u>8,000</u>
	\$08,000
Total Counterpart Costs	<u><u>\$1,605,000</u></u>

AGENCY FOR INTERNATIONAL DEVELOPMENT <b>PROJECT IDENTIFICATION DOCUMENT FACESHEET</b> TO BE COMPLETED BY ORIGINATING OFFICE	1. TRANSACTION CODE A = ADD C = CHANGE D = DELETE	PID 2. DOCUMENT CODE 1
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3. COUNTRY/ENTITY ROCAP	4. DOCUMENT REFERENCE NUMBER [ ]
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5. PROJECT NUMBER (7 DIGITS) [ 596-0081 ]	6. BUREAU/OFFICE A. SYMBOL LA	B. CODE [ 05 ]	7. PROJECT TITLE (MAXIMUM 40 CHARACTERS) [ Regional Grains Handling Program ]
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8. PROPOSED NEXT DOCUMENT A. [ 2 ] 2 = PRP 3 = PP	B. DATE MM YY [ 04 ] [ 78 ]	10. ESTIMATED COSTS (\$000 OR EQUIVALENT, \$1 = 1 CA PESO)
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FUNDING SOURCE	BASE OF
A. AID APPROPRIATED	635
B. OTHER [ 1. CA Regional Inst ]	50
C. HOST COUNTRY (S)	250
D. OTHER DONOR(S) Canada	200
<b>TOTAL</b>	<b>1135</b>

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION a. INITIAL FY [ 79 ]      b. FINAL FY [ 82 ]	
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11. PROPOSED BUDGET AID APPROPRIATED FUNDS (\$000)							
A. APPRO- PRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. FIRST FY <u>79</u>		LIFE OF PROJECT	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN
(1) FN	159B	056		372		635	
(2)							
(3)							
(4)							
TOTAL				372		635	

12. SECONDARY TECHNICAL CODES (maximum six codes of three positions each)					
063	140	720	333		

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)	14. SECONDARY PURPOSE CODE
BF      TNG	

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)

To reduce grain prices in Central America and to facilitate trade in grains between the republics.

16. PROJECT PURPOSE (MAXIMUM 480 CHARACTERS)

To reduce losses attributable to improper storage policies and procedures of the Central American grain stabilization institutions and to bring the efficiency of each to a level which will facilitate trade and cooperation among them.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)

18. ORIGINATING OFFICE CLEARANCE Signature: <i>J. G. Harrison</i> Title: Director	19. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION Date Signed: MM DD YY [ 05 ] [ 27 ] [ 77 ]
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PROJECT IDENTIFICATION DOCUMENT  
(PID)

Regional Grains Handling Program  
(596-0081)

I. Project Goal

To reduce grain prices in Central America and to facilitate trade in grains between the republics.

II. Project Purpose

To reduce losses attributable to improper storage policies and procedures of the Central American grain stabilization institutions and to bring the efficiency of each to a level which will facilitate trade and cooperation among them.

III. Problem Summary and AID Response

A. The Problem

Over the years, AID has, through its regional and bilateral Mission programs, provided financial resources and technical services to the Central American countries to expand their capacity to meet domestic food needs. Production credits, commodity stabilization programs, irrigation works, rural roads, research and extension programs, and grain storage facilities are programs that have been designed and implemented with the goal of domestic food self-sufficiency in mind. In 1974, when faced with declining food grain production and the uncertainty of obtaining cheap grain supplies on world markets, the Central American governments launched an ambitious program to achieve basic food grain self-sufficiency by 1980. By early 1977 the five Central American governments had increased their grain storage networks four times over what had existed ten years before.

Central American agriculture has responded to the high support price policies, and the goal of regional self-

sufficiency in basic grains may be reached in the 1977/78 crop year. Another, less positive result, is that the increased production response and the expansion in grain storage capacity has severely taxed the administrative and technical expertise of the national marketing agencies. Major financial and product losses due to mismanagement and grain spoilage are becoming increasingly commonplace.

The heads and representatives of grain marketing agencies have recognized this problem. One of the issues which surfaced during their September 1976 meeting in San Jose was the need for direct training in basic grains storage and handling. In subsequent meetings at the working level, this need was again discussed and the following problem areas identified:

1. There is no training available at the secondary, vocational or university level which provides the expertise needed to store and handle basic grains.
2. On-the-job training provided to new employees is usually unstructured and superficial. General knowledge throughout the agencies of proper grain storage and handling procedures and use of equipment is fragmentary and technical competence generally low.
3. Communication within the agencies is poor. Few individuals have a clear idea of how the goals and objectives of the agencies translate into program design and work responsibilities.

B. AID Response

This project would initiate a regionally coordinated training program in basic grain storage and handling. The project is based on the premise that improved efficiency in storage and handling of grains can result in an increased supply available to consumers at lower prices and with improvements in

quality. Increased production without improvements in storage and handling facilities and procedures may do little to improve the availability of agricultural products to the consumer and ultimately for regional trade. This project was chosen primarily because preliminary responses from the national marketing agencies and such regional institutions as ICAITI, IICA and SIECA indicated that training in grain storage and handling practices throughout the region was needed to effectively and efficiently manage expanded physical storage capacity and increasingly larger amounts of grain.

### 1. Project Description

The proposed project would provide technical assistance to expand earlier work in the establishment of uniform grades and standards for basic grains to include improving and standardizing storage and handling practices in and among grain marketing agencies in the region. Technical assistance and training would be provided through the Regional Grades and Standards Laboratory initiated under ATFP I.

#### a. Project Outputs and Inputs

1) Project-supported outputs would include an on-going training program which would, through a series of lectures, discussions, laboratory exercises, work sessions and field trips produce:

a) Trained people to manage and operate grain storage facilities; and

b) A research and planning capability to identify and solve problems resulting in or stemming from product losses in grain storage facilities.

Training would be specifically aimed at increasing knowledge and skills in: a) cereal and feedgrain handling from production to consumption; b) grain marketing and grain loss problems; c) grain inspection and grading; and d) economic principles of marketing and the organization of small and large firms.

