

**AGENCY FOR  
INTERNATIONAL  
DEVELOPMENT**

**ANNUAL BUDGET SUBMISSION  
FY 1979**

**L A**

**DEPARTMENT  
OF STATE**

FY 1979 ANNUAL BUDGET SUBMISSION

LATIN AMERICA REGIONAL

JULY 1977

FY 1979 ANNUAL BUDGET SUBMISSION

TABLE OF CONTENTS

	<u>Page</u>
A. Narrative Statement . . . . .	1
B. Long Range Planning -- Table I (DAP Documentation N/A) . . .	2
C. Evaluation Schedule . . . . .	3
D. FY 1977-1979 Programs	
1. Table II FY 1977-1979 Program Levels by Appropriation Account . . . . .	7
2. Table III ABS/CP Summary FY 1977-1979 Funding by Project	8
a. Table IV On-going Project Budget Data N/A	
b. Project Narrative Statements -- Deviations from FY 1978 CP . . . . .	10
c. Table V Proposed Program Ranking . . . . .	12
d. Project Identification Documents	
(1) Reduction of Vertebrate Pest Crop Losses . . . . .	16
(2) Research Project on Extension Information Systems	27
(3) Socio-Economic Criteria for Agriculture Research	35
(4) Training for Development . . . . .	48
(5) Education Research Networks . . . . .	54
(6) New Initiatives in Human Rights . . . . .	62
(7) SOLIDARIOS Development Fund . . . . .	67
(8) High Elevation Farming Systems . . . . .	84
3. PL-480 Title I N/A	
4. PL-480 Title II N/A	

## A. NARRATIVE STATEMENT

### Background

A.I.D. has continued to support regional development efforts in Latin America for a number of years. In so doing a full portfolio of institutional and administrative arrangements has been utilized.

In addition to the usual criteria applied to the selection of a project for A.I.D. support, an activity is considered for L.A. REgional funding if a) the nature of the problem is of relevance and interest to more than one L.A. country and expressions thereof have been confirmed or are anticipated from indigenous entities, and/or b) the project is an extension of, or will help to effect, important U.S. policy initiatives, e.g. in the area of human rights.

### Proposed FY 1979 Projects

The program recommended herein thus includes both additional funding for on-going projects and new projects in Food and Nutrition, Population Planning and Public Health, Education and Human Resources Development, and Section 106-Selected Development Activities.

## B. Long Range Planning

## 1. Country/Program L.A. Regional

Table I  
Long Range Program Plan  
(\$ 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>
Food/Nutrition	<u>2.0</u>	<u>25.4</u>	<u>3.5</u>	<u>4.0</u>	<u>14.0</u>	<u>5.0</u>
Grants	<u>2.0</u>	<u>3.4</u>	<u>3.5</u>	<u>4.0</u>	<u>4.0</u>	<u>5.0</u>
Loans	-	22.0	-	-	10.0	-
Population	-	-	-	-	-	-
Grants	-	-	-	-	-	-
Loans	-	-	-	-	-	-
Health	-	-	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>
Grants	-	-	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>
Loans	-	-	-	-	-	-
Education	<u>9.6</u>	<u>9.9</u>	<u>10.0</u>	<u>15.5</u>	<u>10.5</u>	<u>15.5</u>
Grants	<u>9.6</u>	<u>9.9</u>	<u>10.0</u>	<u>10.5</u>	<u>10.5</u>	<u>10.5</u>
Loans	-	-	-	5.0	-	5.0
Selected Development						
Activities	<u>1.4</u>	<u>1.3</u>	<u>6.0</u>	<u>2.5</u>	<u>3.0</u>	<u>7.0</u>
Grants	<u>1.4</u>	<u>1.3</u>	<u>2.0</u>	<u>2.5</u>	<u>3.0</u>	<u>3.0</u>
Loans	-	-	4.0	-	-	4.0
Total Functional						
Accounts	<u>13.0</u>	<u>36.6</u>	<u>20.0</u>	<u>22.5</u>	<u>28.0</u>	<u>28.0</u>
Grants	<u>13.0</u>	<u>14.6</u>	<u>16.0</u>	<u>17.5</u>	<u>18.0</u>	<u>19.0</u>
Loans	-	22.0	4.0	5.0	10.0	9.0
Other Accounts						
(Specify)						
Grants	-	-	-	-	-	-
Loans	-	-	-	-	-	-
PL 480 (non-add)						
Title I	-	-	-	-	-	-
Title II	-	-	-	-	-	-
Housing Investment						
Guaranties (non-add)	-	-	-	-	-	-

UNCLASSIFIED

COUNTRY/PROGRAM L.A. REGIONAL

PERIOD COVERED: FY 1978/79

DATE:

Mission Evaluation Schedule for FY 1978 and FY 1979

(1)	(2)	(3)	(4)	(5)
Project Title & Number/Subject	Last Evaluation Submission Date	Number of Last PAR (if applicable)	Date of Submission FY 78 and/or FY 79 Evaluation	Period Covered Next Evaluation
Cooperative Development-- 598-0116	6/77	N/A	6/78	6/77-6/78
LA Crop Insurance Systems--598-0579	N/A	N/A	1/80	10/77-12/79
Remote Sensing-- 598-0550	N/A	N/A	11/79	10/78-10/79
LA Confederation of Credit Unions 598-005	6/77	N/A	6/78	6/77-6/78

COUNTRY/PROGRAM

LA/REGIONAL

PERIOD COVERED:

DATE:

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 (if applicable)	Date of Sub- mission FY 78 and/or FY 79 Evaluation	Period Covered Next Evaluation	Remarks
<u>L. Amer. Scholarships Prog. of Amer. Univ. (LASPAU) - 598-0453</u>	6/76		10/77	11/77-10/78	
<u>Radio Schools of Latin America 598-0558</u>		Initial year of project	9/77	10/77- 9/78	
<u>Experimental Radio Education - 598-0556</u>		"	11/78	11/78-11/79	
<u>Home Inst. Early Intervention Method 598-0582</u>		"	6/78	7/78- 6/79	

7

COUNTRY/PROGRAM

L.A. REGIONAL

PERIOD COVERED

DATE:

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 (if applicable)	Date of Submission FY 78 and/or FY 79 Evaluation	Period Covered Next Evaluation	Remarks
Communications and Technology Application 598-0581			11/78	11/78-11/79	
Mot. Media for Low Income Women 598-0574		"	6/79	7/79- 6/80	
Community-Based Learning Resource Center 598-0574		"	7/77	10/77- 9/78	
Self-Instructional Systems. 598-0571		"	9/78	10/78- 9/79	
Economics of Education Studies (ECIEL) 598-0567		"	8/77	8/77- 7/78	

S

COUNTRY/PROGRAM: LA REGIONAL

NEW PROJECTS

PERIOD COVERED

DATE:

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 (if applicable)	Date of Submission FY 78 and/or FY 79 Evaluation	Period Covered Next Evaluation	Remarks
Training for Development	-	-	10/79	9/78-10/79	
Education Research	-	-	6/79	7/79- 6/80	

## C. FY 1977- FY 1979 Programs

## 1. Country/Program L.A. Regional

Table II

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

	<u>FY 1977<sup>1/</sup></u>	<u>FY 1978</u>	<u>FY 1979</u>
Food/Nutrition	1,607	2,026	25,383
Grants	<u>1,607</u>	<u>2,026</u>	<u>3,383</u>
Loans	--	--	22,000
Population/Health	133	--	--
Grants	<u>133</u>	<u>--</u>	<u>--</u>
Loans	--	--	--
(Population)	(--)	(--)	(--)
(Grants)	<u>(--)</u>	<u>(--)</u>	<u>(--)</u>
(Loans)	(--)	(--)	(--)
(Health)	(133)	(--)	(--)
(Grants)	<u>(133)</u>	<u>(--)</u>	<u>(--)</u>
(Loans)	(--)	(--)	(--)
Education	9,973	9,567	9,908
Grants	<u>9,973</u>	<u>9,567</u>	<u>9,908</u>
Loans	--	--	--
Selected Development Activities	1,190	1,400	1,285
Grants	<u>1,190</u>	<u>1,400</u>	<u>1,285</u>
Loans	--	--	--
Sub-Total	13,036	12,893	36,576
Grants	<u>13,036</u>	<u>12,893</u>	<u>14,576</u>
Loans	--	--	22,000
Security Supporting Assistance	--	--	--
Grants	<u>--</u>	<u>--</u>	<u>--</u>
Loans	--	--	--
Total	13,036	12,893	36,576
PL 480	--	--	--
Title I	<u>--</u>	<u>--</u>	<u>--</u>
Title II	--	--	--
Housing Investment Guaranties	--	--	--

<sup>1/</sup> Reflects currently approved OYB.

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		4. DOCUMENT REVISION NO.	5. OPERATIONAL YEAR FY	6. BUREAU/OFFICE		7. GEOGRAPHIC CODE					
Latin America Regional		<input type="checkbox"/>	7/8	A. SYMBOL LA	B. CODE [05]	<input type="checkbox"/> 598 <input type="checkbox"/>					
8. TYPE DATA					9. TYPE ASSISTANCE						
<input type="checkbox"/> 1 = ABS      2 = ABS REVISION <input type="checkbox"/> 3 = CP      4 = CP NOTIFICATION					<input type="checkbox"/> 1 = PROJECT <input type="checkbox"/> 2 = PROGRAM						
10. PROJECT SEQ. - UENCE NO.	11. PROJECT TITLE (40 CHARACTERS MAXIMUM)	12. QTR. FOR OBLIG.	13. EST. FY AUTH. OBLIG. FINAL	14. APPR. PRIA-TION	15. PRIMARY PURPOSE CODE	16. LOAN/GRANT INDICATOR	17. BUDGETS (IN \$ 000)				
							AY	OY	BY	LOP	
0000	Program Development and Support	2	Cont.	FN	290	GC	452	460	485	Cont.	
0116	Cooperative Development	-	77	FN	250	GC	253	-	-	1,587	
0554	*Sector Analysis Support	2	78	FN	290	GC	833	616	-	2,121	
0575	IGAD/LAC	-	77	FN	120	GC	69	74	-	199	
0579	LA Crop Ins. Systems	3	80	FN	241	GC	-	376	379	1,137	
0580	Remote Sensing	4	79	FN	200	GC	-	500	510	1,010	
0583	High Elevation Farming Systems	-	81	FN	250	GN	-	-	125	500	
0584	Reduction of Vertebrate Pest Crop Losses	-	79	FN	100	GN	-	-	799	799	
0585	LA Extension Information Systems	-	79	FN	141	GN	-	-	1,005	1,005	
0586	Socio-Economic Criteria for Ag Research	-	81	FN	250	GN	-	-	80	655	
	Sub-Total			FN		G	1,607	2,026	3,383		
0587	SOLIDARIOS Development Fund		79	FN	200	L	-	-	22,000	22,000	
	Sub-Total			FN		L			22,000		
0554	*Sector Analysis Support	-	77	PH	590	GC	133	-	-	933	
	Sub-Total			PH		G	133	-	-		
0005	Regional Technical Aids Center	-	77	EH	600	GC	50	-	-	17,692	
0101	*Free Labor Development (AIFLD)	2	Cont.	EH	699	GC	6,120	6,625	6,816	Cont.	
0453	Latin America Scholarships Program of American Universities (LASPAU)	1	78	EH	600	GC	2,243	242	-	21,848	
0551	Basic Village Education	-	77	EH	610	GC	176	-	-	1,732	
0554	*Sector Analysis Support	-	77	EH	690	GC	140	-	-	940	
0556	Experimental Radio Education	4	80	EH	640	GC	250	200	300	871	
0558	Radio Schools of Latin America	1	78	EH	640	GC	320	200	-	790	
							18. DATE DOCUMENT RECEIVED IN AID/W				
							MM	DD	YY		

AGENCY FOR INTERNATIONAL DEVELOPMENT <b>ABS/CP SUMMARY - TABLE III</b>		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 Latin America Regional		4. DOCUMENT REVISION NO. <input type="checkbox"/>	5. OPERATIONAL YEAR FY 1978	6. BUREAU/OFFICE A. SYMBOL: LA B. CODE: 05	7. GEOGRAPHIC CODE 598
8. TYPE DATA <input checked="" type="checkbox"/> 1 = ABS <input type="checkbox"/> 2 = ABS REVISION <input type="checkbox"/> 3 = CP <input type="checkbox"/> 4 = CP NOTIFICATION			9. TYPE ASSISTANCE <input type="checkbox"/> 1 = PROJECT <input type="checkbox"/> 2 = PROGRAM		

10. PROJECT SEQ. - UENCE NO.	11. PROJECT TITLE (40 CHARACTERS MAXIMUM)	12. QTR. FOR OBLIG.	13. EST. FY AUTH. OBLIG. FINAL	14. APPROPRIATION	15. PRIMARY PURPOSE CODE	16. LOAN GRANT INDICATOR	17. BUDGETS (IN \$ 000)			
							AY	OY	BY	LOP
0567	Economics of Education Studies (ECIEL)	1	78	EH	621	GC	150	155	-	365
0571	Self-Instructional Systems	4	80	EH	600	GC	-	322	323	751
0573	Community-Based Learning Systems	1	78	EH	612	GC	77	200	-	415
0574	Motivational Media for Low-Income Women*	2	79	EH	640	GC	250	500	295	1,045
0581	Communications and Technology Applications	4	81	EH	600	GC	-	1,000	1,000	4,000
0582	Home Instruction Early Intervention Methodology	2	78	EH	612	GC	197	123	-	489
0588	Training for Development	-	81	EH	600	GN	-	-	750	5,500
0589	Education Research	-	81	EH	600	GN	-	-	424	1,660
	Subtotal			EH		G	9,973	9,567	9,908	
0044	Consultants and Seminars	4	Cont	ST	790	GC	500	500	500	Cont
0436	Partners of the Americas (NAPA)	1	80	ST	773	GC	400	350	235	1,085
0572	Science and Technology Information Transfer	2	79	ST	750	GC	250	250	250	750
0576	Role of Law in Social Change in Latin America	-	77	ST	721	GC	40	-	-	110
0591	Human Rights Initiatives*	4	80	ST	701	GC	-	300	300	900
	Subtotal			ST		G	1,190	1,400	1,285	

\* FY 1978 funding deviates from FY 1978 Congressional level. See next page for narrative explanation.

18. DATE DOCUMENT RECEIVED IN AID/W

MM	DD	YY

## C.2. a. Table IV Not Applicable

## C.2. b. Project Narrative Statements- Deviations from FY 1978 Congressional Presentation.

1. Sector Analysis Support (F+N); FY 1978 CP level; \$514,000; Current FY 1978 Estimate; \$616,000.

Funding is being made available for the following uses:

	(\$000)
Termination of Phase I, Dominican Republic Agricultural Sector Analysis	75
Final project documentation and closeout	50
Agricultural Sector Assessment Support:	
11 professional person-years @ \$33,600 (including overhead)	370
3 clerical person-years @ \$24,000 (including overhead)	72
Travel and per-diem	30
Computer hardware and software	10
Final documentation and closeout of Colombia hospital study, El Salvador education Sector analysis, and other education data reports	9
	616

FY 1978 funding will be principally for the support of agricultural sector assessments which are financed bilaterally, rather than for carrying out sector analyses as had been originally planned. The major reason for the increase in FY 1978 funding over the FY 1978 CP level is the increase in the size of the support staff financed under the project.

2. Sector Analysis Support (H); FY 1978 CP Level; \$258,000; Current FY 1978 Estimate, \$-0-

Future health sector assessments/analyses will be financed bilaterally.

3. Free Labor Development (AIFLD); FY 1978 CP level, \$5,925,000;  
Current FY 1978 Estimate, \$6,625,000.

The additional FY 1978 funding is for the following uses:

	(\$000)
Additional budget support	200
AUDS expansion	135
Peru country program	170
Argentina country program	50
El Salvador country program	70
Union-to-union expansion	75
	<u>700</u>

4. Sector analysis Support (EH); FY 1978 CP Level, \$258,000;  
Current FY 1978 Estimate, \$-0-.

Future education sector assessments/analyses will be financed bilaterally.

5. Motivational Media for Low-Income Women; FY 1978 CP Level,  
\$283,000; Current FY 1978 Estimate, \$500,000.

Because of delays in developing the PP, FY 1977 funding requirements are reduced and FY 1978 funding is increased. Funding is also being extended into FY 1979, although the life of project level remains unchanged.