2) As project inputs, existing training material on grain storage and handling prepared by the USDA, Kansas State University and others would be assembled, reviewed and synthesized into didactic material (operational manuals, field guides, handbooks, etc.) which (in translation) would be timely and relevant to the types of problems found in Central America. Modifications to established U.S. practices and standards may prove necessary to insure complementarity within Central American grades and standards and to insure they are supportive of regional acceptance of improved storage and handling practices. Material presented would include blocks of instruction on:

1. The importance of proper storage.
2. Fundamentals of grain structure, moisture, molds, and changes in storage.
3. Inspection, including standards, sampling, and grading.
4. Storage and handling methods and requirements on equipment, maintenance and facilities.
5. Quality preservation to include control of insects, birds, rodents, and micro-organisms.
6. The economics of marketing including management, operation, organization, inventory control, and warehousing.

b. Technical and Physical Resources Required

1. To conduct a base line survey of the region's priority training requirements; (approx. 5 m/m) \$ 50,000
2. For the advisory assistance to assemble and develop uniform, area-relevant, didactic materials; (approx. 6 m/m) \$125,000

3. To strengthen ICAITI's capacity to conduct seminars, workshops and lectures over the four year life-of-project period;	\$160,000
4. To train selected individuals in specialized areas deemed necessary to continue the training at the national level but not available through the regional program;	<u>\$300,000</u>
Total	\$635,000

c. Estimated Disbursement Period

A four year disbursement period is anticipated for this project. The majority of the grant will be obligated early in the first year with progressively diminishing amounts in succeeding years. Increasingly larger annual allotments are projected for the counterpart donations over the life of project.

2. Major Assumptions

In addition to conditioning this project on AID/W approval of second tranche financing for ATPF II, this project assumes that:

a. The training which will be made available will still be of interest to the Central American marketing agencies;

b. The introduction of uniform and standardized methodologies of handling basic grains on a regional basis will be adopted by the marketing agencies.

c. There will be close coordination between the national marketing agencies and the regional institutions involved in the project.

d. The specialized technical expertise required will be available when needed to develop the didactic material and to assist in the training.

e. National support prices will be adjusted to levels more closely aligned with existing and projected storage and handling capacity.

### 3. Other Donor Activity

During the first quarter of FY 1977, members of IICA's marketing management group entered into discussions with representatives of the Canadian government regarding a possible project in management aimed at the national marketing agencies of Guatemala, Costa Rica and Panama. The general purpose of this proposal is to improve the management efficiency of these three marketing agencies. To avoid any duplication, ROCAP will be in continuing contact with IICA and the Canadians during development of the PRP.

### 4. Alternatives to the Project

The training needed to improve basic grain handling and storage practices could be furnished by the bilateral missions on an individual basis. However, to achieve the most cost effective approach in terms of delivering a uniform, regionally coordinated training program resulting in standardized methods of grain handling argues that the project be undertaken multilaterally. Given the expressed need for the training, and the existence of a regional institution with recognized expertise in the area of grades and standards, the proposed approach offers the best use of development resources at this time.

### 5. Project Beneficiaries

The direct beneficiaries are the grain marketing agencies currently attempting to efficiently manage their grain inventories. With project implementation, grain management skills will progressively improve and help to reduce financial and product losses due to mismanagement. These savings will then become available to the national governments and may be directed to other developmental purposes or passed on to the indirect beneficiaries, the consumers, in the form of lower prices.

6. Project Replication

As the problem identified appears to exist in other regions, it is possible that what is learned through this project will be of value elsewhere.

IV. Financial Requirements and Plans

Initial estimates call for a total project cost of \$1,135,000 with AID contributing \$635,000.

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	<u>AID</u>		<u>Sponsoring CA Regional Institution</u>		<u>Marketing Agencies</u>		<u>Other* Donor</u>		<u>TOTAL</u>
	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>	
	(Thousands US\$)								
Grant:	635	56	50	4	250	22	200	18	\$1,135
Project Design	175	61	12	4	50	17	50	17	287
Training & T.A.	460	54	38	4	200	24	150	18	848

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\* Canadian Government

V. Development of the Project

A. Project Preparation

ROCAP anticipates drawing on several sources for project development. First, the Central American RDO's will be surveyed. IICA marketing specialists, U.S. consultants, and representatives from ICAITI will form the task force which will identify specific training priorities and requirements through interviews with heads and representatives of the various marketing agencies. Also, ROCAP will draw on the results of a two-year

project, funded by a 1976 AID grant to the League for International Food Education (LIFE), which seeks to develop and field test a set of guidelines that will standardize the approach to and the implementation of a method of determining the extent and causes of grain losses in the post-harvest food system. Finally, from these and other activities to be identified during PRP development, the area-relevant didactic materials will be developed and will be presented during the training sessions.

B. Documentation Schedule

The proposed project implementation schedule is as follows:

PID completion and internal review	May, 1977
PID submission to AID/W	June 1977
AID/W approval	June 1977
PRP completion and internal review	April 1978
PRP submission to AID/W	April 1978
AID/W approval	May, 1978
PP completion and internal review	Sept. 1978
AID/W approval	Oct. 1978

C. Resource Requirements

The following consultants and temporary duty staff are necessary to advance the proposed project through intensive review to the final PP:

<u>Number of Specialists Required</u>	<u>Area of Expertise</u>	<u>Length of Time</u>	<u>Approx. Cost</u>
1	Grain storage facilities operation and maintenance	3 m/m	\$ 9,000
2	Grades and standards implementation	1 m/m	12,000
1	Grain storage technology	2 m/m	6,000

<u>Number of Specialists Required</u>	<u>Area of Expertise</u>	<u>Length of Time</u>	<u>Approx. Cost</u>
1	Management and Marketing Training	2 m/m	\$ 6,000
2	Curriculum development and instruction	1 m/m	<u>6,000</u>
Total			<u>\$39,000</u>

VI. Policy Issue - Regional Justification

It makes sense to undertake the program regionally (assuming that ATPP II goes ahead) because 1) there appear to be economies of scale by undertaking this type of program once rather than five times, and 2) achievement of uniformly higher levels of grain management will facilitate increased trade and cooperation, thereby directly supporting the purpose of the ATPP.

There appear to be several regional institutions which could provide assistance in this area, viz. INCAE, ICAP, ICAITI and IICA. During project development we will examine the relative strengths of each and whether the services to be provided will be required over an extended period and should therefore be institutionalized.

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3. COUNTRY/ENTITY ROCAP	4. DOCUMENT REVISION NUMBER <input type="checkbox"/>
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5. PROJECT NUMBER (7 DIGITS) <input type="checkbox"/> 596-0077	6. BUREAU/OFFICE A. SYMBOL LA	B. CODE <input type="checkbox"/> .05	7. PROJECT TITLE (MAXIMUM 40 CHARACTERS) <input type="checkbox"/> Regional Grain Production
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8. PROPOSED NEXT DOCUMENT A. <input type="checkbox"/> 2 = PRP <input type="checkbox"/> 3 = PP	B. DATE MM YY <input type="checkbox"/> 07 <input type="checkbox"/> 78	10. ESTIMATED COSTS (\$000 OR EQUIVALENT, \$1 = 1 C.A. Peso)
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9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION a. INITIAL FY <input type="checkbox"/> 7 <input type="checkbox"/> 9      b. FINAL FY <input type="checkbox"/> 8 <input type="checkbox"/> 0		10. ESTIMATED COSTS (continued)
		FUNDING SOURCE A. AID APPROPRIATED 13,500
		B. OTHER U.S. 1. Sub- 2. Towers 3,000
		C. HOST COUNTRY 5,500
		D. OTHER DONOR(S) 500
		TOTAL 22,500

11. PROPOSED BUDGET AID APPROPRIATED FUNDS (\$000)							
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. FIRST FY 78		LIFE OF PROJECT	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN
(1) FN	214B	011	011	1,000	12,000	1,500	12,000
(2)							
(3)							
(4)							
TOTAL				1,000	12,000	1,500	12,000

12. SECONDARY TECHNICAL CODES (maximum six codes of three positions each)

070	312				
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13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)	14. SECONDARY PURPOSE CODE
BF      TNG	113

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)

To reduce per unit costs, and to raise incomes and well-being, of Central American small basic food grain producers.