6. Human Rights Initiatives

Project was not included in the FY 1978 CP. See the PID for a discussion of planned FY 1978 activities.

TABLE V - FY 1979 PROPOSED PROGRAM RANKING

LA Regional  
 Decision Unit

REVISED BY

CONSOLIDATED BY

RANK	DECISION PACKAGES/PROGRAM ACTIVITY/SUPPORT ITEM DESCRIPTION	APPROX ACCT	CUMULA- TION OPERATING EXPENSES (000)	RESOURCE REQUIREMENTS				PROGRAM FUNDING	
				INCREMENT US	FN	CUMULATIVE US	FN	INCREMENT (000)	CUMULATIVE
<u>DECISION PACKAGE - MINIMUM</u>									
1.	0101 Free Labor Development (AIFLD)	EH	-	2	-	2	-	5,825	5,825
2.	0436 Partners of the Americas (NAPA)	ST	-	-	-	2	-	235	6,060
3.	0579 L.A. Crop Insurance Systems	FN	-	-	-	2	-	379	6,439
4.	0556 Experimental Radio Education	EH	-	-	-	2	-	300	6,739
5.	0571 Self Instructional Systems	EH	-	-	-	2	-	323	7,062
6.	0574 Motivational Media for Low Income Women	EH	-	-	-	2	-	295	7,357
7.	0044 Consultants and Seminars	ST	-	-	-	2	-	250	7,607
8.	0572 Science and Technology Info. Transfer	ST	-	-	-	2	-	250	7,857
9.	0000 Program Development and Support	FN	-	-	-	2	-	485	8,342
10.	0580 Remote Sensing	FN	-	-	-	2	-	200	8,542
11.	0581 Communications and Technology Transfer	EH	-	-	-	2	-	400	8,942
12.	0589 Education Research	EH	-	-	-	2	-	385	9,327
13.	0591 Human Rights Initiatives	ST	-	-	-	2	-	150	9,477
14.	0588 Training for Development	EH	-	-	-	2	-	205	9,682
<u>DECISION PACKAGE - CURRENT</u>									
15.	0101 Free Labor Development (AIFLD)	EH	-	-	-	2	-	991	10,673
16.	0588 Training for Development	EH	-	-	-	2	-	237	10,910
17.	0591 Human Rights Initiatives	ST	-	-	-	2	-	75	10,985
18.	0044 Consultants and Seminars	ST	-	-	-	2	-	75	11,060
19.	0584 Reduction of Vertebrate Pest Crop Losses	FN	-	-	-	2	-	250	11,310
20.	0583 High Elevation Farming Systems	FN	-	-	-	2	-	125	11,435
21.	0585 L.A. Extension Information Systems	FN	-	-	-	2	-	325	11,760
22.	0586 Socio-Economic Criteria for Ag. Research	FN	-	-	-	2	-	80	11,840

LA Regional  
DECISION UNIT

TABLE V - FY 1979 PROPOSED PROGRAM RANKING

RANK	DECISION PACKAGES/PROGRAM ACTIVITY/SUPPORT ITEM	DESCRIPTION	APPROPRIATION ACCT	CUMULATIVE DIVISION OPERATING EXPENSES (000)	REVISOR'S				REVISOR'S				PROGRAM FUNDING (000)	
					INCREMENTS		CUMULATIVE		INCREMENTS		CUMULATIVE			
					US	FN	US	FN	US	FN	US	FN		
		<u>DECISION PACKAGE - C EXPANSION</u>												
23.	0587	SOLIDARIOS Development Fund	FN	-	-	-	-	2	-	-	10,000	21,840		
24.	0580	Remote Sensing	FN	-	-	-	-	2	-	-	310	22,150		
25.	0581	Communications and Technology Applications	EH	-	-	-	-	2	-	-	600	22,750		
26.	0588	Training for Development	EH	-	-	-	-	2	-	-	308	23,058		
27.	0589	Education Research	EH	-	-	-	-	2	-	-	39	23,097		
28.	0044	Consultants and Seminars	ST	-	-	-	-	2	-	-	175	23,272		
29.	0584	Reduction of Vertebrate Pest Crop Losses	FN	-	-	-	-	2	-	-	549	23,821		
30.	0585	L.A. Extension Information Systems	FN	-	-	-	-	2	-	-	680	24,501		
31.	0591	Human Rights Initiatives	ST	-	-	-	-	2	-	-	75	24,576		
		<u>DECISION PACKAGE - PROPOSED</u>												
32.	0587	SOLIDARIOS Development Fund	FN	-	-	-	-	2	-	-	12,000	36,576		

TABLE VSUMMARY NARRATIVE STATEMENTMinimum

The minimum package includes final funding for seven previously initiated projects, funding for AIFLD in accordance with the current agreement (PP), partial funding for Consultants and Seminars, Remote Sensing, Communications and Technology, Human Rights Initiatives, and initial funding for Training for Development and Education Research (follow-up project to the ECIEL Economics of Education Studies activity).

Current

The current package includes full funding for AIFLD, two-thirds funding for the Training for Development and Consultants and Seminars activities, three-fourths funding for the Human Rights Initiatives effort, and initial partial funding for the projects entitled Reduction of Vertebrate Pest Crop Losses, High Elevation Farming Systems, L.A. Extension Information Systems, and Socio-Economic Criteria for Agricultural Research.

Expansion

This package includes full funding for all activities except the SOLIDARIOS Development Fund (fifty percent).

Proposed

This package is composed of only full funding for the SOLIDARIOS Development Fund.

Project Identification Documents

•

•

•

•

16

<b>AGENCY FOR INTERNATIONAL DEVELOPMENT</b> <b>PROJECT IDENTIFICATION DOCUMENT FACESHEET</b> TO BE COMPLETED BY ORIGINATING OFFICE	<b>1. TRANSACTION CODE</b> ("X" appropriate box) <input checked="" type="checkbox"/> Original <input type="checkbox"/> Change <input type="checkbox"/> Add <input type="checkbox"/> Delete	<b>PID</b>  DOCUMENT CODE 1
--	---	---

<b>2. COUNTRY/ENTITY</b> Latin America - Regional	<b>3. DOCUMENT REVISION NUMBER</b>
--	------------------------------------

<b>4. PROJECT NUMBER</b>	<b>5. BUREAU</b> a. Symbol: LA      b. Code: 3	<b>6. PROPOSED NEXT DOCUMENT</b> a. <input checked="" type="checkbox"/> PRP <input type="checkbox"/> PP    b. DATE: 11/77
--------------------------	---	--

<b>7. PROJECT TITLE - SHORT</b> (stay within brackets) Reduction of Vertebrate Pest Crop Losses	<b>9. ESTIMATED COST (life of project)</b> (\$000 or equivalent, \$1 = ) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:70%;">FUNDING SOURCE</th> <th style="width:30%;">AMOUNT</th> </tr> <tr> <td>a. AID APPROPRIATED</td> <td style="text-align: right;">799</td> </tr> <tr> <td>b. OTHER U.S.</td> <td></td> </tr> <tr> <td>c. HOST GOVERNMENT</td> <td></td> </tr> <tr> <td>d. OTHER DONOR(S)</td> <td style="text-align: right;">799</td> </tr> <tr> <td style="text-align: right;"><b>TOTAL</b></td> <td></td> </tr> </table>	FUNDING SOURCE	AMOUNT	a. AID APPROPRIATED	799	b. OTHER U.S.		c. HOST GOVERNMENT		d. OTHER DONOR(S)	799	<b>TOTAL</b>	
FUNDING SOURCE	AMOUNT												
a. AID APPROPRIATED	799												
b. OTHER U.S.													
c. HOST GOVERNMENT													
d. OTHER DONOR(S)	799												
<b>TOTAL</b>													

<b>8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION</b> a. INITIAL FY 79      b. FINAL FY 79	
--	--

10. ESTIMATED COSTS/AID APPROPRIATED FUNDS (\$000)							11. OTHER U.S. (\$000)		
a. Appropria- tion (Alpha Code)	b. Primary Purpose Code	c. Primary Tech. Code	FIRST YEAR FY 79		ALL YEARS		a. FUNDING SOURCE	b. FIRST YEAR	c. ALL YEARS
			d. Grant	e. Loan	f. Grant	g. Loan			
FN	100S	000	799		799				
<b>TOTAL</b>			799		799				

<b>12. SECONDARY TECHNICAL CODES</b> (maximum six codes of three positions each) 024      029      070      080      098					
---	--	--	--	--	--

<b>13. SPECIAL CONCERNS CODE</b> (maximum six codes of four positions each) BR      BS      EQTY      ENV      TNG	<b>14. SECONDARY PURPOSE CODE</b> 200S
---	---

<b>15. PROJECT GOAL</b> (stay within brackets) To increase farm gate income for the farmer while reducing the incidence and risk of serious crop losses and to reduce agricultural commodity costs for the consumer.
---

<b>16. PROJECT PURPOSE(S)</b> (stay within brackets) To develop technologies which may be used by participating countries to reduce crop losses by rodents and other vertebrate pests both prior to harvest and during post harvest maintenance on small farms.
--

<b>17. PLANNING RESOURCE REQUIREMENTS</b> (staff/funds) AID and contract staff travel: \$10,000
--

<b>18. ORIGINATING OFFICE CLEARANCE</b> Signature: <i>Marshall B...</i> Title: Associate Assistant Administrator LA/DR	<b>19. Date Received in AID/W or For AID/W Documents, Date of Distribution</b> Date Signed:      mo.    day    yr. mo.    day    yr.
---	--

**TITLE: Reduction of Crop Losses Through the Control of Rodents and Vertebrate Pests in Latin America**

**I. Summary of the Problem**

In many parts of the world and particularly in the developing countries, rodents and other vertebrate pests cause serious agricultural losses. Both grain crops such as corn, beans, rice and wheat, and fresh produce such as starchy roots, vegetables and fruits often suffer serious damage during the growing season. Chronic losses are believed severe throughout most of Latin America. In localized areas of Central America, the evidence indicates that the crop destruction during years of rodent population outbreaks is a major factor in limiting small farm development. In the cone countries of South America, damage by parakeets and doves, which likewise are vertebrate pests, appears to be of similar importance.

While it is difficult to present concise data on field crop losses because of the general lack of systematic investigations, preliminary data and observations compiled by the Denver Wildlife Research Center (DWRC) of the U.S. Department of Interior indicate that several rodent species and at least two bird species cause severe losses to small farm crops throughout much of the region. For example, damage to corn by rodents was estimated to be 24-28% in one area of Honduras in 1976; damage to rice by rodents in Nicaragua was estimated to be 26% in 1971; and sorghum damage by doves in Uruguay ranging from 30-40% was observed in 1977. Reports from the INVIERNO program in Nicaragua indicated losses of 33.8% and 21% in corn and beans respectively on small farms receiving agricultural loans in the Matiguas area. An FAO plant protection bulletin states, "Disastrous crop losses are reported repeatedly from Northeast Brazil. Argentina's crops are subject to severe attacks by rodents. Rangeland destruction by rodents is an important problem in Chile". An April 1977 report of the Agricultural Attache in Guatemala reports that a BID loan for the planting of African palm nut in the Aguan Valley of Honduras has been only 16% utilized, partially due to a rat infestation that destroyed close to 500 hectares of new plantings within a two month period.

Not only have such crop losses been poorly controlled in the field, but there are also indications that similar losses may be going unnoticed during post harvest management. Here again small farmers are the group that is most affected. A still unpublished report on Central America by the International Group for Agricultural Development (IGAD) indicates that on small farms in Honduras between 65 and 70 per cent of the corn and beans is retained by the farm family for its subsistence consumption. Of this amount kept for home consumption, some 20 to 50% is lost to pests or deterioration as compared to

13% of that portion which is sold in commerce. The largest portion of this post-harvest wastage which is typical throughout Latin America is attributable to rodents.

Over the past several years personnel of the Denver Wildlife Research Center (DWRC) have studied vertebrate pest control problems in developing countries under a Resources Support Service Agreement (RSSA) with AID's Technical Assistance Bureau. This work has demonstrated that practical solutions for vertebrate pest problems can be devised by a systematic approach involving problem evaluation, adaptive research, program development and the training of teams of local personnel to carry through the programs worked out for specific country conditions.

Methods of reducing rodent damage to rice on small farms in the Philippines were developed by DWRC personnel in cooperation with Philippine scientists.

It was found that rat damage on small farms could be greatly reduced by maintaining bait stations in fields throughout the growing period to kill rats which continuously moved in from surrounding areas. In contrast, massive poisoning campaigns conducted during the post-harvest period when rats were most visible to farmers were found to have little effect in reducing subsequent crop damage because of the rapid recovery of rat populations. This approach to managing rodent damage on the farm as opposed to untargeted, area-wide programs is expected to apply to a variety of similar rodent damage problems. Work in the Philippines has shown that reduction in crop damage rather than number of rats killed must be the primary measure of evaluation for any control methods proposed for agricultural use.

The DWRC has also achieved success in controlling vampire bat predation on cattle - a problem which has caused tremendous losses in Latin America through direct losses of cattle to bat-borne rabies and indirect losses through reduced milk production and hide damage.

## II. Proposed Response

This proposal is intended to address problems related to reducing the damage caused by rodents and other vertebrate pests on crops which are predominantly produced by small farmers. Emphasis will be given to the development of control practices which are applicable to grain and horticultural crops. The project will consider methods by which to reduce damage to the growing crop while in the field as well as to control post-harvest losses on the farm. A major effort of the proposed program would be to train teams of host government specialists who would be prepared to carry out adaptive research and farm-oriented control programs in their respective countries.

This project is conceived of as a three year contract with the Denver Wildlife Research Center to effect for AID a regional program in Latin America. Procurement of the DWRC's services is anticipated because under RSSA arrangements with TAB, ID/TAB-473-1-67, the Center has gained a predominant expertise to provide technical assistance in the LDCs which is without equal in other US institutions. It has a proven ability to resolve the vertebrate pest damage problems of small farmers through its successful programs for combating the rice rat in the Philippines and for controlling the vampire bat in Mexico and Nicaragua.

Two field units - nuclei of outreach activity - are first anticipated. There would be a program in Nicaragua to service the needs of Central America and Panama and one in Paraguay to service Paraguay, Bolivia and Peru. A DWRC expert would be resident in each under the AID contract. Assistance to the participating countries would be supplemented as required by short-term consultancy services out of the DWRC and by appropriate studies and materials evaluation of local pest species conducted at the DWRC. Final selection of the countries of resident experts would be determined during intensive review. If the results achieved under the programs of the first two field units should prove adequately beneficial, a third outreach center could be established for the Caribbean Islands at a later date. This would require the input of additional funds.

Specific program activities would have to be developed during intensive review and for the most part would depend upon the needs of each participant country. Specific country programs would be entered into only after an agreement had been worked out by the AID mission in accord with the host government. The following plan of operation is applicable, however, to the project as a whole.

#### First Year of Operation

1. Development of crop damage survey methods and initiation of vertebrate damage surveys of nucleus outreach area. These damage surveys may then serve as a baseline upon which future control activities may be evaluated. Because of probable annual fluctuations in the intensity of damage, particularly that caused by rodents, the use of such baselines will receive intensive review during project development.
2. Development of methods of indexing vertebrate pest population levels and initiation of annual or seasonal population censuses in nucleus area. These data may be useful in adjusting crop damage baselines for annual fluctuations in pest density.
3. Preparation of work plans for adaptive research necessary to resolve vertebrate pest problems of the nucleus area including work to be done in the field and work to be done at DWRC.
4. Definition of major crop loss problems.

5. Initiation of field trials to evaluate currently available control methods and initiation of preliminary work to evaluate new methods or adaptations.
6. Negotiation of specific country control programs. This will be accomplished by the AID missions in accord with their host governments.
7. Concurrent with initial vertebrate damage surveys and population assessment, in-service training will be performed for the development of surveying teams.
8. Preliminary visits will be made to all outreach areas to assure applicability of crop damage survey and population assessment methods over the broader outreach region.
9. Initiate Denver-based research investigations of behavior and toxicology for principal pest species.

#### Second Year of Operation

1. Initiate or expand damage survey and population assessment programs in other outreach countries; expand programs in nucleus area.
2. Carry on research investigations in field and at DWRC to assist methods development and solution of those problems defined as most serious deterrents to crop production on small farms.
  - a) Evaluation of candidate toxicants and repellants.
  - b) Studies of feeding behavior
  - c) Ecological studies.
  - d) Evaluation of control techniques.
3. Field trials of potential control approaches.
4. Initiation of a program of training and short courses related to: survey methods for vertebrate damage, control practices, and field observation.
5. Development of approaches for control demonstrations.
6. Review of project by AID to determine the benefits derived from the project, whether to expand it to the Caribbean or to close it out after third year.