16. PROJECT PURPOSE (MAXIMUM 400 CHARACTERS)

To provide an inexpensive and regionally accessible supply of improved seed to basic food grain producers.

17. TRAINING RESOURCE REQUIREMENTS (staff/funds)

For PRP: Agricultural Economist - 2 mm Seed Marketing Advisor - 1 mm	For PI: Seed Production Advisor - 2 mm Food Processing/Certification Advisor - 3 mm
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18. ORIGINATING OFFICE CLEARANCE Signature: <i>[Signature]</i> Title: Director Date Signed: MM DD YY 05 27 77	19. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION MM DD YY
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PROJECT IDENTIFICATION DOCUMENT

(FID)

Regional Seed Production

(596-3377)

I. Problem Summary and AID Response

A. The Problem

The provision of low-cost agricultural inputs has been a basic component of the strategy of many CA USAID programs to raise rural incomes in Central America. But efforts have focused on low-interest credit and factors of production other than improved seed.

Yet field trials at the national level as well as adaptive trials and area-specific research of the international research institutes have demonstrated the importance of improved seed in raising output, lowering per unit costs, and enhancing net incomes of small farmers. CAIIE has found that rapidly maturing seed varieties are essential to get the most returns from multiple cropping. CIMMYT, CIAT, and IRRI have demonstrated the critical role of improved seed varieties in fostering the "Green Revolution" in other parts of the world.

While more research needs to be done in selecting seed varieties - particularly for many of Central America's micro-climates - technical capabilities to carry it out exist at the national and regional level. However, seed research to date is not significantly benefiting the small grain producer population. The problem is one of a lagging seed production and distribution system.

Reports at the PCCMCA (Central American Cooperative Program for the Improvement of Food Crops) meeting in San José, Costa Rica in 1973 emphasized the serious deficiencies in production and supply of improved seed of basic food crops in Central America. A preliminary analysis by the Instituto Interamericano de Ciencias Agrícolas (IICA) in the early 1970's revealed that after ten years of bean improvement research in the region and nearly twenty of similar efforts in rice and corn, the supply and use of improved, high-yielding, fertilizer- and-management-responsive seed varieties identified and developed through local research was inadequate to negligible. For example,

a survey in the use of improved bean seed in the Central American region showed that only 1.2% of annual requirements for bean seed were being produced in the region and less than 0.2% of this improved seed was certified.

Considering the low usage of improved grain seed by small to medium size farmers, it is obvious that they are not participating in technological advances achieved through agricultural research; improved seed, which is basic for improved production, must be made available to and planted by them.

### B. AID Response

In 1975-76 ECAP financed a study of the seed production and supply systems in Central America by a team of Mississippi State University seed specialists to establish current capabilities of national systems, identify major deficiencies and constraints, and suggest needed improvements. Regarding why small traditional producers have not made greater use of improved seed the specialists concluded:

1. Economic incentives for increasing production, which is the major result of use of improved seed, have not been sufficient.
2. Benefits from use of improved seed have not been effectively demonstrated in the context of the small farmer's production system.
3. Private seed companies focus their promotional and marketing programs almost exclusively on the large commercial farmer.
4. Government seed programs have to a large extent also concentrated on supply of seed to commercial farmers because little promotional effort was needed.
5. Agricultural development programs have devoted scant attention to planning and implementation of seed supply.
6. Technical problems arising out of relatively unfavorable climatic conditions for seed

production and supply, and inadequate technical and managerial skills, have resulted in the supply of poor quality seed to farmers, and, in consequence, lack of confidence among small farmers in "government produced seed".

- 7. Technical assistance to and support of seed program industry development in the region have lacked continuity, with the result that periodic steps forward have been followed in time by nearly equal falls backward because of lack of attention and support.

The present project addresses itself to the recommendations of the MSU specialists for promoting improved seed production, processing, and distribution among Central America's small traditional producers. Loan and grant funds, to be disbursed over three years, are anticipated.

The loan component of the project would be handled by CABEI, which would extend credit to national public development credit agencies or private financieras and commercial banks for financing private seed production, processing and distribution activities. Based on the INTAGRO study, estimates of the minimum expansion in capital investment for producing 1,000,000 quintales of improved seed (i.e. the quantity of seed considered necessary in 1975 to supply 50% of the land area then in grain crops alone) and based on an average capital investment cost of \$20 per quintal of added seed production and handling capacity, are as follows:

I t e m	Cost
Machinery and equipment for seed cultivation	\$5,500,000
Irrigation equipment	1,600,000
Equipment for seed processing	3,000,000
Equipment for seed storage	6,900,000
TOTAL	<u>\$20,000,000</u>

The AIF loan would finance \$12,000,000 of the total capital costs, the rest being underwritten by CABEI, the IOIs and sub-borrowers. Annual operating costs (e.g., labor, land, fertilizer, parent seed, insecticides) would be met by borrowers or financed by participating IOI's out of their own funds.

A grant-funded component of the project would be required to: (a) build capacity of regional agencies to evaluate projects for financing, (b) to assist national agencies through FFA and ICAITI to provide assistance to seed growers and processors in quality control and other measures, (c) build national capacity to certify seed for sale to small producers and (d) disseminate information about the usefulness of good seed to the target small-producer population. The grant component would total about \$1,500,000 as follows:

<u>I t e m</u>	<u>Cost</u>
Certification laboratory equipment	\$500,000
Seed Certification Training	200,000
Information and advisory services	<u>800,000</u>
TOTAL	\$1,500,000

While the project would better the supply of improved seed by financing private sector production and processing and public sector inspection and certification activities, each country would have to promote among small producers the use of such seed via its extension and credit programs (see Regional Small Farm Mass Media PID). The project assumes there is an in-country delivery system in place able to get a reliable supply of inexpensive seed into the hands of small farmers currently using other inputs (e.g., fertilizers) but only getting limited benefits because of the piollo seed they use. Credit to producers of seeds most suitable to regions where small producers are concentrated is one mechanism.

An AID-financed seed laboratory operating in Costa Rica could be used for training national technicians. Each country has seed certification services which could be expanded.