#### Third Year of Operation

1. Continue and expand training and demonstration program using farmer assistants in representative crop areas of each country.
2. Continue damage survey and population assessment.
3. Continuation of research program in nucleus areas and at DWRC.

4. Organization of pilot control programs in representative regions in outreach countries.
5. Evaluate production increase in pilot areas by comparison with initial baseline data.
6. Formulate programs of control technology for demonstration and extension application in participating countries.

### III. Goal, Purpose, Outputs, Inputs

1. Goal: The goal is to increase farm gate income for the farmer while reducing the incidence and risk of serious crop losses and to reduce agricultural commodity costs for the consumer.
2. Purpose: The purpose is to develop technologies which may be used by participating countries to reduce farm crop losses by rodents and other vertebrate pests, during production in the field and during post-harvest maintenance.
3. Outputs: The outputs are anticipated to include; A) Initial training activities: (i) Four counterparts, at least, two trained at each nucleus through direct working relationships and participation in all activities. (ii) At least four project technicians, two at each nucleus trained in all field and laboratory techniques required for project activities. (iii) At least one team of experts in each participating country, trained in performing crop damage surveys by means of sampling techniques. (iv) Training of agricultural outreach agents in rodent control techniques and safety practices in handling pesticides. B) A baseline survey of the vertebrate damage and populations in each of the two principal field areas and periodic surveys to assess population changes. The baseline study will also be used to evaluate the project's effectiveness in reducing vertebrate pest damage. C) Two centers of expertise, nuclei of outreach programs capable of: (i) Performing the necessary field research required to develop control technology which may be applied under specific country conditions. (ii) Providing in-service training, short courses and workshops. (iii) Providing outreach technical assistance in the area of responsibility. (iv) Perfecting control technologies ready for application in participating host countries. D) A now undeterminable number of packages of technology ready for use in participating host countries to reduce crop losses, particularly on small farms, both in the field during production and on farm areas during post harvest periods. E) Appro country-financed vertebrate pest control programs in each of the participating countries.
4. Inputs: Project inputs are projected in greater detail under section IX, the financial plan. They consist of: A. Professional U.S. staff: (i) Two resident technicians, one at each outreach center. (ii) Backstop staff of the DWRC required for assistance in the outreach center programs. (iii) USAID project management staff, one month/year. B. Local staff: (i) Four counterpart

professionals, two at each outreach center. (ii) Four project technicians, two at each outreach center. (iii) Two secretaries, one at each center, two sub-professionals, one at each center. C. Research and Development supplies consisting of: (i) Shelf items, (ii) Field and laboratory equipment, (iii) four vehicles, two for each outreach center, (iv) Calculating machines, (v) Training supplies, D. Support for outreach training functions.

#### IV. Critical Assumptions Pertinent to Project Functions

At the present stage of project development the following assumptions have been made: A. That a nucleus established in one country in each of the two proposed areas of outreach would be able to service all the countries in that area. B. That the concerned USAIDs recognize vertebrate pest control to be the serious problem which in fact it is and will assign it the priority necessary to make a long range program worthwhile. C. That the host governments concerned will recognize vertebrate pest control as one of their serious problems and will agree to become participating parties in the outreach programs. D. That the participating countries will provide the personnel necessary for specialized vertebrate pest control training and that once trained they will be retained in the work for which they were prepared. E. That participating countries will agree to finance those rodent control research and extension programs sponsored by the centers of outreach within their own frontiers and that they will make use of the packages of control technology developed under the nuclei program.

#### V. Related Activities

No related activities in vertebrate pest control are known to be in operation in Latin America. That is why this activity which can immediately achieve increases in such small farm produce as grains and horticultural crops merits consideration as an AID regional program. Insect control is now extensively practiced with commercial products on many crops and the use of herbicides to control weeds has expanded rapidly. Chemical crop defense practices are being widely disseminated through the efforts of private industry.

Under the TAB/RSSA with the DWRC a program was initiated in rodent control in the Philippines in 1967. That program has since developed considerable rodent control technology which with minor adaptation to specific local conditions and pest species should be applicable in Latin America. Also under the TAB/RSSA, DWRC and Mexican scientists developed methods to combat the vampire bat. These findings are now being extensively used by Nicaragua and several countries in Latin America, among them the Central American nations, Peru, Brazil and Paraguay. The work has caused a lessening in the incidence of rabies and has resulted in a reduction in death of cattle.

Several rodent damage surveys have been performed at the request of host governments in Central America under the TAB/RSSA, ID/TAB-473-1-67. As a result a substantial amount is already known about the need for rodent control there. It has been found that the

vast majority of the vertebrate pest damage to crops in Central America and northern South America is caused by a single rodent species, the rat Sigmodon hispidus. Typically the Sigmodon hispidus population fluctuates from year to year; in some years populations are low; in others they reach "outbreak" proportions and crop damage may be extremely heavy. Rodent control programs tend to be hastily organized when severe damage is reported with the objective of killing large numbers of rats rather than protecting crops. Virtually no evaluations of the effectiveness of these approaches have been made in Latin America; however, the work in the Philippines indicates they probably have little effect in protecting crops because of immigration of rats from surrounding areas.

#### VI. Alternatives to the Project

Historical evidence suggests that neither the Latin American Ministries of Agriculture nor the AID target groups are fully aware of the extent of vertebrate pest damage in the region. As a result control operations have been largely confined to sporadic poisoning campaigns when pest populations expand to plague proportions. General lack of an understanding of the extent of crop losses in the field and during post harvest storage is likely to continue until adequate surveys of the damage have been made to convince the host governments of the priority need for work in this specialty. Until this is achieved it is improbable that many LDCs are likely to ask for other than sporadic technical assistance which may reduce the symptoms, but will not resolve the cause. Without such a project as proposed present vertebrate pest losses are likely to continue unabated and probably become more intense as development proceeds.

A possible alternative to the present proposal would be for TAB to undertake this work under its assisting RSSA. This is not likely. Research utilization activities in Latin America under the present RSSA are to terminate in 1978 and TAB is of the opinion that programs for sustained control such as are now indicated, are not within its mandate.

#### VII. Direct and Indirect Beneficiaries

The direct beneficiaries are likely to be the AID target group of small farmers who are the primary producers of basic grains and horticultural crops in Latin America although those larger producers who produce these crops will likewise be benefited. The indirect beneficiaries will be the consumers for whom prices of agricultural produce could be reduced. Host government agencies participating in this program will also be direct beneficiaries through the staff development and training activities carried on by the field projects.

#### VIII. Extent of Spread Effect

The extent of the spread effect of this project is hard to predict at this time. Except in a very few instances, the amount of vertebrate pest damage

is not known. In most parts of the world the serious damage which is being caused by rodents and bird pests is probably considered due to natural causes. The rural poor are probably the largest single group throughout the Latin American region and probably suffer the greatest risk of limited production due to pest damage. The subsistence farmer and the small farm producer are at present minor participants in most of the economies of Latin America's developing countries. By reducing risks and removing production limitations for these small producers, it is expected that additional persons will be brought into local economies and that the GNPs of participating countries will expand. There are considerable numbers of technical assistance programs in progress planned to reach the rural poor. The present proposal differs from most of these, however, in that it will recuperate losses from a potential that is not now realized, but could be available.

It is a program of conservation the results of which can be large while the cost should be relatively small. Equally important is the fact that the results of this project will have an immediate pay-off.

IX. Financial Plan

Estimated annual costs of project; (\$000)

	FY79	FY80	FY81
Operation of Research Units	100	110	120
Resident DWRC Technicians	100	80	95
TDY Consultants	24	20	28
Research Support	10	15	12
Equipment and Supplies	65	10	10
	299	235	265
		Total:	\$799

X. Development of Project

This project will be prepared jointly by the Denver Wildlife Research Center (DWRC) and a direct hire staff member from LA/DR/RD. Because of the extensive experience already gained by the personnel of the DWRC they will be responsible for the technical and programming part of the project documentation while the AID staff member will be responsible for coordination and policy formulation in the PP.

The present TAB RSSA can be counted on to provide a considerable amount of backstopping to the Denver personnel during project preparation. For example, a sample survey of the major vertebrate pest problems and their order of importance is anticipated in the two areas of concentration to provide information for technical response in the PP. It is considered partially a RSSA activity because it will assist in an orderly transition of present TAB activities to the LA Regional activity in 1979 after the TAB project phases out at the end of FY 1978. Approximately \$10,000 in addition to funds budgeted

under the RSSA are required in FY 1978 to carry-out travel-related project development.

Transitional Budget

Direct Hire AID Personnel	3 mos.
DWRC Personnel	2 mos.*
Travel, 4 People to field areas	\$ 10.000 **

\* Project write up by RSSA personnel

\*\* Travel and per diem for personnel whose salary is covered under TAB RSSA

XI.. Policy or Program Issues

In order to solve the rural poverty problem farmers must first of all have more to sell. Increased marketable produce implies increased incomes on the farm and is likely to improve employment in processing, handling, distribution and marketing systems. This project attempts to achieve better equity for the rural poor not by a long range program of improved technology, but by an immediate program of lessening vertebrate pest damage so that crop losses are reduced and the farmer will realize a better share of his potential product.

The present world-wide TAB program for vertebrate pest control is intended to terminate field activities in Latin America in 1978. Its resources will be called upon so as to facilitate an orderly transition to the new Bureau program proposed for 1979.

XII. Environmental Impact

Crop conservation is the critical aspect of this project. To achieve this it is intended to reduce damage by rodents and other vertebrate pests in the basic grains and horticultural crops which are predominantly grown on small farms. Development of effective rodent control programs will coincidentally assist in reducing the incidence of disease which such pests frequently transmit. The project will assist also in preventing an undue expansion of migration to new uncultivated land by providing increased food from land already under cultivation.

Availability of environmentally sound approaches to rodent control can sharply reduce the use of persistent chlorinated hydrocarbon insecticides, such as endrin, which are now widely used as rodenticides and avicides throughout Latin America. Research procedures, laboratory and field evaluation, and control methods used for U.S. domestic animals are foreseen as minimizing the adverse effects of present local methods on desirable wildlife species.

### XIII. Impact on Women

As part of the focus on control of rodents and other vertebrate pests, a special effort will be made to reach the women involved in agricultural production. Women could benefit from this project in large measure. In most of rural Latin America they are directly responsible for maintaining the family budget; thus any increase in income directly involves them. Women are predominantly responsible for on-farm food storage. Because women are more intimately associated with household and on-farm sanitation, the impact of this project will, in large measure be related to their participation in it.

### XIV. Additional Project Design Considerations

In addition to considerations which have already been raised above, the following issues will likewise be addressed during the course of project development:

- 1) To what extent can nucleus centers be integrated with existing national research facilities? Is it preferable that they be merged or distinct?
- 2) Is the project sufficiently long in duration to perform adequate adaptive research and develop pest control programs?
- 3) To what degree can counterpart financing be expected from both nuclei and non-nuclei countries?
- 4) Should more A.I.D. funding be directed toward non-nuclei countries?
- 5) Do project outputs contemplate an adequate degree of training?
- 6) Is the budget sufficient to achieve the project purpose?

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

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

PID  
 2. DOCUMENT CODE  
 1

3. COUNTRY/ENTITY  
 LATIN AMERICA - REGIONAL

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 DIGITS) [ ]

6. BUREAU/OFFICE  
 A. SYMBOL LA B. CODE 3

7. PROJECT TITLE (MAXIMUM 40 CHARACTERS)  
 Research Project on Extension Information Systems

8. PROPOSED NEXT DOCUMENT  
 A.  3 2 = PRP 3 = PP B. DATE 12/77

10. ESTIMATED COSTS (\$000 OR EQUIVALENT, \$1 = )  
 FUNDING SOURCE MISSEY  
 A. AID APPROPRIATED 1.005  
 B. OTHER 1.005  
 C. HOST COUNTRY  
 D. OTHER DONOR(S)  
 TOTAL 1.005

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION  
 a. INITIAL FY 79 b. FINAL FY 79

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

A. APPRO- PRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		C. FIRST FY		LIFE OF PROJECT	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN
(1) FN	141	010		1.005		1.005	
(2)							
(3)							
(4)							
TOTAL				1.005		1.005	

12. SECONDARY TECHNICAL CODES (maximum six codes of three positions each)  
 012 030 050 220

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

14. SECONDARY PURPOSE CODE  
 240

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)  
 To increase farm gate income of farmers served by technology transfer systems through improved effectiveness and increased efficiency.

16. PROJECT PURPOSE (MAXIMUM 480 CHARACTERS)  
 To identify technology transfer processes of proven merit for incorporation in future integrated rural development and agricultural production improvement projects.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)  
 AID and contract staff travel \$65,000

18. ORIGINATING OFFICE CLEARANCE  
 Signature: [Signature]  
 Title: Associate Assistant Administrator, LA/DR  
 Date Signed: 017/016/77

19. DATE DOCUMENT RECEIVED BY AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION  
 [ ] [ ] [ ] [ ] [ ] [ ]

PROJECT IDENTIFICATION DOCUMENT

PROJECT TITLE: Latin American Regional Research Project on  
Extension Information Systems

I. The Problem and Approach:

A number of the recent evaluations of the process of development have commented critically on the technology transfer interface at the farmer level. The commonly used term for the process is "extension of research results to the farmer" or simply "extension." The critical comment in a variety of forms reduces to the common element that the available information is not flowing to the farmer. Perhaps the strongest statement in this regard was drafted by the International Conference on Crop Productivity-Research Imperatives sponsored by Michigan State University and the Charles F. Kettering Foundation, October 1975. The conference report states that one of six imperatives common to all technical disciplines was to: "Develop Mechanisms for Rapid and Effective Transfer of Available Technology."

"A significant body of agricultural technology from both biological and physical sciences, is available for immediate application. Better institutional mechanisms must be developed for collating, interpreting, disseminating, and applying the technology already known."

"It is virtually certain that the increase in food production will lag behind population growth unless (this) imperative receives a higher level of support."

In order to shift program emphasis from the goal of increased agricultural production to the more comprehensive objective of rural development, it is necessary to expand the role of extension officers as the local "agent of change." In principle each rural development project is designed carefully to realize the full potential of the physical, social and other resources of the project area or entity. It is a normal consequence of things for projects to develop unique characteristics as they reach toward optimizations of the local resource mix. In attempting to achieve a broadened set of objectives, i.e., rural development vs. increased agricultural production, the role of the extension agent has been prescribed in a variety of ways. Some of these ways are quite innovative. Due to lack of systematic assessment and adequate interchange of information concerning such innovations, however, there is a sense of frustrations that trial and error are not leading toward a better approach to the extension elements of the development process. Although the literature on extension contains numerous studies of techniques and methods, this body of knowledge has not been adequately presented in a form of utility to designers of rural development projects which seek to introduce a technology of moderate complexity to a predetermined group of farmers.

In other words, there is an apparent need for harder data for use in designing the extension system of future agricultural production and rural development projects. It is quite probable that useful design information can be gleaned from the diversity of experience embodied in various agricultural and rural development projects and programs. Present and past projects within Latin America include projects which range from conventional agricultural production campaigns to very carefully designed, integrated area development activities and studies of integrated use of communications technology to increase impact. There are also a number of combinations of integration such as credit X extension, credit X inputs X extension, marketing X extension and other combinations of agricultural technology manipulated in collaboration with nonagricultural institutions. An analysis of this experience should remove some of the uncertainties of project design and quite directly improve project performance.

It is visualized that the results of this study will suggest guidelines for improving extension effectiveness which can be incorporated directly into planning of new development projects for the countries of the Bureau, as well as opportunities and needs for more effective training and assistance in technology transfer within the region. It is also likely that such an analysis will highlight some aspects that require controlled investigation.

#### Proposed Project

The objectives of this investigation are: to define the performance parameters of various techniques and methods of technology transfer in Latin America; to identify the critical preconditions for development of successful technology transfer programs; and to suggest guidelines for planning and implementing technology transfer components of rural development or crop production programs. Secondary outputs are expected to be improved statements of crucial extension aspects requiring further investigation and, possibly, elaboration of the cases for further scientific investigations into the extension process.

The investigative work will be done by study, analysis, evaluation, survey, etc., of various development projects selected on the basis of distinctive features of the extension techniques employed by each. Among the specific aspects to be studied are: research/extension and extension/farmer interfaces, agricultural message development, integrated programming strategies, production of educational materials, information delivery systems, and feedback mechanisms. The investigation will seek to identify and assess factors common to several projects which have served as constraints and those which have been critical to success in achieving information transfer.

At this stage, studies of five projects in possibly five countries are proposed to provide the necessary breadth to the investigation. Both the number of projects and the range of investigation must be considered more comprehensively in subsequent project design steps.

This research project on extension information systems will be complementary to, but distinct in purpose and objective from, the separately proposed project on socio-economic criteria for agricultural research systems. This project will focus on how to achieve technology transfer, whereas the socio-economic criteria project will focus on interdisciplinary determination of the suitability of technology for transfer.

The project inputs will be from one to five collaborative agreements and contracts which would enable joint investigation by U.S. and L.A. institutions within specific localities and development activities. Elements of these several agreements and contracts will be common for all projects, thereby enabling subsequent comparative analysis of the investigative results. At this stage it appears that for reasons of logistics and limited resources it will be necessary to use multiple implementing documents to permit the diversity in the investigation of several countries.

The project will be undertaken by a central research unit with individual country or project investigative units. The central unit will plan the survey/study methodology, assist in the investigation and the preparation of the unit report, and compile the project report.

The budget provides for up to four limited methodological studies to 1) test the validity of preliminary conclusions reached concerning guidelines that can be applied broadly in the region in the design of technology transfer programs; 2) determine the degree of specificity that can be included in such guidelines, recognizing that each country has unique characteristics that must be taken into account in planning in-country programs; and 3) to demonstrate the viability of using such guidelines in in-country planning.

The individual project investigations will be planned to provide both quantitative and qualitative measures of the outputs realized from a variety of extension inputs in comparison, where the opportunity exists, to change occurring in the absence of such inputs. Policy, physical and other factors that may have overpowered the extension or change agent input in bringing about changes in farming practices will be identified.

Plans for each project will be reviewed in a workshop/conference prior to finalization to expand, if necessary, the relevant design inputs, and to maintain comparability in data collection and reporting. Subsequent to the field work, draft conclusions will be reviewed in a second workshop to insure the adequacy of the report and supporting data, thus facilitating feedback into bilateral project designs.

An Outline Budget

Central Research Unit -

1. Team Leader - 2½ yrs @ \$60,000	\$ 150,000
2. 3 Staff Specialists - 2 yrs @ \$40,000	80,000
3. 4 Investigations of Methodology @ \$75,000	<u>75,000</u>
Sub-Total	\$ 305,000

Country Studies - (5 Units)

4. 2 Staff - 5 months @ \$5,000	\$ 10,000
5. Survey Program Contract and Analysis \$100,000	100,000
6. 2 Conferences - 15 participants	<u>30,000</u>
Sub-Total	\$ 140,000
X5	
Total	<u>700,000</u>
Project Total	\$1,005,000

Host Government Linkages

Each country study will require a collaborating local institution to serve as a physical base of operations as well as a resource for planning the field work and evaluating results. The capacity for leadership in undertaking the proposed research varies considerably in the L.A. countries; consequently, it will be necessary to tailor the collaboration agreement to each situation. Where the local institute has a high interest in this study and resources they can contribute, they will be asked to participate as fully as they may be able. The institutional collaboration is presumed to include appropriate participation of the host government, which also will be specified in a ProAg suitably drawn to provide the resources found to be necessary for the individual subproject.

Alternatives

One course of action for filling a gap in the transfer of agricultural technology, which has a number of notable precedents, is to set up an international research institute. This approach has proven to be productive and cost effective when applied to crop production technology. LA/DR/RD has considered a proposal for an international institute for training, service and research in extension information systems. However, the socio-cultural diversity of countries is more complex than in the case

of agronomic characteristics and the economics of such a center are therefore less obvious at this time. It appears premature to establish such an institution until more is known about the extension process and the benefits of centralized research training and service in this field.

Another alternative is to develop an extension research project as an element in one of the ongoing projects or proposals in advanced planning. This approach offers numerous potential advantages, yet it seems that at the present stage of knowledge about extension, it is quite likely that the extension research aspect would be a nearly autonomous subsection and would require considerable time to generate proven improvements in practices and methods.

Regional management offers the most expedient route for collection of comparable data from several countries (necessary for fulfilling project objectives), for intercountry information flow, and for rapid feedback of results into future bilateral project designs. For these reasons, the regional approach has been recommended over the individual country approach. We also believe that the case for an international center in this field should be reviewed when the results of this research have been compiled.

#### Beneficiaries

It is imperative that we improve our understanding of the mechanics of the technology transfer process in order to design more effective projects for technology transfer to small farmers. This project, designed to isolate and describe the technology transfer processes, will have as its direct beneficiaries the project designers. The benefits to small farmers, however, will be indirect only in the sense of the time delay and the dependence upon implementations by future assistance and development projects.

One can also visualize significant benefits to all the agricultural service institutions who combine extension processes with credit, inputs, market and other services. The result of this project will be readily utilized in operational improvement of the institutions servicing farmers by reducing costs or making services more effective. It seems reasonable to anticipate quite significant indirect benefits of this type.

#### Project Development

In developing the PP, it will be necessary to identify five research sites which will meet criteria established in accordance with project objectives, and to determine the specific characteristics common to all or nearly all sites which will be used for comparative purposes. For these purposes, a prestudy is recommended as a project development input. Such a prestudy would necessarily encompass a greater number of countries than the five finally selected.

A team of one to three consultants will be engaged to conduct the above prestudy, to analyze the options available, and to prepare recommendations based on:

1. Technical-economic features
2. Socio-cultural features
3. Institutional resources
4. Official comments
5. Research potential of site, including history of technology transfer

Consultancies of up to nine work-months should provide the information needed for selection of sites and final project design. Preparation of the PP by LA/DR/RD, including the prestudy and draft collaborative agreements for the five selected sites, is expected to require nine to twelve months. Therefore, the PP would be submitted for approval and initiation in the first quarter of FY 1979. The negotiation between local institutions and missions is expected to require up to two months including travel to each of the five site countries by a consultant familiar with the documentation being drafted.

#### Issues

1. Number of Projects - The number five has been shown in the PID as the number of project/countries to indicate an order of magnitude. Increasing the number would obviously increase the comprehensiveness of the investigation, but would also make management more complex. In order to have similarity in analytical technique as well as insure minimum time lag from completion of initial survey work to final report, the number is limited. As the project evolves in the PP stage the number of field sites will be reviewed in terms of these principles and may be expanded. Guidelines for such consideration would be put forward in the project review.

2. Project Staff Complement of U.S. and Local Personnel - The PID has not identified staff as U.S. or local, although this may be suggested as the differentiation between the budget categories of Central Research Unit and Country Studies. The project development will clarify the availability of local staff input and also the availability of contractor input. The availability of staff combined with the number of projects to be studied have obvious implication for the life of the project. Trade-offs in these regards are to be considered in the project review.

3. Costs of Survey and Investigations - In reviewing the Bureau's experience with surveys of similar types, we find considerable range in cost. It is likely that within this project there will be some variation among the subproject and the methods studies.

4. Expansion - The proposal envisages analysis of extension in relation to agricultural production. The technique might also be applied to the extension of health or other practices. The trade-off of a broadened scope may be considered in review of the proposal.

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

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

PID  
 2. DOCUMENT CODE 1

3. COUNTRY/ENTITY Latin America -- Regional  
 4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 DIGITS) [ ] [ ]  
 6. BUREAU/OFFICE  
 A. SYMBOL LA B. CODE 3  
 7. PROJECT TITLE (MAXIMUM 40 CHARACTERS)  
 Socio-Economic Criteria for Ag. Research

8. PROPOSED NEXT DOCUMENT  
 A.  2 = PRP B. DATE 03/7/8  
 3 = PP

10. ESTIMATED COSTS (\$000 OR EQUIVALENT, \$1 = )  
 FUNDING SOURCE: A. AID APPROPRIATED 655  
 OTHER: 1. U.S. 2. OTHER DONOR(S)

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION  
 a. INITIAL FY 79 b. FINAL FY 81

TOTAL 655

11. PROPOSED BUDGET 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	250S	0	0	80	655		
(2)							
(3)							
(4)							
TOTAL				80	655		

12. SECONDARY TECHNICAL CODES (maximum six codes of three positions ea.)  
 010 | 020 | 050 | 070 | 080 | 200

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)  
 BS | EQTY | INTR | PART | | |

14. SECONDARY PURPOSE CODE 140S

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)  
 To structure and channel agricultural research activities to maximize their impact on Latin American small farmers.

16. PROJECT PURPOSE (MAXIMUM 400 CHARACTERS)  
 To determine the extent to which socio-economic criteria should guide Latin American agricultural research activities in order to benefit small farmers and to promote whatever guidance is judged to be appropriate.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)  
 For the PRP, two person-weeks each of a contract agriculturalist and agricultural economist, \$5000, plus inputs and travel of LA/DR/RD direct hire staff. Similar inputs anticipated for the PP.

18. ORIGINATING OFFICE CLEARANCE  
 Signature: [Handwritten Signature]  
 Title: Associate Assistant Administrator, LA/DR  
 Date Signed: 07/06/77

19. DATE DOCUMENT RECEIVED IN AID/M, OR FOR AID/M DOCUMENTS, DATE OF DISTRIBUTION  
 MM DD YY

PROJECT IDENTIFICATION DOCUMENTSocio-Economic Criteria for Agricultural  
ResearchI. Summary of the Problem

The role of technology is generally recognized as highly instrumental, if not central, in efforts to assist in improving small farmer welfare. Accordingly, substantial AID funding has been directed either directly or indirectly to technology development and outreach. Among other things, the Agency has supported the international agricultural research centers and national research and extension systems. Many of the small farmer credit programs it has supported have had technical assistance in modern practices as an integral component and small farm management programs have had adoption of more efficient (and generally more input-intensive) practices as a basic rationale. Similarly, much agricultural sector planning work has relied on resource allocation analysis to study what crop and technological alternatives would be most effective in improving small farmer incomes.

Assumed in many of these efforts is the premise that product or profit maximization is consonant with small farmer objectives. However, only limited attempts have been made to determine whether or not this is indeed the case. Frequent mention has likewise been made of the constraints within which the small farmer operates and these constraints have been formulated in a variety of ways. For example, reference is often made to the need of the farmer to guarantee a minimum subsistence income for his/her family, that there are limits to the indebtedness a farmer can bear to finance new practices, that the farmer is extremely averse to the risk of decapitalization, that existing institutional structures deprive small farmers

of equal access to modern inputs, etc., etc. Whether these constraints consistently impact on the structure of AID-financed research programs is unclear, however.

The issue of taking explicit account of small farmer objectives and constraints in AID research programs is not new. In fact, one of the central themes of the 1975 Cali Rural Development Conference was precisely the issue of the scale neutrality of agricultural research. Both agriculturalists and agricultural economists concurred in the contention that the technologies being developed by the international research centers are generally scale-neutral in terms of the technical relationships between inputs and outputs, i.e., that if all inputs are increased by X percent, output likewise increases by X percent. There was likewise agreement that certain of these practices could in practice benefit large farmers preferentially because of small farmer risk aversion and skewed institutional arrangements. Where disagreements did arise -- and no resolution was reached -- was with respect to whether such "exogenous" factors should be explicitly accounted for in determining directions for agricultural research. The inclination of a number of participants was that such considerations should not impinge heavily on research design, that promising avenues should not be closed prematurely because of existing institutional obstacles which could be overcome in the long run, and that the challenge for non-agriculturalists is precisely to devise institutional mechanisms to assure that the spread of technological benefits is in fact scale-neutral. On the other hand, others attending the conference argued that small farmer risk aversion and skewed institutional relationships are intransigent phenomena

and that if the Agency were to address seriously the implications of the "new directions" legislated by Congress, it should not be content with a scale-neutral stance but rather attempt to bias research efforts deliberately toward small farmers. The latter arguments were not articulated well, however, in terms of concrete guidelines which could be followed by agricultural researchers. As a result, no clear directions emerged for revising existing research criteria along these lines.

The debate in Cali is both symptomatic and indicative of a genuine need to come to concrete judgments concerning the extent to which socio-economic criteria should guide agricultural research activities. Returns to agricultural research are generally recognized to be high and if concrete guidelines can be formalized to structure and channel these returns to benefit small farmers, the potential payoffs of such an effort are likely to be high as well.

II. Proposed Response

This project will be designed specifically to encourage agriculturalists and agricultural economists to collaborate in an effort to reach informed judgments concerning the extent to which socio-economic criteria should guide agricultural research programs. The intent will not be necessarily to discover anything new but more to remove the fuzziness which has characterized much of the discussion on this subject in the past and to integrate and articulate in distilled form the state of existing knowledge. The outputs of the project are foreseen to be a set of guideline materials which will be clearly intelligible to both policymakers and researchers and which can be used by them to orient concrete program decisions.

Sources of Information. Since research activities in Latin America have been quite varied, the approach to collecting relevant information will necessarily be rather eclectic. Among the sources to be consulted will be:

- a. the experiences and research of the international research centers, particularly CIMMYT, CIAT and CIP;
- b. the work of individual national research and extension agencies;
- c. supervised credit and farm management programs;
- d. Latin America and U.S. university research;
- e. primary data on small farmer production practices; and
- f. the views of small farmers themselves.

The last source is judged to be particularly important. Indeed it is somewhat ironic that while professional judgment seems to be converging more and more in an appreciation of the small farmer as an "economic man," so much professional work is performed without his direct input.

Levels of Analysis. Attempts will be made to synthesize generally applicable guidelines from the above sources. The danger with limiting oneself to this general approach, however, is that resulting criteria may remain too platitudinous to be useful for guiding program decisions. Hence efforts will be made so that whatever guidelines are developed are relevant to concrete directions for applied research.<sup>1/</sup> Encouragement will be given to cite specific illustrative examples even though they may be crop and site specific.<sup>2/</sup>

Analytical Foci. The relevance of a given technological package to small farmer needs can be visualized as a function of two basic phenomena: small

farmer objectives and the constraints within which the small farmer operates. Hence work to be undertaken under this project will be focused along these lines.

As noted above, much agricultural research work is premised on a consonance of product or profit maximization with small farmer objectives. Attempts to modify these assumptions (by incorporating elements of risk and uncertainty, for example) have been relatively unsuccessful in providing generalizable "rules of thumb" for the decision maker who must make programmatic decisions in the absence of thorough information and analysis. As a consequence, he/she is frequently forced back to relying on the aforementioned assumptions.

A major hypothesis to be addressed by this project is that small farmers in Latin America are best characterized not as product or profit maximizers but rather as unit cash cost minimizers, at least in the context of technological choices within a given crop. In other words, the basic objective of small farmers is hypothesized to be maximization of the rate of return to cash outlays.

It can be shown theoretically that minimization of cash costs per unit of output implies an efficient but different (and more conservative!) resource allocation pattern than do product or profit maximization. Furthermore, limited analysis of empirical evidence to date suggests that the hypothesis can be supported<sup>3/</sup> but nothing definitive has been established as yet.

If the hypothesis does prove acceptable, the consequences are far-reaching. The advisability of a given technological alternative can be

evaluated by calculating a simple ratio and comparing it with the ratio associated with current practice. Such an exercise can give the researcher an early "first-cut" indication of whether adoption of his/her work is likely. Similarly, the advisability of current technological recommendations can likewise be readily appraised.

The above hypothesis does have the virtue of incorporating some elements of risk and uncertainty which are frequently conceptualized as small farmer constraints. A number of other constraints, however, likewise bear on production decisions. Thus the second basic analytical focus of this project will be precisely to address these constraints in systematic fashion. Particular emphasis will be given to how variables such as timeliness of credit provision, conditions of credit-worthiness, hidden "red-tape" costs, reliability of input delivery systems, availability of technical assistance services, tenure security, distance to market, etc., impinge on selection of production alternatives and to what extent they should be explicitly accounted for in structuring research and extension programs.<sup>4/</sup>

### III. Goal, Purpose, Outputs, Inputs

Goal. The goal of the project is to structure and channel agricultural research activities to maximize their impact on Latin American small farmers.

Purpose. The purpose of the project is to determine the extent to which socio-economic criteria should guide Latin American agricultural research activities in order to benefit small farmers and to promote whatever guidance is judged to be appropriate.