## II. Financial Requirements and Plans

During project development (See III below) the following best estimates of project costs will be documented. At present a \$22,500,000 program appears to be a manageable level of activity for reaching within the life of the project one half of the land area in grains produced by small traditional farmers. AID, host country and other donor contributions to the project would follow the pattern shown below:

	<u>Loan</u>	<u>Grant</u>	<u>Total</u>
AID	12,000,000	1,500,000	13,500,000
Host Country Govs.	5,000,000	500,000	5,500,000
ICIs & Sub-Borrowers	3,000,000	-	3,000,000
Other Donors		500,000	500,000
	\$ 20,000,000	\$ 2,500,000	\$ 22,500,000

### III. Development of the Project

Initial technical studies by MSU and SIERCA INTACH identified problems requiring attention. Now required is a detailed study into the economic and financial feasibility of improved seed production and marketing for each of the participants in the project.

The following activities in design and development of the project will be necessary:

1. Supply analysis including an inventory of improved seed varieties presently available in the region and a listing of producers and processors in the private sector able to handle them.
2. Demand analysis including a survey of the land area and number of producers who could benefit from use of improved seed varieties.
3. The technical and financial soundness to small food crop producers - - terms of yield responses and improved incomes, respectively -- of participating in the project.
4. Profitability analysis to determine incentives to private seed producers and processors who would be financed by the project.
5. Institutional analysis of national and regional agencies involved in seed inspection and certification to determine their capabilities to regulate improved seed production and marketing in Central America and promote its use among small producers.

A PRP is scheduled for March 1978 to be followed by a PP in October 1978. Consultants required for project development would be scheduled as follows:

	<u>Source</u>	<u>Period</u>	<u>Timing</u>	<u>For:</u>
1. Agricultural Economist	AID	2 mo.	Jan-Feb.	PRP
2. Seed Marketing	MSU	1 mo.	Jan-Feb.	PRP
3. Seed Production	MSU	3 mos.	April/June	PP
4. Seed Processing & Certification	MSU	3 mo.	April/June	PP

#### IV. Policy Issues

1. INTAGRO argues that inadequate use of improved seed is a problem common to all C. A. countries. The MSU team suggests that the regional institutions might be able to do something to help in a way more efficient than five countries acting independently. This must be demonstrated.

Some savings are certainly possible from the production of seed varieties in one country which may be suitable in others. A wide range of micro-climates precludes each country from producing all seed varieties necessary. Still, since several of these micro-climates are shared by two or more C. A. countries there exist opportunities for specialization and trade of seed.

In brief the issue is whether a regional approach to this common problem in C. A. is the most efficient, or whether bilateral programs are, or can be of greater benefit. On the other hand, if, in the light of progress on ATPP I, CABEI moves into the agricultural sector more broadly defined than trade, and particularly with a promotional role, financing of the seed program through CABEI may be easier to justify.

2. The size of the project should be further examined. Should it attempt to meet the INTAGRO goals, or some lesser target? If the feasibility of a discrete project proves out at a smaller scale, it can be later expanded. If a discrete project does not prove out, requirements in the seed area could be incorporated into ATPP II.

3. What will be the long-term roles for regional institutions (e.g. IICA, ICAITI). Is their involvement in the project essential? What is the role of U. S. technical assistance?

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17. PLANNING RESOURCE REQUIREMENTS (MAXIMUM 400 CHARACTERS)																																																											
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PROJECT IDENTIFICATION DOCUMENT  
(PID)

Regional Animal Systems Research  
(596-0079)

1. The Problem

Livestock (e.g. double-purpose cattle, hogs, sheep, goats, chicken and, increasingly, rabbits) plays an important role on small farms in Central America. It provides protein from meat and milk, beasts of burden for land preparation, wool for home use in clothing, blankets, etc., skins for clothing and sandals, fertilizer, and cash for purchase of essential basic family living needs as well as for production inputs. Reliable data on the contribution of animals to the income of families working on such farms are not presently available. While almost all of the estimated one million small and subsistence farms in Central America produce some animals for either home use or sale, a growing -- though still unquantified -- number of small farms are specializing in animal protein production as a major source of their incomes. Small farmers typically pasture animals on land unfit for crop production. Feed crop residues and weeds (as well as some grain not fit for seed or human consumption) at times supplement pasture.

There are approximately thirty animal researchers in Central America and an estimated one hundred extension agents working with animal producers. Most of the research work presently undertaken is on feed mixtures, breed improvement, some pasture plant studies and pasture rotation schemes. Results of this work are most often adapted to medium and large farms commonly producing purebred animals or purebred crosses. Little attention is given in research to the problems of small livestock farms growing native stock almost exclusively, and almost none is dedicated to improving animal production as an adjunct to crop production on small farms. Consequently, income from this source is low and farmers are working far less than their capacity or are wasting valuable

inputs capable of augmenting their family income or nutrition. Technological packages specifically designed for small farm animal production are unknown and are needed.

Inquiries into the present effectiveness of animal production on small farms by Central American technicians have indicated that production is extremely low compared to that of larger producers. Cattle on small farms usually reach killing age in five to seven years instead of two to three; hogs require from fifteen to eighteen months to attain reasonable killing size rather than eight to nine months; laying hens average 75 to 120 eggs per year rather than 180 to 200 eggs, and double-purpose cows average an estimated 600 Kg. of milk annually, instead of a potential 1000 Kg. or more per year.

CATIE, located at Turrialba, Costa Rica, has for many years trained senior livestock specialists at the MS degree level and has conducted both applied and basic research on beefcattle and double-purpose criollo cattle for milk production. They have also conducted research on several small animals (notably sheep and hogs). Since 1974, when CATIE initiated its new focus on small farm agriculture, the Tropical Animal Industry Department, consisting of five Ph.D., two MS, and one BS professionals, has undertaken an innovative approach to dairy production. It is concentrating on attaining a maximum level of milk or beef produced per area, instead of the more conventional per animal rate, with a minimum of supplemental feeding. This research uses a small integrated team and has resulted in a technological package for areas similar to Turrialba, capable of producing up to 14,000 liters of milk per hectare annually. With this system, under wet tropical Costa Rican conditions, small farms of three hectares in size can provide a good family income. At present, however, CATIE's small farm dairy work is restricted to Costa Rica.

In Panama and Honduras, CATIE is providing technical assistance in beef production. Recently, CATIE signed a three year agreement with the Canadian Government to undertake

surveys and research in the use of crop residues as a basis of cattle feeding.

## 2. The Proposed Response to the Problem

ROCAP proposes to initiate, through CATIE, a regionally coordinated research program for the improvement of small farm income from animals through the development of technological packages adapted to both animal and mixed farming enterprises. A small farm enterprise will not exceed five hectares on soils classified No. 1, 2 or 3 in the new USDA soil classifications nor over ten hectares on soils classified No. 4 or above. This program will use an interdisciplinary research team located at CATIE and in selected Central American countries to bring together national researchers into a regional organization to facilitate training, exchange information on research underway and, most importantly, assist in designing and conducting new research on small farms.