Outputs. The outputs of the project are anticipated to include:

a) a formal synthesis of the implications of existing knowledge both to articulate those criteria for which there is a relative

degree of consensus and to delineate those criteria which require further clarification and/or analysis;

b) a workshop to acquaint a broad spectrum of Latin American researchers and extensionists with these preliminary conclusions and to encourage them both to react and to provide guidance for the work to be undertaken during the remainder of the project;

c) quantitative analysis of existing primary data on small farmer production practices to address the unresolved hypotheses generated by the synthesis of existing knowledge and the guidance provided by the multi-country workshop;

d) surveys of small farmers in three Latin American countries to incorporate input directly from the target group and to treat hypotheses which cannot be adequately addressed with existing information; and

e) presentation of a written report of final conclusions in a multi-country seminar and intensive workshops with personnel of all levels within individual national research, extension, technical assistance and small farm management agencies to discuss how these conclusions can be implemented most effectively.

Inputs. The sources of information to be utilized in this project are outlined in Section II. Particular attention will be paid to involving, either contractually or otherwise, those entities (e.g., international agricultural research centers and national research and extension agencies) whose operations most stand to benefit from the project itself.

For an outline of the services which would need to be contracted for the project, see the financial plan which follows:

IV. Financial Plan

	<u>FY 79</u>	<u>FY 80</u>	<u>FY 81</u>
Bibliography generation (including travel and per diem)	\$30,000		
Preparation of initial report	40,000		
Multi-country workshop	10,000	\$40,000	
Analysis of existing primary data:			
Analysis services		100,000	
Programming services		40,000	
Computer services		50,000	
Clerical services		35,000	
Surveys of small farmers in three countries		30,000	\$115,000
Analysis of survey data:			
Analysis services			40,000
Programming services			25,000
Computer services			20,000
Clerical services			15,000
Multi-country seminar and individual country workshops			65,000
Total Fiscal Year Requirements	\$80,000	\$295,000	\$280,000
Total Project Requirement	\$655,000		

V. Project Beneficiaries and Spread Effect

The project is designed so that the benefits of agricultural research activities can be captured by Latin American small farmers. Every effort will be made to involve those entities (including AID project management entities)

which are charged with the responsibility for such activities. Those entities which for one reason or another cannot be directly involved will be invited to participate in the multi-country workshop and seminar as well as individual country workshops.

The intent of this project is not to carry out "academic" research in isolation from ongoing research work. It is rather to be responsive to small farmers' needs by developing concrete, programmatically oriented guidelines for and with the very research agencies whose activities can be of benefit to small farmer interests. To the extent that these agencies are receptive to these interests, the anticipation is that they will find this project initiative quite germane to their own work and that they will welcome whatever sound guidelines are developed by the project.

#### VI. Related Activities and Project Alternatives

As noted above, the relevance of the socio-economics of small farmers to research activities is by no means a new issue. Much relevant work has already been done, as the varied sources of information outlined in Section II serve to indicate. What has not been done, however, is to integrate the implications of these rather disparate endeavors in the form of programmatically applicable guidelines. In addition, much of this work has been limited by organizational structures which serve to restrict interdisciplinary collaboration. This project, in contrast, is not to be viewed as an agricultural economics or an agronomic research endeavor. To be successful in terms of ultimate payoff to small farmers, it must be joint.<sup>5/</sup>

There are two basic alternatives to undertaking this endeavor as a Latin American Bureau regional project. The first would be a series of bilateral projects which would be geared specifically to the needs of individual countries. The principal difficulty with such an arrangement, however, would be the failure to take advantage of the full range of cross-country fertilization which is envisioned here. Although there is undoubtedly substantial heterogeneity in the region, the anticipation is that there are clear, non-platitudinous lessons to be articulated and learned which are applicable to more than one country-- and which can be obtained more efficiently on a regional basis.

The second alternative (and the opposite extreme) would be a worldwide project funded by the Technical Assistance Bureau. The principal difficulties with this alternative are twofold. First, such a broadening of scope might serve to obscure the relative degree of homogeneity which is found within Latin America in comparison with other regions of the world and render the conclusions of the project less specifically applicable to Latin American needs. Secondly, there is nothing inherently experimental or methodologically innovative in what is proposed here which would make the project more amenable to TAB funding.

#### VII. Project Development Requirements

It is recommended that the PRP for this project be presented in March 1978. Requirements for preparation of the PRP are foreseen to be:

a) correspondence and travel for an LA/DR/RD agriculturalist and agricultural economist to consult with CIMMYT, CIAT, CIP, national research and extension agencies, USAID and national project managers of AID-supported technical assistance

and farm management projects, Latin American and U.S. universities, etc., to develop project focus in more concrete terms and to determine interest in possibly collaborating in project implementation; and

b) two person-weeks each of an agriculturalist and an agricultural economist, both with Latin American experience in agricultural research or extension to elaborate technical issues for clear and efficient project design. (Cost is estimated as \$5000.)

It is recommended that the PP be presented in October 1978. Requirements for preparation of the PP are anticipated as similar to those for developing the PRP, subject to review of the PRP.

FOOTNOTES1/

In other words, development of guidelines which are genuinely concrete and programmatically applicable implies the need for differing levels of generality. For example, vegetable research might be offered as a small farmer research priority since vegetables are commonly produced by small farmers. A decisionmaker needs much more guidance than this level of generality provides, however. He/she requires directions for applied research in vegetables which are specific to a given range of ecological and socio-economic conditions.

2/

Examples of concrete questions which might be addressed are: Should development of a high-yielding sesame variety be abandoned when it is found that pods open too soon to permit machine harvesting? Is the reluctance of small farmers to incur cash indebtedness so great as to question the advisability of research on other than open-pollinating seeds? Which of the following alternatives is preferable: specialization in a high yielding crop which requires application of chemical products for disease control or rotation of less profitable crops with no need for purchases of chemical inputs?

3/

This work also raises questions as to whether technological practices recommended under AID-Supported technical assistance programs are in the small farmers' long-run interest to adopt.

4/

At a rather general level there is already a relative degree of consensus as to how such variables affect production choices: that they lead to emphasis on cereals, on crops amenable to storage and home consumption, on crops with stable local markets, etc. But again considerably more explicitness is required for purposes of programming research and extension priorities in different ecological and socio-economic contexts.

5/

Furthermore, if small farmers' perceive needs are to be genuinely incorporated in the project, anthropological input will be essential as well.

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

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

PID  
 2. DOCUMENT CODE 1

3. COUNTRY/ENTITY  
 Latin American Regional

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 DIGITS) 598

6. BUREAU/OFFICE  
 A. SYMBOL B. CODE

7. PROJECT TITLE (MAXIMUM 40 CHARACTERS)  
 Training for Development

8. PROPOSED NEXT DOCUMENT  
 A.  PRP 2 = PRP  
 PP 3 = PP

B. DATE MM YY

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION  
 a. INITIAL FY 79 b. FINAL FY 84

10. ESTIMATED COSTS (\$000 OR EQUIVALENT, \$1 = )  
 FUNDING SOURCE b85c8f

A. AID APPROPRIATED

B. OTHER 1. U.S. 2.

C. HOST COUNTRY

D. OTHER DONOR(F)

TOTAL

11. PROPOSED BUDGET 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)				750	750	5,500	
(2)							
(3)							
(4)							
TOTAL						5,500	

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

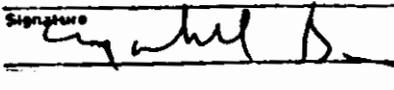
13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)

14. SECONDARY PURPOSE CODE

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)  
 Increase Latin American expertise in priority development areas and institutionalize the human resource development capability in Latin American LDCS'.

16. PROJECT PURPOSE (MAXIMUM 480 CHARACTERS)  
 Support and strengthen the development of institutions capable of assessing human resource needs and providing appropriate experience to reduce the need.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)

18. ORIGINATING OFFICE CLEARANCE  
 Signature  Date Signed

19. DATE DOCUMENT RECEIVED 1: AID/W, OR FOR AID/W DOCUMENT DATE OF DISTRIBUTION

## 1. Summary of the Problem to be Addressed

The majority of AID's participant training efforts have been tied to specific development projects carried out jointly by the Agency for International Development and host governments. This has been a successful approach to ensure expected project results and developing qualified manpower within the areas covered by the projects. However, there is a concern that project related participant training programs do not provide the range of coverage required to meet critical human resource development needs in developing countries. AID is seldom able to respond to host country training requests in fields which are of special U.S. concern such as science and technology transfer, environmental protection, energy conservation, etc. and other priority areas not anticipated in project-specific training. There are also countries in which AID does not have ongoing projects but which do need continued support for human resource development programs. A universal trained human resources shortfall exists in ministries and educational institutions responsible for administration of education sector; it is reasonable to assume that improved management and decision-making would result in better utilization of scarce resources.

1/

A study of AID participant training programs completed in March, 1976 by Arthur Young and Company suggests the need for the Agency to reexamine its training efforts . . . "the study team found indications of the possible increasing need for a type of Agency training activity that would identify and fulfill the manpower or human resources needs of a country or region, but not be directly related to any one mission or bureau training project. Specifically there may be a need for the Agency to improve its ability to:

- Develop a capability to respond to non-project related training requirements or requests which support overall U.S. objectives in Latin America, particularly those related to Congressional "New Directions."
- Develop manpower planning and developing methodologies for use by mission/host country
- Conduct reviews training programs
- Conduct substantive policy reviews on such issues as the tradeoffs among U.S., third country, and in-country training
- Provide technical assistance to nations developing training programs funded on a reimbursable basis
- Provide short term and longer term in-country, third country and U.S. training experiences directed specifically at sector managers in all.

1/ A study of the Agency for International Development Participant Training program and the Office of International Training, Arthur Young and Company Contract No: AID it-c-2077, March, 1976.

Governor Gilligan in his FY 1979 Program Guidance made clear his support of expanded and flexible participant training efforts:

"Training has been one of the most effective aspects of the U.S. Foreign Assistance Program over the years. I strongly favor its expansion both in the U.S. and in third countries. Participant training need not be rigidly tied to specific projects but can, as it is now in some missions, be provided in the form of general programs, so long as the participants are trained and will work in fields demonstrably related to AID's mandated objectives."

In addition to broadening the selection criteria for participant training programs there exists a continuing requirement to carry out research and to explore additional ways and means to provide training. For example, there is a need to know more about how AID can target its training efforts to reach more directly the poorer population groups. The development of special programs in-country or in third countries may be a partial solution. Language requirements for U.S. training now act as a rigid obstacle for many rural training candidates who have not had the advantage of studying in city schools where any English can be learned. An expansion of third country opportunities or subsidized special U.S. programs may help resolve this problem. Additionally, attention must be directed to planning, administration and management problems which could be alleviated by appropriate training experience.

Few countries in Latin America have successfully assessed their human resource requirements nor planned a training program to prepare the resources. This project will seek to address that issue as well as to encourage efforts to institutionalize the training process in host governments.

#### A. Goal

The goal of this project is to increase and enhance Latin American contributions to economic development programs that directly benefit the rural poor and to the improved administration of projects affecting the poor through a human resource development effort.

#### B. Purpose

The project will develop, or support and strengthen, the institutions capable of assessing human resource needs and providing appropriate experience to reduce the need.

#### C. Outputs

This regional multi-year (5 year est.) project will be designed to provide long and short term academic and special training opportunities to Latin American countries interested in participating in the project. The project will also contribute to development of a host country manpower development plan and an outline of their training needs. The project will also research and explore alternatives to traditional participant training efforts such as apprentice-type and seminar programs for government leaders, in-country participant training of short and long term nature, and special study grants for host country leadership. Maximum use will be made

of third country institutions that have displayed their excellence in certain training areas and to strengthen those which need such an input. Attempts will be made to involve organizations, such as Panamerican Association of Educational Credit Institutions (APICE), in the selection, placement and support required in training programs.

The following outputs are predicted at this time:

- (1) 300 person years of training provided in the selected development areas.
- (2) 15 training programs carried out by U.S. expertise in host countries.
- (3) 25 special training programs developed and carried out in the U.S. and third countries. (Apprentice, short-term, etc.)
- (4) Reinforcement of U.S. and third country institutions capable of organizing, placing, and processing trainees.
- (5) Development of an expanded third country training guide based on research and surveys of Latin American education and training institutions.

C. Inputs

- (1) Eight person years of U.S. and third country technical assistance for research and training.
- (2) Ten person years of services of two regional training coordinators to assist Missions and host governments in manpower development planning.
- (3) Institutional grants for developing special training programs and processing participants.
- (4) Tuition fees etc. for participants in training.

D. Major Assumptions

- (1) Host countries will support programs by providing a portion of the costs of training programs.
- (2) Language and cultural obstacles in training the poorer population groups can be overcome.
- (3) Human resource development is a priority concern of Latin American Governments.

### E. Host Country and Other Donor Activities

Many "Other Donors" are involved in the training field. In fact, there are so many that some Latin American countries seldom have enough candidates who can meet selection criteria. However, many of these training programs are offered to fulfill "Donor" objectives rather than more generalized development needs. During the development stage of this project effort will be made to work with Missions, host countries and Latin American training institutions to identify priorities for the project and identify specific training programs that benefit the poorer population groups.

### F. Alternatives to Project

One alternative to this effort could be the provision of increased flexibility in existing project-related training. This could be accomplished by encouraging host countries to request and plan training for needed human resources in areas that relate indirectly to a project and which are only indirectly involved in project implementation. This option would be studied during the project development stage.

### G. Beneficiaries

The ultimate intended beneficiaries of the project are the poorer population groups that will either benefit directly from the training provided or benefit from the improved capabilities of those who administer programs for the poorest populations.

## 2. Financial Requirement and Plan

Below is the best estimate at this time of project costs.

### AID (Grant)

Technical Assistance	\$ 700,000
Training Grants to Inst. (Administrative Fees)	350,000
Training Costs (Fees, etc.)	4,000,000
Research	250,000
Inflation	200,000
<b>Total</b>	<u>5,500,000</u>

### Host Countries

Salaries of Trainees	\$ 850,000
Administrative	350,000
Travel	100,000
Seminars, Short-Term, Training facilities, staff	400,000
	<u>\$1,700,000</u>

3. Development of Project

The project will be developed and brought to the PRP stage as follows:

- 1) Discussions and review of project within LA/DR. July
- 2) Review and discussion with AID/OIT. July-August
- 3) Solicit Mission/Host Country views on project design and implementation. August/Sept./Oct.
- 4) Determine potential involvement implementing agents in Host Countries. Sept./Oct.
- 5) Develop PRP. November/December

Consultants Required:

Four manpower months - One person month each

4. Design Issues

- A. Should national manpower planning and indigenous training planning and management institutions be concern of this project?
- B. Should this project be managed and implemented directly by AID or would a contract arrangement with a U.S. institution such as the Institute for International Education be a more appropriate device?
- C. How restrictive should approved areas of the training be, i.e., limited to a few specific areas, to programs impacting directly on the rural poor, etc.?
- D. Can a project of this type be designed which reaches both the poor majority and also provides needed institutional links with middle income countries?
- E. Can success similar to that achieved by project related training programs be expected?
- F. Host country training initiatives in some cases are managed by indigenous training institutions. Does AID have a role in providing TA and other support to those institutions?
- G. Will better trained managers and administrators contribute to improved utilization of the limited host country funding available for the education, human resources sector?

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

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

PID  
 2. DOCUMENT CODE 1

3. COUNTRY/ENTITY  
 L. A. Regional

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 DIGITS) [ ] [ ] [ ] [ ] [ ] [ ] [ ]

6. BUREAU/OFFICE  
 A. SYMBOL L.A. B. CODE [ ] [ ]

7. PROJECT TITLE (MAXIMUM 40 CHARACTERS)  
 Education Research Networks

8. PROPOSED NEXT DOCUMENT  
 A.  2 = FRP  3 = PP  
 B. DATE MM YY [0] [4] [7] [8]

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

FUNDING SOURCE		AMOUNT
A. AID APPROPRIATED		1660
B. OTHER	1. [ ] 2. [ ]	
C. HOST COUNTRY		TBD
D. OTHER DONOR(S)		TBD
TOTAL		

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION  
 a. INITIAL FY [7] [9] b. FINAL FY [8] [2]

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

A. APPROPRIATION EHR	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) ECIEL				374		454	
(2) Other Research				50		1206	
(3)							
(4)							
TOTAL						1660	

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

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

14. SECONDARY PURPOSE CODE

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)  
 To improve effectiveness of investments in Latin American educational systems.