### a. Project Description

The project will be initiated by a survey carried out regionwide to determine the major constraints to increasing small farm efficiency and, simultaneously, an analysis will be undertaken of ongoing research, research facilities, information availability and areas in which future training should be concentrated.

Based on the results of the survey, research on one or more animal types will be undertaken where it is deemed that most improvement can be made in a short time. The program will work in ten geographic areas in which there are high concentrations of small farms. At least two integrated research projects will be undertaken per country -- one in an area where animals are the predominate source of income and one in which animals supplement the income derived from crops. The animal research on supplementation of income in cropping farm situations will be carried out in the same areas as the ROCAP/CATIE multiple cropping research. Since Canada is supporting the study of crop residues for beef and dairy

cattle, this project will draw upon that research.

Animals used for experimentation will be those found on the small farm. Animals will be treated for parasites, vaccinated as required, and will receive supplemental minerals. Seed or planting materials will be provided by the project if necessary, but planting, irrigation, and fencing will be provided by the cooperating farmer. Research data will be analyzed at CATIE and the results published or otherwise made available to the extension service, banks and mass media through national counterparts and regionally through the ROCAP/IICA agricultural information project. Research papers will be presented at the regional annual animal research conference to be held in a different Central American country each year.

Ten Agronomic Engineers will receive MS level training in some major aspects of livestock research either in the U.S. or Mexico, or at CATIE. Upon the completion of their training they will return to their countries and work for the Ministries of Agriculture, per previous agreement (two years for each year of training). The Ministries will agree to employ them upon their return and supplement their training stipend as required.

Short course training will be provided by the CATIE interdisciplinary staff. Courses will be on such topics as research design methods, survey techniques, pasture management, ensilage, mineral requirements and their application to small farm situations, and animal sanitation. Training manuals for each course will be prepared at CATIE.

Quantitative criteria will be developed during the preparation of the PRP for the improvement in production or income for each technological package developed.

b. Project Outputs

(1) A coordinated network of C.A. national livestock researchers will have been organized.

(2) Ten C.A. technicians -- two from each country -- will have been trained at the MS level and will be actively working on the solution of animal production problems on small farms.

(3) At least eight short courses will have been held in the region on animal improvement and research methods adapted to small farm situations.

(4) A survey of small farm animal production problems will have been completed and transferred to the national and/or regional information transfer agencies for their use.

(5) At least five technological packages will have been developed.

### 3. Financial Requirements

The total costs of this new initiative are estimated to total \$2,699,000 of which ROCAP will contribute \$1,693,000, CATIE will contribute approximately \$564,000 largely in kind, and the five national governments and small farm operators will contribute a minimum of \$442,000. More accurate estimates of the counterpart contribution will be developed during the preparation of the project review paper.

### 4. Development of the Project

The PRP will be prepared with the help of CATIE and the Central American countries. Project details, such as location of survey locations, types of training and similar elements of the program, will be discussed with national agencies. ROCAP will work closely with bilateral USAIDs on the project.

The proposed project implementation schedule is as follows:

Preparation of PID	May 1977
PID submission to AID/W	June 1977
AID/W approval of PID	August 1977

Completion of PRP	May 1978
Submission of PRP to AID/W	June 1978
Approval of PRP by AID/W	July 1978
Approval of PP by AID/W	October 1978
Initiation of project	March 1979

5. Assumptions and Issues

a. It is assumed that the Central American governments will be sufficiently interested in this project to either re-allocate personnel and funds or employ new personnel and provide funds for this project.

b. It is assumed that CATIE will be interested in undertaking a new regional activity in this area and can secure additional core budget support for their counterpart contribution. This will require that CATIE secure the support of at least three additional Central American countries both financially and as members of the CATIE Board of Directors.

c. During project development ROCAP will examine whether, after four years, enough momentum in the five countries will have been achieved to obviate or reduce any requirement for continuing support from CATIE. If it is judged that ultimate success hinges on CATIE's ability to continue to guide this process, ROCAP will consider obtaining Central American Government commitments to provide sufficient funds to support a sustained program as a condition precedent to going ahead with this project.

Regional Animal Systems Research  
Estimated 4-Year Budget

I. ROCAP Costs

A. Long Term Professionals

Animal nutritionist (pasture and feeds) 4 years at \$40,000/year	160,000
Small animal production specialist 4 years at \$60,000/year	240,000
Ruminant (cattle) production specialist 4 years at \$40,000/year	160,000
Veterinarian 4 years at \$60,000/year	240,000

B. Short Term Professionals

Statistics, marketing, publications, ecology, etc. 4 man/years at \$60,000/year	<u>240,000</u>
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Total professional costs \$1,040,000

C. Sub-Professional Personnel

2 secretaries at \$4,000/yr - 4 years	32,000
2 data clerks at \$5,000/yr - 4 years	40,000
laborers and short term contracts	<u>40,000</u>
	<u>112,000</u>

Total personnel costs \$1,152,000

D. Equipment

Vehicles - 3 pickups, 1 sedan @ \$7,000 ea.	28,000
Laboratory and field scientific equipment	50,000
Office and calculating equipment	15,000
Animal demonstration facilities	<u>25,000</u>

\$ 118,000

E. Other Costs

Travel and per diem	95,000
Seeds, inoculation supplies and mineral feed supplements	50,000
Communications	8,000
Maintenance of vehicles, field and scientific equipment	30,000
Publications and reprints	20,000
Conferences and seminars	<u>60,000</u>
	\$ 263,000

F. Training - Long Term

10 two year scholarships (MSc level for national researchers) a/\$8,000/year	<u>160,000</u>
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Total ROCAP costs \$1,693,000

II. CATIE Counterpart Costs (in kind)

A. Professional

1 animal prod. specialist, 4 years at \$40,000/year	160,000
1 pasture management advisor - 1/2 time at \$40,000/year	30,000
1 research assistant 4 years at \$15,000/year	<u>60,000</u>
	\$ 300,000

B. Sub Professional

1 Secretary at \$3,000/year	12,000
Research assistants and laborers	50,000

C. Other Costs

Office space and equipment	25,000
Field research land and animals	80,000
Electricity, water, etc.	10,000
Laboratory space and equipment	25,000
Per diem	20,000
Animal feeds, minerals, etc.	32,000
Misc., research costs - chemicals	<u>10,000</u>

264,000

Total CATIE counterpart \$ 564,000

National Counterpart (in kind)

15 medium level professionals - all costs for 4 years	300,000
Vehicles and maintenance	40,000
Travel and per diem	20,000
Laboratory, office and equipment	32,000
Misc. seeds, supplies	40,000
Communications	<u>10,000</u>