16. PROJECT PURPOSE (MAXIMUM 480 CHARACTERS)  
 To improve the quantity and quality of information on educational efficiency available to decision makers through basic research and the development of education research networks.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)  
 Approximately 3mm LA/DR/EST staff time plus limited amount of Mission education staff time.

18. ORIGINATING OFFICE CLEARANCE  
 Signature: *Michael B...*  
 Title: Deputy Director, IA/DR  
 Date Signed: MM DD YY [0] [6] [0] [9] [7] [7]

19. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION  
 MM DD YY [ ] [ ] [ ]

55

## Education Research Networks

### 1. Summary of the problem and proposed response

There is a basic need for increased in-depth education research in Latin America to develop information needed to provide an improved basis for the design of development projects which would focus on improvement of the lot of the poor majority. As an example, the problems of illiteracy, sluggish flow of students through the formal system, high failure, repetition and drop-out rates are common to most LDCs in Latin America. The problems have been observable for years, yet they still remain as problems. Attempts have been made to attack these problems through curricular revisions, improved teacher preparation, increased access to higher grade levels and similar actions. In some cases, these efforts do show a gradual improvement in flow but the relationship between effort and effect is not clear. In terms of cost, the internal inefficiency is such that it often takes fourteen years support to produce one sixth year graduate. The rural poor are most likely to be affected by this syndrome and rural schools to show this pattern of inefficiency. From the persistence of the problem, it would appear that the judgement made with respect to the causes and consequently the projects designed to resolve the problems may be based on surface level, limited scope, observations other than the basic causes. The assumption on which this project is based is that there are deeper, underlying causes for these and similar problems that can be discovered and that once discovered, pilot, cost-effective projects to attack these causes can be designed. Similarly, the basic causes for other sets of problems faced by education systems need to be studied and programs designed to resolve them. Research of this type could prove invaluable to Missions, host countries and Regional Bureaus in designing future education programs.

Education research capacity exists in the LDCs and can be found in individuals, in universities, in research agencies, in Ministries of Education and in other Ministries. For the most part, these research agents are scattered, time limited, and under-financed, particularly for long-term, in-depth studies. As a result, much of the research has been descriptive of symptoms rather than focusing on discovery of basic causes. Furthermore, the research is often done in isolation, without knowledge of previous related studies, and in turn without publication and dissemination of methods used and results obtained. It would appear that if the research agents could achieve greater coordination and increased cooperation, a more effective use of the limited funds available for research could result and a greater potential for in-depth, cooperative research could be realized. The development of research networks would seem to be an appropriate solution to this problem.

Thus the overall goal of this project is the improvement of the effectiveness of investments in Latin American educational systems. The purpose of the project is to finance in-depth research on basic educational efficiency and to make results available to decision makers, through sponsoring the development of education research networks.

#### Outputs

While it would be premature to specify exact outputs at this point, it is anticipated that the outputs would fall into four basic areas: (1) The results of

(2)

studies directed at basic causes of educational problems; (2) networks of research agents, national, sub-regional, and perhaps regional; (3) broader dissemination of research methods and results; (4) increased numbers of trained personnel.

Among the types of studies which need to be carried out are the following:

(1) Additional research on the underlying causes of the internal inefficiency that practically all LDCs experience, i.e., high dropout and repetition rates and overage students. Often attributed to the poverty of the students' families. These problems now appear to be more related to insufficient classrooms and other education system problems.

(2) Additional studies on education's effect on income distribution, for LDC rural areas especially, with reference to policies for achieving equity through investment in human resources. While a 1971 study (Adelman Morris) indicates investment in education is the most important factor in achieving equitable growth, Fred Harbison later concluded (1975) that investment in formal education has limited income effect in rural areas unless accompanied by a general rural development effort.

(3) Socio-cultural factors influencing motivation for learning and remaining in school.

(4) Economic factors which influence learning (complementary to 1) above).

(5) Generalized analysis of the many country studies of education's response to the labor markets (i.e., external efficiency).

(6) "Relevance" as perceived by the student and in terms of national or community goals, and the relationship of each to education content.

(7) Comparison of teacher preparation to student achievement. ECIEL\* findings on the subject are not consistent, yet AID invests considerable amounts in teacher training.

(8) Comparison of different types of learning environments, including alternative delivery systems, to determine impact on and possible trade-offs between efficiency and achievement. The on-going Stanford Radio Math project yields some information on such trade-offs, and ECIEL\* findings appear to indicate that equipment and physical facilities have the most influence on performance.

(9) Research on low-cost information systems, especially for monitoring improvements in access and efficiency.

(3)

A regional, Latin American network of educational research institutions now exists in a limited form through ECIEL, with financing from several development agencies and foundations. ECIEL determines major research areas, then channels funds to other Latin American institutions doing research in these areas, brings researchers together for regular seminars and finally forwards their findings to donor agencies and LDC institutions. This model permits strengthening of individual research groups as well as providing a forum for exchange, and a multi-country analytical capability. Separate regional networks may be set up, using this model, for concentrations other than economics of education. Mechanisms will also be developed, during the project preparation, for a more flexible approach to including interim direct funding for individuals and country research institutions for studies related to areas 1) through 9) above, while new networks are being organized.

(4)

Dissemination of results would be fostered through support for publications, national and regional meetings of researchers, sponsored by the networks as they are developed. One major element of such meetings would be the presentation and critiquing of studies underway or proposed to provide for a sharpening of research skills.

Additional trained personnel would be fostered through financing programs of varying types for personnel engaged in research. They would consist of academic training as needed for limited numbers of persons and limited length internship programs as needed.

#### Major Assumptions

(1) The major assumption behind this project is that the basic causes of problems faced by the education system are deeper-lying than have yet been discovered, that they can be discovered, that they are likely to be complex and interrelated, and that cost-effective programs to resolve the problems can be designed.

(2) A second assumption is that existing education research networks can be involved, and that new ones can be formed that will be in accord with the objectives of this grant.

(3) A third assumption is that researchers will be interested in sharing their present and proposed research projects and their methods with other researchers and will profit from critiques provided by their colleagues.

(4) A fourth assumption is that an unsatisfied need for training will be found among the researchers.

These assumptions will be tested during the period required for preparation of the next project document.

#### Major Direct Beneficiaries

As the project is presently designed, the beneficiaries will eventually be not only the researchers and research agencies involved, but also LDC decision-makers and their programs, since the research focus will be on improving the lot of the rural poor, the group most affected by the inefficiencies of the educational system.

#### Development of the Project

We would expect to use the ECIEL organization which now coordinates (under project 598-15-690-657) five pilot studies carried out by Latin American research institutions as well as other joint studies financed by other donor agencies as a model. ECIEL accepts research proposals from other institutions, evaluates them, and can supply financing. Semi-annual seminars of all those involved in ECIEL studies are held and include progress reports of studies under way, critiques of the study reports, and of the methods used, all in an effort to provide mutual improvement.

(5)

of research efforts. The seminars are well conducted and professionally stimulating. We propose additional AID financing for ECIEL for eighteen months in a total amount of \$454,000 beginning in FY 1979. This will permit ECIEL to investigate three areas that are specifically related to AID investment policies and grow out of data resulting from prior ECIEL studies.

### 1. Rural Schools and Alternate Technologies

ECIEL has school censuses and inventories of facilities, and achievement data, as well as information on rural population perceptions of schooling that indicate that they see education as relevant only as it serves to escape the rural areas for urban life. With some additional, but minimal survey work in a few rural areas, in order to assure inclusion of radio-using schools, the data could be analyzed to shed new light on the effectiveness of rural education as now implemented. The study would take eighteen months and cost approximately \$220,000.

### 2. Teacher Training

Comparison of teacher training/educational levels of teachers and student achievement measures has produced contradictory results, and at least implies that the link between trained teachers and achieving students may not be as positive as usually assumed. Additional analysis of available data may be able to determine what factors may be overshadowing the effectiveness of training of teachers, or to establish a clearer relationship, whether positive or negative. Total time would be one year, and cost would be \$117,000.

### 3. Dropouts/Repetition

Analysis to date demonstrate that achievement, dropouts and repetitions are all factors that interact with each other, and cannot simply be related to other casual factors. With additional analysis of available data these complex inter-relationships can be somewhat more clearly defined and can provide policy makers with some indications of how to improve efficiency of school systems. Total time one year and total cost \$117,000.

During preparation of the next project document, and using the ECIEL model as a basis. LA/DR/EST will explore with the Missions the identification of one or more interested agencies and/or individuals with area effective, practical research ability. We will also review with TAB, Mission replies on which require in-depth research study. We are already aware of some of the other institutions which are effective such as the Carlos Chagas Foundation (Brazil), ENCAP (Guatemala). All are already active in education research and have well qualified researchers. From these and from the pool of suggestions obtained above, the Regional Office and the Missions could decide the agencies to be supported and the research focus to be given, and the amount of funding needed by each agency for each project. Monitoring responsibilities would be shared with the missions, and the grantee network headquarters (ECIEL and others).

Certain studies, such as the three ECIEL studies noted above, have already been associated with specific institutions. New research proposals would be submitted either directly to regional network headquarters, or to AID/W through appropriate AID Missions, for referral to the regional networks. These proposals will be evaluated by AID project manager and network headquarters, not only on the basis of their study design but also on how it would interrelate to other studies in the major research areas defined on page 2. This coordination among researchers is an important element of developing multi-country networks to reduce duplication and enrich analysis.

Other support from this project would include supplementary funding for publications where wider dissemination would be productive. Incentives will also be developed to encourage outreach by research agencies to other institutions and to country policy bodies.

It is anticipated that a final project document can be prepared within one year of PID approval, involving three months of LA/DR/EST and other AID/W officers' time, plus limited time from mission education officers.

#### Funding Requirements

##### 1st Year FY 1979

ECIEL Grant: Rural Schools Effectiveness	\$140,000
Teacher Training and Student Achievement	\$117,000
Dropout/Repetition	\$117,000
Start-up of two new network links	<u>50,000</u>
Total FY 1979	\$424,000

##### FY 1980

Continuation of ECIEL	\$80,000
Funding of new agencies' research	350,000
Support for seminars, travel	8,000
Training	20,000
Publication/dissemination	<u>6,000</u>
Total FY 1980	\$464,000

##### FY 1981

Regional network research	420,000
Seminars	20,000
Publications	6,000
Training	25,000
Total FY 1981	<u>\$471,000</u>

61

(7)

FY 1982

Regional network research	\$260,000
Seminars	15,000
Training	20,000
Publications	<u>6,000</u>

Total FY 1982	\$301,000
---------------	-----------

Grand Total	\$1,660,000
-------------	-------------



PID - "New Initiatives in Human Rights"

1. Summary of the Problem to be Addressed and the Proposed Response

The idea of AID taking deliberate actions specifically directed toward increasing respect for human rights, anticipated passage of Sec. 116 of the FAA which requires termination of foreign assistance activities in countries whose governments are consistent violators of internationally recognized human rights, unless the aid directly benefits the needy people of those countries. In a memorandum to Assistant Administrators and Heads of Offices dated August 28, 1975, AID Administrator Parker announced a program of "New Initiatives in Human Rights," calling upon the Agency "to support human rights in its development policies to the greatest extent feasible" and to "contribute to increased respect for human rights in the developing nations."

"In most instances," he stated, "the termination of AID assistance to a country because of human rights considerations could reduce our ability to influence the human rights situation in a positive direction. It could, in effect, penalize the poor majority because of a repressive government. Thus, although termination of assistance on human rights grounds may, in some instances seem desirable, it is not likely to be constructive."

Secretary Vance's speech on April 30, 1977, which set out the basic Administration position on human rights, included the statement that AID's "new initiatives in human rights" program would be expanded, in order to complement present efforts to get the benefits of our aid to those most in need abroad. Pending legislation earmarks \$750,000 for AID activities related to civil and political rights.

Except for two regional projects (American Society for International Law (ASIL) and Stanford Law and Development (SLADE), the Latin America Bureau's response to the call for new initiatives has, so far, focused on country programs. Field missions have funded, or are proposing to fund, country-specific projects directed toward:

-- programs designed to help the rural and urban poor obtain information about and access to rights and protections provided to them by law;

-- sponsoring conferences and research on human rights problems;

-- sectoral programs intended to (a) stimulate greater participation by the poor in decision-making; (b) foster more equitable distribution of land, wealth or other resources; (c) preserve and protect the integrity and dignity of minority ethnic groups and of their fundamental right to pursue their cultures while sharing in the benefits of development.

We will encourage LA missions to continue -- and to accelerate -- their human rights efforts on a country-specific basis. As a complement to these projects, we propose a regional program of diversified activities designed to expand the "new initiatives". Adding a regional component has several advantages over retaining a completely bilateral approach. It encourages greater flexibility and creativity in developing new approaches to addressing human rights concerns through pilot or experimental programs; and permits AID to undertake projects with or to provide support to programs of private or international organizations which are already working to promote human rights throughout the Hemisphere. It allows for the possibility of funding human rights projects in phase-out countries, which cannot appropriately be funded from other sources. Regional projects can bring together the talents of experts in several countries for mutual benefit. In some cases a regional project might have a better chance of success or survival than a bilateral project, in that a repressive government might regard a multinational effort as less suspicious and threatening to that government than the activities of an indigenous institution.

The responses from U.S. Country Teams to the State-AID Joint Message (A-687) and LA Message on New Initiatives in Human Rights recommended that emphasis be placed on regional programs, including regional conferences, research activities, and support for regional initiatives in Latin America. For example, the Country Team in Bolivia suggested that we fund the attendance of government leaders (including military people) at international conferences where the positive values of human rights to economic development are discussed. The Nicaragua reply suggested that we encourage a Central American Human Rights Commission. The Embassy in Brazil cited the SUNYA legislative assistance program (for which PPC worldwide funding runs out this year) and suggested other regional programs that might provide for consultants and observational visits in the fields of judicial and penal reform. Our people in Guyana recommend regional programs for the West Indies. The Ecuador reply said that

regional activities should be encouraged rather than country programs so far as they are concerned. The Country Team in Costa Rica suggested that that country might play a useful role in regional programs.

Examples of the types of programs being considered include:

A. Follow-up to our existing grant to the American Society for International Law (ASIL). For example:

-- A grant to the Organization of American States (OAS) to convene a symposium of experts and public figures to discuss the findings of the ASIL studies, and to identify potential new projects appropriate for AID support;

-- Assistance in establishing a small center in Latin America to serve as a clearinghouse for collection and exchange of information on public interest law and to provide assistance in developing and carrying out new programs.

B. An AID-sponsored regional workshop to relate human rights concerns -- economic and social as well political -- to development.

The principal theme of the workshop would be how to improve project planning through more thorough social analysis, so as to better assure that the activities we support will, in fact, promote and protect human dignity and enhance the participation of target populations in the development decisions which affect them. The workshop would bring together, in addition to AID/W and field staff, resource people from national or international humanitarian organizations, the academic community, indigenous groups which work with the poor, representatives of other donors, etc.

C. Assistance to indigenous non-partisan national civic action volunteer organizations, to expand their activities in civic education and in research into legal discrimination to reach and benefit larger numbers of people, particularly in rural areas. Such organizations include the Unión de Ciudadanas de Colombia (UCC); the Organización de Ciudadanas Costarricenses (OCC); and the Unión Nacional de Mujeres Ecuadoreanas (UNME).

The UCC was highly instrumental in bringing about the Statute for Equal Rights, a law which ended legal discrimination against women in Colombia. The UCC has also established a kind of bilateral agreement with its sister organization in Ecuador, holding occasional joint meetings (which government officials have attended) to exchange information and seek mutual support. The OCC in Costa Rica, in addition to its civic education

programs, has more recently undertaken research into the effects of existing laws on women in the labor force.

These organizations are active, well established institutions which need neither AID technical assistance nor funding to continue to function within the limits of their present programs. The purpose of this project, then, would not be to strengthen these institutions per se, but rather to expand the reach of their programs and perhaps to foster and establish similar organizations in other countries.

D. Research into special problems of ethnic minorities in Latin America, such as the various Indian groups and the black populations in coastal areas of Central America, Colombia, etc. To develop programs -- perhaps through the Inter-American Indian Institute, as one example -- or attempt to influence host governments to design and carry out programs which will help these people gain greater participation in the economic and social life of their countries, without being forced to sacrifice their cultural identities.