\$ 442,000

Total Counterpart \$1,006,000

AGENCY FOR INTERNATIONAL DEVELOPMENT <b>PROJECT IDENTIFICATION DOCUMENT FACESHEET</b> TO BE COMPLETED BY ORIGINATING OFFICE				1. TRANSACTION CODE <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 10px;">A</div> A = ADD C = CHANGE D = DELETE		PID 2. DOCUMENT CODE 1			
3. COUNTRY/ENTITY ROCAP			4. DOCUMENT REVISION NUMBER <div style="border: 1px solid black; width: 40px; height: 20px; margin-left: 10px;"></div>						
5. PROJECT NUMBER (7 DIGITS) <div style="border: 1px solid black; padding: 2px; display: inline-block;">596-0080</div>		6. BUREAU/OFFICE A. SYMBOL LA		B. CODE <div style="border: 1px solid black; padding: 2px; display: inline-block;">05</div>		7. PROJECT TITLE (MAXIMUM 40 CHARACTERS) <div style="border: 1px solid black; padding: 2px; display: inline-block;">Regional Small Farm Mass Media Training</div>			
8. PROPOSED NEXT DOCUMENT A. <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> 2 = PRP 3 = PP				B. DATE MM YY <div style="border: 1px solid black; padding: 2px; display: inline-block;">03 78</div>		10. ESTIMATED COSTS \$000 OR EQV. VALENT, \$1 = 1 CA PESO			
9. ESTIMATED FY OF AUTHORIZATION OBLIGATION a. INITIAL FY <div style="border: 1px solid black; padding: 2px; display: inline-block;">79</div> b. FINAL FY <div style="border: 1px solid black; padding: 2px; display: inline-block;">82</div>				FUNDING SOURCE A. AID APPROPRIATED 1245		OTHER U.S./B.			
				C. MOST COUNTRY 640		D. OTHER DONOR(S)			
				TOTAL 1885					
11. PROPOSED BUDGET AND APPROPRIATED FUNDS (\$000)									
A. APPROPRIATION		B. PRIMARY PURPOSE CODE		PRIMARY TECH. CODE		E. FIRST FY 79		LIFE OF PROJECT	
				C. GRANT		D. LOAN		F. GRANT	
								G. LOAN	
								H. GRANT	
								I. LOAN	
(1) FN		252 B		070		300		1245	
(2)									
(3)									
(4)									
				TOTAL		300		1245	
12. SECONDARY TECHNICAL CODES (MAXIMUM SIX CODES OF THREE POSITIVE FIGURES)									
610		020		010		140			
13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF TWO POSITIVE FIGURES EACH)								14. PRIMARY FUNDING CODE	
BR		BS		DEL		TNG			
15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)									
To increase small farmer awareness and use of production, marketing and other useful socio-economic information.									
16. PROJECT PURPOSE (MAXIMUM 400 CHARACTERS)									
To train and mobilize national and regional agricultural communications personnel and local radio-TV-newspaper personnel in order to better serve small farmers with useful information.									
17. HUMAN RESOURCES (MAXIMUM 200 CHARACTERS)									
Agricultural Mass Media expert - 2 mm RDO - 1 mm									
18. AUTHORITY FOR CLEARANCE Title Director						DATE MM DD YY 05 27 77		19. DATE RECEIVED ALL INFORMATION IS TO BE KEPT IN CONFIDENCE DATE OF DISTRIBUTION	

PROJECT IDENTIFICATION DOCUMENT  
(PID)

Regional Small Farm Mass Media Training  
(596-0080)

I. Problem and Response

Too often the small farmer and his family are outside the economic and social development of his country because he has poor communications. At this time methods for the small farmer to effectively and dynamically communicate on matters of production credit, inputs, production/technical recommendations, marketing, available services, and policies is inadequate. This mass media communications project can help the small farmer run his business more effectively and efficiently, thereby increasing his income and standard of living.

II. Project Description

The project will mobilize and train national and regional agricultural communications staffs and local mass media (radio, TV and newspaper) staffs to obtain, process, prepare and disseminate useful production, marketing and other rural sector socio-economic information useful to small farmers and the rural poor. It will put into practice a delivery and feedback communications system that serves small farmers and the rural poor through the use of mass media channels.

A C.A. regional headquarters will be established to serve as the focal point for the project and for the Small Farm Communication "School".<sup>1/</sup>

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<sup>1/</sup> "School" means a training program in Small Farm Communications for agricultural communication specialists and for mass media staff. Some training will be done at the headquarters, but most will be done at selected mass media centers. Over the life of the project the action moves from a training activity to become functional on an on-going basis.

The project/school, with the help of the national agricultural information coordinator committees and other national agencies, will select and organize key national level communications specialists to form a national work unit that will receive training and become functional on a regular permanent basis. These communication specialists will obtain pertinent information on a timely basis from reliable sources.<sup>2/</sup> The specialists will review the information received and will process, prepare and program the dissemination of the information to small farmers/rural poor through mass media channels (radio, TV and newspapers).

The school will provide training on a regional basis at the headquarters, and at selected sites that have facilities and equipment for the specific planned training. Specialists from the Central American countries will be brought together to learn and practice their particular skills in preparing materials for radio and T.V. programs/communications, for newspaper articles, and for other media techniques.

Project technical staff will follow-up and provide general and specific skill training at the national level. This training will be followed up with on-the-job technical assistance.

Exchange of communications specialists between agencies and between countries will be used where beneficial.

General material, information and programs that are developed will be exchanged among the participating countries. Countries receiving materials, information, radio/TV spot announcements, regular scheduled programs, and newspaper articles, may use the material received without modification; however, in most cases modifications/adaptations will be necessary. For area-specific materials the text from one country may not be of use in another, but the methodology, presentation, style, etc., will be useful.

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<sup>2/</sup> Sources will include those national and regional agencies that are participating in the Central American Agricultural Research and Information Systems Project.

### III. Outputs

- The Small Farm Mass Media Training program will be included as a part of the national agricultural information program of each Central American country and will have support from the governments and from local mass media agencies.
- A Central American regional small farm communication headquarters, including a mass media agricultural information "school", will be established.
- National and regional agricultural and educational communication specialists will be identified, mobilized, organized and trained to obtain, prepare and program useful, timely information for dissemination to small farmers by use of mass media.
- Mass media organizations that serve Central American countries will be identified, mobilized and trained in the programming and use of agricultural information beneficial to small, remote farmers, as part of the media's public service communications programs.
- At least one radio station and one daily newspaper, per participating country, will be disseminating information especially directed at small farmers on a regular (daily/weekly) basis, sending information and systematically receiving feed-back from the target group.

### IV. Resources Required (4-year life of project inputs)

#### 1. Technical Resources

U.S. Technicians (long-term)

2 Agricultural Information/Mass Media specialists

78 M/M

U.S. Technicians (short-term)

Agricultural/Information/Mass Media specialists  
24 M/M

Regional Counterparts (IICA and/or ICAITI)

1 Agricultural Communications  
specialist full-time 48 M/M  
plus short-term support 48 M/M

National Counterparts (in each country)

1 National Program Coordinator (full-time in each country) plus assistance of government communications technicians.  
Mass media staff time.

2. Physical Resources

Many of the physical resources needed are available and can be mobilized for project use with minimum cost.

Facilities to house the project are available from counterpart agencies. Facilities to hold training are available at the various agricultural information agencies and training centers in the countries as well as facilities at IICA in San José and CATIE in Turrialba. Technical training could be conducted at the media locations in each country. USIS has communications equipment in each country that would be useful in project support.

Although most of the project's work and training would be conducted at the participating agencies, it is anticipated that some mass-media (tape/radio) equipment will be needed at the project headquarters.

## V. Assumptions

1. That the Ministries of Agriculture and/or the Ministries of Education will support the project.

2. That the Central American radio and TV stations and newspapers will be willing to participate in the project as part of their public service programs.

## VI. Current Activities

An excellent base exists in Central America for launching this small farmer benefit project. The following are a few of the current efforts that this project will support and will draw upon for mutual benefit in providing assistance to small farmers and the rural poor.

CATIE/ROCAP in their Small Farm Cropping Systems project are working with the Central American national research organizations to find more efficient and effective systems of production on small farms. Their results will be put to more effective use if small farmer communication is improved.

IICA/ROCAP with the Central American Agricultural Research Information Systems (PIADIC) program are working with national and regional organizations in Central America to develop systematic information improvement programs in the Central American countries which are working to improve/standardize research reporting, improve/standardize agricultural rural sector statistics and crop forecasting, improve and/or establish national information centers with standardized data banks (classifying, coding, storing, retrieving) and improved data processing, analysis and packaging of information for specific use (including area-specific packages of technology). Also the project is working to improve the market news services. This proposed project could be an excellent extension/outreach component of the PIADIC effort.

ICAITI and ROCAP have a transfer of technology project that is developing a data base and network in agro-industrial

information. The Small Farm Communication program could be supportive to this project.

In addition to these projects, there are in each of the Central American countries small farmer projects that the proposed small farmer communication project could support or draw upon for mutual benefit in assisting the small farmer and rural poor. Some are: INVIERNO in Nicaragua, Basic Village Education in Guatemala, the Asentamientos project in Honduras, the Cooperative Development program in Costa Rica, and the Land Settlement in El Salvador.

The Central American countries are planning additional projects to benefit the small farmer. Regional agencies also are planning additional projects such as horticulture research and animal research for introduction into small farm systems, and projects to improve intraregional trade and agricultural marketing that will benefit small farmers.

#### VII. Alternatives

Many methods, around the world, have been tried and are being tried to get information and technology to the small farmer. Few methods can reach the masses except the mass-media. Therefore, optimum use should be made of the mass media to reach the poor in Central America. Developing the project on a regional basis is an effective and efficient way to serve the needs of the countries. Most of the basic methodologies, training, technical assistance and general materials will be interchangeable, transferable, and applicable to all of the countries. Each country using the core programs developed by the regional project will have a working system which can expand in terms of information provided, frequency, number, and types of mass media channels as capabilities and resources become available.

#### VIII. Benefits

The rural unemployed or underemployed, as well as the agricultural sector in general will benefit through timely



<u>Counterpart Contribution</u> <u>Regional Agency Counter-</u> <u>part (IICA or ICAITL)</u>	<u>1st/yr</u>		<u>2nd/yr</u>		<u>3rd/yr</u>		<u>4th/yr</u>		<u>Total Cost</u> <u>4 Years</u>
	<u>M/M</u>	<u>Cost</u>	<u>M/M</u>	<u>Cost</u>	<u>M/M</u>	<u>Cost</u>	<u>M/M</u>	<u>Cost</u>	
<u>LT Staff</u>									
1 Agric Comm. Spec./ Project Coordinator	12	40.0	12	40.0	12	40.0	12	40.0	160.0
<u>ST Staff</u>									
Agricultural Comm./ Info, Mass Media Spec.	12	40.0	12	40.0	12	40.0	12	40.0	160.0
<u>Other Cost Contributions</u>									
Regional & National Offices and facilities		10.0		10.0		10.0		10.0	40.0
<u>National Level Counterpart</u> <sup>1/</sup>									
<u>Full-time staff</u>									
Small farm communications coordination in each coun- try (including Panama)	72	60.0	72	60.0	72	60.0	72	60.0	240.0
<u>Other Costs</u>									
Office facilities and equipment		10.0		10.0		10.0		10.0	40.0
<hr/>									
Total Counterpart Contribution by years		160.0		160.0		160.0		160.0	
Total Counterpart Contribution for 4 years									640.0
Total AID and Counterpart Contribution Cost		460.0		500.0		500.0		425.0	\$1,885.0

<sup>1/</sup> National level counterpart includes only project coordination, office location and equipment (does not include the staff to be assigned to the project)

## IX. Development of the Project

The project will be developed from a base of studies, analyses, experiences, relationships, and national and regional agricultural and research information organizational structures that have been developed during the past two or three years in projects such as the Small Farm Cropping Systems project, the Agricultural and Research Information project, the Guatemala National Basic Village Education project, and the Transfer of Technology project.

Project staff from these activities will be used along with short term technical assistance from AID, U.S. universities, USDA, national and regional agricultural communication agencies, and from the potential mass media participants.

A PRP will be submitted in March 1978 and a PP will be submitted by October 1978. Resources necessary to prepare the PRP and PP include three man months of consultant services for each.

## X. Issues

1. Are the Ministries of Agriculture, Communications and Education in the Central American countries willing to actively participate in a Small Farm Communication program?

2. Are the local mass media (radio, TV stations and newspapers) willing to participate, as a public service, in a project of this nature.

AGENCY FOR INTERNATIONAL DEVELOPMENT  
**PROJECT IDENTIFICATION DOCUMENT FACESHEET**  
 TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE  
 A A = ADD  
 C C = CHANGE  
 D D = DELETE

PID  
 2. DOCUMENT CODE  
 1

3. COUNTRY/ENTITY  
 ROCAP

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 DIGITS)  
 596-0072

6. PROJECT OFFICE  
 A. SYMBOL LA B. CODE 05

7. PROJECT TITLE (MAXIMUM 40 CHARACTERS)  
 Regional Seismic Instrumentation Network

8. PROPOSED NEXT DOCUMENT  
 A.  2 2 = PRP  
 3 3 = PP  
 B. DATE MM YY  06  78

10. ESTIMATED COSTS  
 \$000 OR EQUIVALENT, \$1 = 1 CA PESO

FINANCING SOURCE	255
A. AID APPROPRIATED	255
B. OTHER U.S. \$	
C. MOST DEVELOPED COUNTRIES	2100
D. OTHER DONOR(S)	
TOTAL	2355

9. ESTIMATED FY OF AUTHORIZATION OBLIGATION

a. INITIAL FY  7  9 b. FINAL FY  8  1

11. PROPOSED BUDGET AID APPROPRIATED FUNDS (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. FIRST FY 79		LIFE OF PROJECT	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN
(1) SD	754B	874		560		755	
(2)							
(3)							
(4)							
TOTAL				560		755	

12. SECONDARY TECH. CODES (MAXIMUM SIX CODES OF THREE POSITIONS EACH)

873 860

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)

BRW BUW

14. SECONDARY PURPOSE CODE

15. PROJECT GOAL (MAXIMUM 248 CHARACTERS)

To reduce chances for loss of life and property, urban and rural, caused by seismic activity.