## 2. Financial Requirements and Plans

It is proposed that the amount of \$300,000 be set aside for each of the next three fiscal years to provide funding for human rights initiatives in Latin America and the Caribbean. Since the examples of projects being considered are merely illustrative, it is not possible to forecast with precision the costs of specific projects to be undertaken. Ball-park figures for those examples cited would be in the range of \$15 to 25,000 for the OAS symposium; \$15,000 for the law center; \$50 to 60,000 for the regional workshop. Assistance to indigenous groups is expected to be in the form of small grants not exceeding \$20,000 each.

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

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

PID  
 2. DOCUMENT CODE  
 1

3. COUNTRY/ENTITY  
 L.A. Regional

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 DIGITS)

6. BUREAU/OFFICE  
 A. SYMBOL B. CODE

7. PROJECT TITLE (MAXIMUM 40 CHARACTERS)  
 SOLIDARIOS Development Fund

8. PROPOSED NEXT DOCUMENT  
 A.  2 = FRP  3 = CP  
 B. DATE MM YY  
 10  71

10. ESTIMATED COSTS  
 (\$000 OR EQUIVALENT, \$1 = 22,000)

FUNDING SOURCE		455087
A. AID APPROPRIATED		
B. OTHER	1.	
	U.S.	
	2.	
C. HOST COUNTRY		
D. OTHER DONOR(S)		
TOTAL		

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION  
 a. INITIAL FY  7  a  
 b. FINAL FY  7  d

11. PROPOSED BUDGET 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)					22,000		22,000
(2)							
(3)							
(4)							
TOTAL					22,000		22,000

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

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

14. SECONDARY PURPOSE CODE

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)  
 To aid low-income groups to participate in their own economic development by providing them access to capital resources through non-government development institutions.

16. PROJECT PURPOSE (MAXIMUM 400 CHARACTERS)  
 To provide SOLIDARIOS, the national development foundation Councils with seed capital for channeling to grass-roots organizations of low-income groups for a broad range of development projects.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)  
 PRP- \$25,000 for travel of DR and possibly contract technician in development finance.

18. ORIGINATING OFFICE CLEARANCE  
 Title: *Acting Director, LA/DR*  
 Date Sent: MM DD YY  
 0  5  2  4  7  7

19. DATE DOCUMENT RECEIVED BY AID/AF, OR FOR AID/AF DOCUMENTS. DATE OF DISTRIBUTION  
 MM DD YY

SOLIDARIOS DEVELOPMENT FUNDSummary of the Problem and Proposed ResponseIntroduction

The non-government development institutions that are active in most Latin American countries have demonstrated considerable success in reaching and benefiting the lowest income groups in both urban and rural areas. The national development foundations are among the strongest and most experienced in management of development; many of them are "graduates" of prior AID grant activities. Thirteen\* of these local development foundations (NDFs) formed a consortium called SOLIDARIOS (Council of Latin American Development Foundations) in 1972 to exchange ideas and program experiences, as well as to consolidate their efforts to search for funds. Activities developed and implemented by the NDFs have been financed from a variety of sources: the parent US-based Pan American Development Foundation, local private sector groups, international organizations, including A I.D. and the Inter-American Foundation, and U.S. and European Foundations. In the past these sources were normally approached by the NDFs separately and on a project-by-project basis. Some foundations fared better than others, but such an approach limited their ability to program far ahead. As they have matured, the NDFs have come to recognize the advantage that would exist

\* Bolivia, Colombia, Costa Rica, Dom. Republic, Ecuador (2), El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay

with a readily accessible fund for well-planned development activities. They have, therefore, recently proposed through SOLIDARIOS the establishment of a hemispheric private development fund, with an initial capital of \$37 million, \$22 million from external sources. Funds would then be lent by SOLIDARIOS to member development foundations, and to other private development organizations that become affiliated with the Council. There are currently in Latin America and the Caribbean, more than 50 private, non-profit development groups which administer revolving loan funds of some significance. SOLIDARIOS is willing to open its membership to any of those groups which have a lending program similar to the NDFs in emphasis and approach, and which have a creditable track record.

Specific problems to be addressed by the SOLIDARIOS Fund and Rationale for Approach: Since the scope of the development activities of SOLIDARIOS members is broad, covering agriculture, education, health, small industry, housing, and general economic development sectors, in both urban and rural areas, it would be inappropriate to try to pinpoint which of the specific development problems identified in sector assessments would be dealt with by the NDFs. Rather, two cross-sectoral problems that regularly emerge in AID assessment documents are the focus of this project: 1) reaching the poorest of the poor, and 2) enabling them to participate more in their own economic development.

NDF techniques for reaching the lowest-income groups: In the twelve years since the NDFs initiated their first loan fund, they have concentrated exclusively on the poorest majority. After some initial failures, they have developed some successful techniques.

Participation: Many of the Latin American Mission DAPs and assessments identify the difficulty they have found in encouraging participation by local and community groups in the planning and implementation of development programs that they are to benefit from. Constraints found for developing this important element point to inadequate political structures or insufficient human resources to implement more participatory programs. The non-government development institutions provide an alternative and proven channel for reaching low-income groups that have not yet achieved access to government programs. The NDFs have found that in dealing with the poor majority, group lending is more successful than lending to individuals. An essential factor in group lending is social and peer pressure. The group must participate in the economic analysis of the loan application, and all are responsible for its repayment.

Education: An educational process precedes the application for an NDF loan. The NDFs recognize that this requires a great deal of staff time, but their philosophy is that there is a much better possibility for economic and social change when people

are fully aware of their own circumstances, and when they participate in the decisions which affect their lives. The NDFs have assembled one of the larger groups of community development professionals in Latin America, and have continued to provide specialized training for them in community organization and participation skills.

Community Organization: Many NDF-organized local cooperatives and associations have become their town's only community interest lobbying group. The NDFs have a particular motivation for establishing local organizations that soon achieve self-sufficiency since the foundations cannot depend on tax revenues as can governments, and thus cannot afford the burden of financially dependent offspring.

In some cases, AID Missions have sought to include development foundations in loan programs designed and directed by host governments. However, in many instances, complicated government designs for rural development programs which were not sensitive to sociological and behavioural characteristics and needs of the target population, particularly the poorer elements, have not always permitted local participation and initiatives to develop successfully. By working exclusively with the private sector, the SOLIDARIOS Fund could provide an alternative channel to government sponsored development and stimulate a self-help approach to development needs and problem solving.

A study is currently being conducted by the International Development Research Center of Canada to review each NDF's structure and activities. When this report is available (August, 1977), it will provide greater detail concerning the beneficiaries of SOLIDARIOS programs. In the meantime, all of the AID reviews of NDF programs, as well as reviews by the Inter-American Foundation, clearly indicate that the NDFs are indeed reaching the poorest majority.

AID Strategy for PVO Development: AID has for some time been supporting non-government development efforts in the countries of Latin America, and following the Congressional initiative of 1974, has organized to emphasize this PVO approach even more, through specific grants. It is envisioned that these project and institutional support grants would continue to increase, but in many cases, the constraint to organizing further community level organizations is the limited access to capital funds to undertake self-help efforts. The concept of a separate capital fund managed by the development foundations themselves arose from the recognition that promoting self-help was a futile exercise when little funding was available for the actual project that groups were organizing to undertake. Thus, this follow-on effort to build up a source of capital funds is a logical second phase to the DPG/OPG activities that AID has recently been financing. The Latin American Bureau Strategy for PVOs which is currently being developed will support this logical follow-up.

Proposed Project: In order to permit the NDFs and other private sector groups to broaden their activities responding to the two problems mentioned above, the establishment of a private development fund is proposed. SOLIDARIOS would become the legal entity receiving external capital and pooling the counterpart capital from the individual members. The mechanism currently proposed for administration of the Fund would be the Council's General Assembly, for the purposes of policy, and three-to-five member Credit Committee elected by the General Assembly. This follows, in large scale, the administrative mechanism now used in local-level credit unions organized by the NDFs. It permits decision and monitoring responsibilities to remain with the members, while processing and auditing can be turned over to a small staff.

Criteria for eligibility for loans have been developed by SOLIDARIOS and generally cover the following:

- a. application by legal, national institutions that maintain revolving loan funds in order to finance their projects;
- b. projects directed at lowest income groups for improvement in both social and economic conditions of ultimate beneficiaries;
- c. beneficiaries must be responsible for implementation of the projects, with NDFs limiting their role to one of technical assistance and promotion;
- d. a scheme for generating funds to cover administrative expenses must be included as a part of the proposal;

e. the projects and programs must be compatible with overall development plans of the region(s) involved, and respond to specific needs of communities.

Procedures for solicitation and approval of subloans have been designed as has a format for the eventual contracts to be drawn up between SOLIDARIOS and its member organizations. Loan monitoring and reporting procedures are also tentatively described in their proposal.

Sub-lending terms: Subloans from NDFs will be from two to ten years, with longer term loans limited to programs such as housing. Interest charged to the NDF subborrowers will be within a range of realistic interest rates, determined loan by loan given the difference between countries' commercial rates, and the types of projects to be financed. The NDFs have learned through experience the importance of avoiding decapitalization by using too-concessional an interest rate. Their credit policies and operations now are normally keyed to lending at or near commercial bank rates for personal loans. The alternative sources of funds for many small borrowers are not banks but prestamistas or street lenders, whose interest rates may be as high as 200% in annual terms. Certain types of projects (education) could receive lower than commercial rates and others (high risk venture type projects) could require higher rates to ultimate borrowers.

As a minimum, spread of interest rates charged at each level (AID-SOLIDARIOS-NDF-Beneficiary) will cover administrative costs. These are generally low because overhead is kept low and local groups are encouraged to assume much of the monitoring and credit review responsibilities. Beyond this, the capitalization of the SOLIDARIOS fund will become first priority. It is not possible at this time to estimate the extent to which interest rate spread can be used to build capital, but this will be further examined during the later project reviews.

SOLIDARIOS will not require a co-guarantor but will depend on the guaranty of the institution receiving the loan. AID is requested to accept the same terms, i.e., a full-faith guaranty from SOLIDARIOS without co-guaranty of any governments.

Description of expected outputs: As broad as the NDFs activities are, outputs will not be described in physical terms, but rather in terms of strengthened local institutions and associations - providing services to their rural and urban poor members. These groups include market credit unions, agricultural cooperatives, community housing associations, educational credit institutions, small industry and consumer and marketing cooperatives. A complete inventory of current associations affiliated with the development foundations will be included in the next project review document. It is expected that two studies currently underway will detail both institutional capacity and projected

demand. The Canadian International Development Research Center is conducting an extensive survey of each of five representative development foundations (Mexico, Santo Domingo, Paraguay, Ecuador, and El Salvador) of their institutional structure, program beneficiaries, management practices and financial viability. Instituto Interamericano de Ciencias Agropecuarias (IICA) is conducting a study of potential demand for additional capital, financed by a grant from the IDB. Both of these studies will be available in late summer, 1977. SOLIDARIOS requested these studies in order to be able to demonstrate (1) the demand for credit by the rural poor who are outside the reach of current government programs, and (2) the style and ability of the NDFs to address these needs.

Replication: This initial seed capital loan from AID will help in establishing the credibility of SOLIDARIOS for future non-guaranteed borrowing from other International Financing Institutions, thereby serving as a sort of lever for additional funds. The loan is also expected to provide incentive for indigenous development institutions other than the already established NDFs to improve their planning and implementation mechanisms in order to qualify for loans from the Fund. The potential also exists for motivating some creative experimentation, including comparative approaches for resolving specific development problems, and ultimately contributing to our body of knowledge about the so-often-elusive practical aspects of development.

Financial Plan: The individual NDFs have now pooled approximately \$15 million, including \$6 million in paid-in share capital and \$9 million in loans from non-US sources, and their own private sectors. These funds will be considered the counterpart to this loan, and is in addition to the operation budgets that the NDFs support with donations and grants from various sources. The additional operation expenses, principally SOLIDARIOS staff additions, will be covered through the interest rate spreads discussed above. OPG requests to AID and similar grant requests to IAF and other foundations are expected to continue and are included in a non-add sense here.

	<u>NDF/SOLIDARIOS</u> (US \$000s)	<u>A.I.D.</u>	<u>TOTAL</u>
Capital for Fund	\$15,000	\$22,000	\$37,000
Technical Assistance (non-add)	( 2,000)	( 500)	( 2,500)

The technical assistance funding will generally be direct requests from NDFs and other PVOs to AID and other sources, for internal or project related management assistance. SOLIDARIOS will maintain its own credit review and monitoring mechanism, including review of credit worthiness of applicants for new membership. They have initial funding for technical assistance needed to develop these mechanisms from an AID DFG (\$292,000) supplemented by a recent grant of \$60,000. from PACT.

The PACT grant was for a total of \$400,000., providing, in addition to the technical assistance referred to above, \$340,000. for the seed capital for the initiation of the SOLIDARIOS Fund. The disbursements from the AID loan to SOLIDARIOS would not commence before the first quarter of FY '79 (October, 1978), and thus the PACT grant makes it possible for SOLIDARIOS to test out its criteria and procedures prior to drawing down the first tranche of the AID loan.

The main requirement now for broadening grass-roots programs is a significant increase in available capital for use by these marginal groups, who are associated with SOLIDARIOS either through the NDFs or directly. As mentioned in the Introduction, SOLIDARIOS foresees opening up its membership to non-government organizations throughout the hemisphere that meet the technical and financial experience criteria. An initial survey has identified at least twenty national or local institutions with significant credit experience in working with marginal groups that would qualify immediately as new members of SOLIDARIOS (COOPCENTRAL in Colombia, EDUCREDITOS in several countries, DESEC in Bolivia, CADEC of the Caribbean). Most of these do not have access to significant capital funds other than those limited resources available from their private sectors at commercial rates, and even then only when collateral or guarantees are supplied.

As an initial calculation of demand, SOLIDARIOS has prepared the following country-by-country breakdown of new requirements:

Bolivia	US\$	1 million
Colombia	2	"
Costa Rica	1	"
Dominican Rep.	3	"
El Salvador	3	"
Ecuador (Quito)	1	"
Ecuador (Guay.)	1	"
Guatemala	1	"
Honduras	1	"
Mexico	3	"
Nicaragua	2	"
Panama	2	"
Paraguay	1	"
<hr/>		
TOTAL		22 million

This demand analysis is of course tentative, will be backed up in part by the IICA study mentioned above, and will vary as new members are added to SOLIDARIOS. It is meant to illustrate magnitudes that the individual NDFs and groups might request separately and justify on the basis of individual credit flows and experience, if this less efficient country by country approach to AID and other donors were taken. That the NDFs have opted to think of consolidating their loan requests and organizing their own intermediary is a sign of their maturation.

Terms and Disbursement: The loan would be financed from AID Latin America Regional funds, at an interest rate of 3% (2% during the grace period) with twenty years for amortization, and five years grace. Subloans by SOLIDARIOS to its members would normally be from five to seven years, and at a variable interest rate (higher than three percent and lower than re-lending rates that members charge their subborrowers). A three year disbursement period with increasing tranches is recommended. This would permit AID to examine performance against specific criteria as conditions precedent to second and third tranches:

<u>Year One</u>	<u>Year Two</u>	<u>Year Three</u>
\$ 5 million	\$ 7 million	\$ 10 million

AID Monitoring: It is expected that monitoring requirements will be minimal and can be handled by the AID/W Project Office and the Headquarters of SOLIDARIOS (Guatemala).

Development of the Project: SOLIDARIOS has indicated its willingness to move quickly and directly to work with AID to refine the design of the mechanisms for the credit fund. The technical and financial analyses should be made simpler by the availability of the two studies mentioned in Section I. Additional attention must be paid to alternative sources of credit available to the ultimate beneficiaries, through public or other private sector programs, to assure that demand calculations are as close to reality as possible, and duplication of effort does not occur.