16. PROJECT PURPOSE (MAXIMUM 400 CHARACTERS)

To develop within ICAITI the regional capacity to process seismic data, and to provide advice and assistance to strengthen and expand scope and capabilities of national seismic institutes.

17. PROJECTING RESOURCE TO CURRENT FY'S (staff/funds)

Two man months USGS advisor, funded either by AID/W or ROCAP to help develop the PRP. Estimated cost \$13,000. A similar amount of assistance may be needed to prepare the PP.

18. ORIGINATING OFFICE CLEARANCE

Signature: *[Signature]*

Title: Director

Date: MM DD YY  05  27  77

19. DATE DOCUMENT RECEIVED BY AID/W, OR FOR AID/W DECISIONS, DATE OF DISTRIBUTION

MM DD YY  05  27  77

PROJECT IDENTIFICATION DOCUMENT  
(PID)

Regional Seismic Instrumentation Network  
(596-0072)

In June 1976, when ROCAP was preparing this proposal, the OAS General Assembly, meeting in Chile decided to support a feasibility study for the installation of a seismic network in Central America. In December of that year, the OAS Permanent Executive Committee of the Inter-American Council for Education, Science and Culture approved \$22,000 for the two-month study of a Central American seismic network. In May, 1977 ROCAP was notified by the OAS office in Guatemala that the OAS feasibility study would begin in October, 1977.

The proposal is included in this ABS, therefore, on a contingent basis, and will be further developed only if the OAS study and plans reveal an appropriate role for ROCAP.

Currently, Nicaragua has an extensive network which is being expanded, Guatemala is designing its own network, and El Salvador is considering establishing a network but prefers to do so in conjunction with the other Central American countries in order to facilitate interchange of data.

The complete PID appears in our FY 78 ABS.

MISSION EVALUATION SCHEDULE FOR FY 1978 AND FY 1979

(1)	(2)	(3)	(4)	(5)	(6)
Project Title & Number/Subject	Last Evaluation Submission Date	Number of Last PAR	Date of Submission FY 78 and/or FY 79	Period Covered Next Evaluation	Remarks
<u>Food and Nutrition</u>					
Agricultural Research and Info. Systems 596-0048	June 1976	76-6	July 1978 March 1979	10 months	FY '77 evaluation in Sept. 1977
Soil Fertility 596-0063	May 1977	-	March 1978	11 months	Final Evaluation
Small Farm Cropping Systems 596-0064	May 1977	-	April 1978 March 1979	One Year	
Regional Nutrition 596-0065	-	-	Feb. 1978 June 1979	9 months	FY '77 evaluation in June, 1977
Agricultural Trade Promotion 596-0074	-	-	Jan. 1979		New Project; eval. depends upon when project starts
Horticultural Crop Development 596-0073	-	-	March 1979		New Project; eval. depends upon when project starts

<u>Project Title &amp; Number/Subject</u>	<u>Last Evaluation Submission Date</u>	<u>Number of Last PAR</u>	<u>Date of Submission FY 78 and/or FY 79 Evaluation</u>	<u>Period Covered Next Evaluation</u>	<u>Remarks</u>
LAAD Agribusiness Development II 596-T-011	-	-	Oct. 1977 Oct. 1978	One Year	
Agribusiness Development 596-T-016	-	-	June 1978 June 1979	One Year	First evaluation; Loan signed 2/2/77 First disbursement 6/77
<u>Education and Human Resources Development</u>					
SIECA Institutional Assistance 596-0040	April 1976	76-4	Nov. 1977 Nov. 1978	19 months	No FY '77 evaluation planned.
Transfer of Technology 596-0066	-	-	March 1978	Phase I - 18 months	FY '77 evals. in May and Sept. 1977. FY '78 eval. requires AID/W (TAB) participation.
Rural Sector Management Improvement 596-0067	-	-	Oct. 1977 Sept. 1978	16 months	
C.A. School of Business Administration 596-L-012	July 1976	CAPTO A-73 8/20/76	-	-	Project completed

Project Title & Number/Subject	Last Evaluation Submission Date	Number of Eval. PAK	Date of		Period Covered Next Evaluation	Remarks
			Submission FY 78 and/or FY 79	Evaluation		
Section 106 Development Act 1971/73						
Housing Technical Assistance 596-0098	May 1976	76-5	July 1977	13 months	Final Evaluation	
Special Development Activities - Belize 596-0060	Jan. 1977	77-2	Nov. 1977	11 months	Final Evaluation	
CABEI - Economic Integration Fund 596-L-008	-	-	July 1977	-	See comments attached	
Export Industries and Tourism 596-L-010	Oct. 1973	CAPTO A-15 2/15/74	June 1977	44 months	See comments attached	
Tourism Infrastructure 596-L-013	-	-	June 1978 June 1979	One Year	See comments attached	
Highway Infrastructure 596-L-014	Sept. 1976	Memo, Venezia/ Schwab, 9/29/76	June 1979	33 months	See comments attached	

NOTES ON EVALUATION SCHEDULE

1. Tourism Infrastructure (596-L-013). Evaluation of this project has been postponed awaiting development of activities. No disbursements have yet been made. First disbursements are expected by June, 1977, and the first evaluation a year thereafter.
2. Highway Infrastructure (596-L-014). Road construction financed under this project is not dissimilar from work done under Loan 008. The latter work will be evaluated in July, 1977. Accordingly, we propose to evaluate 014 impact at its date of completion, i.e. June, 1979.
3. Economic Integration Fund (596-L-008). Final evaluation has awaited collection of data on impact of project on roads financed under the project (see Hechtman-Schwab letter of July 29, 1976). Additional delays have been occasioned by staff time required in preparation of FY 1979 project papers. Final disbursement was effected in Spring of 1976. Final evaluation report will be forwarded in July, 1977.
4. Export Industries and Tourism (596-L-010). Date of final evaluation moved to June, 1977, in order to wait for a report from CABEI due by May, 1977 (see Bouchard-Schwab letter of August 9, 1976).