Calendar for document submission:

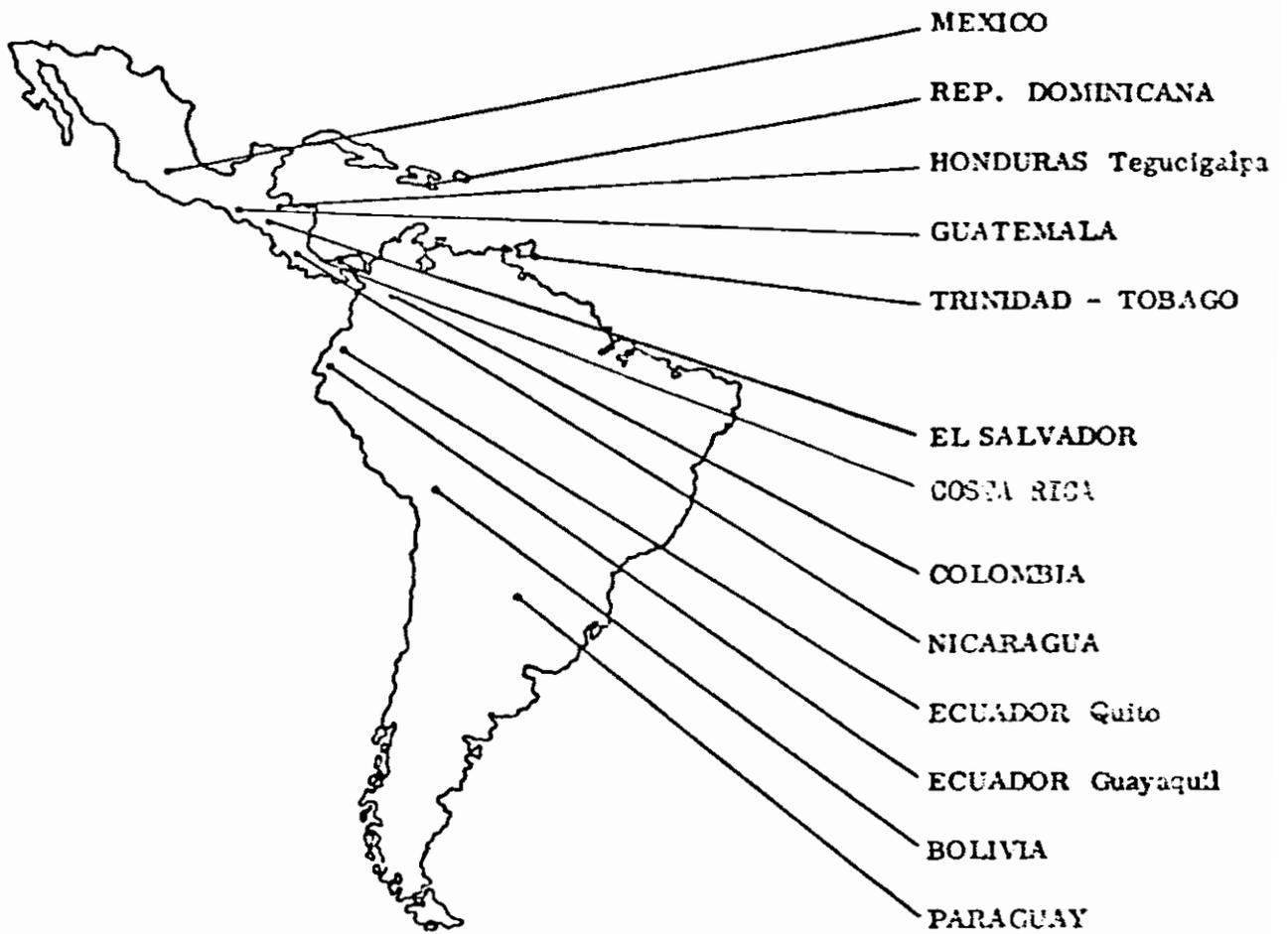
PRP	October, 1977	(\$25,000 AID funds to cover costs of pre-feasibility study)
PP	July, 1978	(\$30,000 AID funds to cover contract consultants to complete feasibility study and analysis)

It is assumed that the bulk of the cost of project preparation will be borne by SOLIDARIOS and the grants that they have already received for evaluation purposes. AID may want to investigate further the target groups expected to be receiving benefits from the Fund and plans for evaluation and monitoring of experimental development approaches.

ISSUES

1. Eventual other donor participation is suggested. Why is that not a likelihood now?
2. What is the experience of past AID loans to PADP and COLAC?
3. Is lack of guaranty from governments a problem?
4. Is repayment to SOLIDARIOS in local currencies a possibility? Additional analysis of arrangements for the currency of lending and repayment should take place.
5. Should AID make a capital grant rather than a loan?
6. What are the implications of including SOLIDARIOS members that are in countries where AID no longer has bilateral programs (Mexico, Colombia, Ecuador) but where rural poor still benefit?

7. SOLIDARIOS lacks a credit history, due to its recent creation, but the NDF's credit histories are available and indicate sound credit management in recent years. The PACT grant will make it possible to initiate the loan fund and to test its criteria, procedures, and capabilities prior to receiving the AID loan. Is this enough?

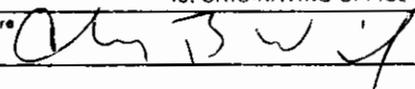


SOLIDARIOS Consejo de Fundaciones Americanas de Desarrollo

SOLIDARIOS -Council of Latin American Development Foundations

6a Avenida, No. 6-47 Oficina No. 4, Zona 9  
Guatemala City, Guatemala

84

AGENCY FOR INTERNATIONAL DEVELOPMENT <b>PROJECT IDENTIFICATION DOCUMENT FACESHEET</b> TO BE COMPLETED BY ORIGINATING OFFICE			1. TRANSACTION CODE ("X" appropriate box) <input checked="" type="checkbox"/> Original <input type="checkbox"/> Change <input type="checkbox"/> Add <input type="checkbox"/> Delete		PID DOCUMENT CODE 1	
2. COUNTRY/ENTITY Latin America -- Regional			3. DOCUMENT REVISION NUMBER			
4. PROJECT NUMBER		5. BUREAU		6. PROPOSED NEXT DOCUMENT		
		a. Symbol, LA	b. Code 3	a. <input checked="" type="checkbox"/> PRP <input type="checkbox"/> PP    b. DATE		
7. PROJECT TITLE - SHORT (stay within brackets)				mo. yr. 1 1 7 7		
[ High Elevation Farming Systems ]		9. ESTIMATED COST (life of project)				
		(\$000 or equivalent, \$1 = )				
8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION				FUNDING SOURCE		
		a. INITIAL FY [7 9]		b. FINAL FY [8 1]		AMOUNT
				a. AID APPROPRIATED		500
				b. OTHER U.S.		
				c. HOST GOVERNMENT		
				d. OTHER DONOR(S)		
				TOTAL		
				500		
10. ESTIMATED COSTS/AID APPROPRIATED FUNDS (\$000)						
			FIRST YEAR FY 79		11. OTHER U.S. (\$000)	
a. Appropria- tion (Alpha Code)	b. Primary Purpose Code	c. Primary Tech. Code	d. Grant	e. Loan	f. Grant	
FN	250S	960	125		500	
TOTAL			125		500	
					TOTAL	
12. SECONDARY TECHNICAL CODES (maximum six codes of three positions each)						
010		020		050		
				060		
				070		
				090		
13. SPECIAL CONCERNS CODE (maximum six codes of four positions each)						
BS		R/AG		EQTY		
				INTR		
				PART		
				XII		
				140S		
14. SECONDARY PURPOSE CODE						
15. PROJECT GOAL (stay within brackets)						
[ To increase incomes and improve the standard of living of small farmers in high elevation in Latin America. ]						
16. PROJECT PURPOSE(S) (stay within brackets)						
[ To improve the capability and performance of agricultural research systems in Latin America to generate and diffuse technological innovations in intensive production systems for small farm agriculture at high elevations. ]						
17. PLANNING RESOURCE REQUIREMENTS (staff/funds)						
For the PRP, one person-month of Cornell University professionals, \$6000 (including travel and per-diem) plus direct hire LA/DR/RD input. Similar inputs anticipated for the PP.						
18. ORIGINATING OFFICE CLEARANCE				19. Date Received in AID/W, or For AID/W Documents, Date of Distribution		
Signature						
						
Title				Date Signed		
Associate Assistant Administrator, LA/DR				mo. day yr.		
				0 7 0 6 7 7		

Project Identification Document

High Elevation Farming Systems

I. Summary of the Problem

The production practices of Latin American small farmers have generally evolved through a process of trial and error over time and reflect the influence of given natural resources, economic resources and conditions, social factors and the degree of managerial skill and innovativeness of the farmers themselves. Where resources are limited, a subsistence level of agriculture is quite common. As a rule, such agriculture is quite labor-intensive and substantial portions of outputs are produced for home consumption. These systems are frequently rather complex, however, and often encompass varied forms of intercropping, multiple cropping and livestock enterprises.

The conventional approach of agricultural research toward increasing farm incomes is to increase crop yields per hectare. Such efforts, which are almost invariably undertaken on a commodity-by-commodity basis and generally imply heavy dependence on purchased inputs, have evidenced considerable success in expanding biological maxima further outward. However, while such technological developments are generally scale neutral in terms of the technical relationships between inputs and outputs, they are in practice frequently biased toward relatively well-endowed, i.e., large, farmers. Small farmer risk aversion and skewed institutional arrangements contribute to this bias. Perhaps even more fundamental, however, is the failure to understand and account for existing small farm systems in the first place.

This is not to say that no research has been undertaken on small farm systems. One of the international research centers, the International Rice Research Institute (IRRI), has in fact been a pioneer in just this kind of work. Other international centers and national agricultural research agencies have likewise made efforts along these lines. Nevertheless, study methods vary widely and lack uniformity. Approaches range from the conventional experimental plot approach on research stations and on-farm demonstrations to farm management surveys. At research centers the methods are highly sophisticated and frequently beyond the capacities of LDC scientists and institutions. On-farm studies both at the centers and at the national level usually do not include the farmer in the formulation of research objectives and programs and when the farmer is in fact treated, his operations are analyzed in only partial fashion. Moreover, most programs of this kind do not include studies of comparative approaches.

One type of ecological region whose farming systems have been particularly slighted by the international centers and national programs are the high elevation regions of Latin America. This is unfortunate for a number of reasons. First, the subpopulations farming in these regions are frequently among the poorest in their respective societies and are among A.I.D.'s principal Latin American target groups. Secondly, high elevation ecosystems are generally more fragile than those in lower elevations. Natural resources, especially those on steep slopes, are subject to rapid deterioration and present serious constraints to the small farmer. And thirdly, the need for addressing the farm as a whole is particularly important here. Not only are agricultural practices

frequently complex but the influence of socio-cultural factors tends to be rather strong as well.

## II. Proposed Response

Perhaps the principal obstacle to responding effectively to the need for research on high elevation farming systems in Latin America is the state of infancy of farming systems research in general. At the moment, there are practically no guidelines for conducting such research nor for utilizing its benefits. Current approaches are mainly those of traditional experimental agriculture or biology. In most programs work is begun on existing experimental stations and is usually based on technological or biological opportunities, intuitively conceived, which appear to be possible. Generally these perceived opportunities revolve around one or more major food crops or commodities, frequently cereals.

Methods of study in most new programs involve standard plot techniques which are effective for evaluating single crop responses to treatment variables under closely controlled conditions. When multi-crop situations are encountered, these methods rapidly become inadequate because of variable harvest or planting dates, intercrop competition (or complementarity) and other related factors.

Design and methodological problems are likewise inherent because of the tendency of much farming systems research either to ignore the farmer completely or to consider him/her as an afterthought. Moreover, when study of existing systems does begin, it is often dominated by a single discipline and is consequently partial.

These limitations of existing farming systems research, as discouraging as they are, nevertheless have some clear implications. If Latin American countries are to conduct meaningful research on high elevation farming systems in order to develop technological innovations which are genuinely relevant to the needs of small farmers, they will need reasonable, practical methods for their use. Hence the necessity for inventorying, evaluating, testing and codifying pertinent methodological approaches. Furthermore, some salient characteristics of such research are self-evident a priori:

- 1) Resultant approaches must be genuinely interdisciplinary,
- 2) They must be grounded as a point of departure (not as a point of arrival!) in thorough knowledge of existing systems.
- 3) They must be tested in on-going, operational farming systems in Latin American countries, i.e., they must deal with real-life substantive problems.

In more concrete terms, the principal components of the project proposed here are:

- 1) To identify and evaluate both methodological approaches for high elevation farming systems research in given social, political and physical environments as well as means for introducing and transferring innovations which are consistent with identified ecological subregions;
- 2) To develop and distribute materials generated in project component #1 to be used by researchers of high elevation farming systems;
- 3) To test and refine alternative data collection and analytical approaches in two high elevation sites, one in Central America and one in South America;

4) To identify farm system innovations which are applicable and transferable to the high elevation small farmer, to pinpoint concrete high elevation farm systems problems which are significant and amenable to research by Latin American institutions, and to effectively transmit final project results to relevant national institutions which have not participated in project implementation.

It is recommended that this project be implemented as a Title XII activity and that Cornell University be selected as the principal U.S. participating institution. Cornell has expressed unsolicited interest in a project specifically along these lines and is widely recognized both for its multidisciplinary expertise (particularly in the physical sciences, economics, rural sociology and anthropology) and its specific competence for work of this kind.

### III. Goal, Purpose, Outputs, Inputs

Goal. The goal of the project is to increase incomes and improve the standard of living of small farmers in high elevations in Latin America.

Purpose. The purpose of the project is to improve the capability and performance of agricultural research systems in Latin America to generate and diffuse technological innovations in intensive production systems for small farm agriculture at high elevations.

Outputs. Two major outputs are anticipated from this project:

1) A set of integrated, multidisciplinary methodological approaches to farming systems research which are geared to small

farmers at high elevations in Latin America, which are adapted to the manpower and financial resources of Latin American institutions and which are packaged for easy delivery to these institutions; and

2) Distribution and education in these methodological approaches for Latin American personnel engaged in high elevation farming systems research.

Inputs. An outline of the inputs which will be required for this project is presented in the financial plan which follows.

#### IV. Financial Plan

	<u>FY 79</u>	<u>FY 80</u>	<u>FY 81</u>
Project Components #1 and #2			
Preparation, field surveys, development of farming systems guideline materials, workshop, revision, publication and distribution of materials	\$125,000	\$25,000	
Project components #3 and #4			
Design of field testing, selection of field testing sites, training of field testing teams, in-country field testing, revision of farming systems materials, training sessions		\$150,000	\$200,000
Total Fiscal Year Requirements	\$125,000	\$175,000	\$200,000
Total Project Requirement	\$500,000		

A major project development consideration will be whether the length of project and the funding levels specified above are sufficient to conduct adequate adaptive research to achieve the project purpose. This issue will be addressed in detail during preparation of the PRP.

#### V. Project Beneficiaries

Basic premises of this project are that a whole farm approach must be adopted if agricultural research is to develop technological innovations which are genuinely relevant to the needs of small farmers at high elevations and that in order to adopt such an approach, efforts must first be made to inventory, evaluate, test and codify pertinent methodological alternatives. As a consequence, the direct beneficiary of the project is foreseen to be Latin American institutions engaged in high elevation farming systems research. The indirect and ultimate beneficiary will be the small farmer who can benefit from such technological innovations.

There is of course no guarantee that innovations will in fact be developed and diffused. Realistically, one must abide by the old adage that "the proof of the pudding is in the eating": if project outputs are seen as useful by research institutions and small farmers, there will be receptivity to employ whatever methodological approaches and technological innovations are developed.

#### VI. Related Activities and Project Alternatives

The Office of Agriculture of the Technical Assistance Bureau has proposed a project entitled "Farming Systems R&D Methodology" which is scheduled for initiation in late FY 77. The project outlined here is similar and clearly complementary to the TAB proposal in a number of respects. Where the work proposed in this document differs from the TAB project is in its focus on a well-defined target group subpopulation and its greater emphasis on the sociological component.

This project is also complementary to a number of other TAB and LA regional and bilateral projects and will look to learning from these experiences. As far as LA/DR/RD is aware at this juncture, however, none of these efforts are directly geared to the evaluation of farming systems methodological approaches for development of technological innovations for small farmers in Latin American highlands.

The rationale for undertaking this endeavor on a regional rather than a bilateral basis is twofold. First, the project contemplates a relatively heavy investment in methodological development. Secondly, resultant methodological approaches -- and ideally technological innovations themselves -- are anticipated to be transferable across specific countries.

#### VII. Project Development Requirements

It is recommended that Cornell University participate directly in the development of this project as a Title XII activity. In addition to LA/DR/RD direct hire inputs, it is estimated that one person-month of Cornell professionals will be required for preparation of the PRP. Similar requirements are also foreseen for development of the PP.

It is recommended that the PRP be presented in November 1977, and the PP in October 1978.