

A.I.D. EVALUATION SUMMARY - PART I

PD-AAZ-680
62315

1. BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS
2. USE LETTER QUALITY TYPE, NOT "DOT MATRIX" TYPE

IDENTIFICATION DATA

A. Reporting A.I.D. Unit: Mission or AID/W Office (ES# FY89-1) USAID/Honduras

B. Was Evaluation Scheduled in Current FY Annual Evaluation Plan? Yes Slipped Ad Hoc Evaluation Plan Submission Date: FY 88 Q 4

C. Evaluation Timing Interim Final Ex Post Other

D. Activity or Activities Evaluated (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report.)

Project No.	Project /Program Title	First PROAG or Equivalent (FY)	Most Recent PACD (Mo/Yr)	Planned LOP Cost (000)	Amount Obligated to Date (000)
522-0249-ESF-1	Agricultural Research Foundation /Integrated Pest Management.	*ESF 522-0283 PIL No. 93 11-26-86	9-30-89	L. 6,580	L. 4,700

*This Evaluation covers the 2nd. phase of the IPM Program which began in September 1986 and is funded by this PIL.

ACTIONS

E. Action Decisions Approved By Mission or AID/W Office Director

Action(s) Required	Name of Officer Responsible for Action	Date Action to be Completed
1. USAID/Honduras will support a 1989 maintenance budget for the IPM Project. The most likely source is a dollar funded Grant.	B.Cooper/ D.Schaer	Completed 3/89
2. USAID/Honduras will encourage ROCAP to fund appropriate IPM Project activities under its Regional Environmental Project presently being developed.	B.Cooper/ D.Schaer	Completed 3/89
3. LUPE, as it begins to implement in 1989, will consider developing close collaboration with and funding for services of the IPM Project. A decision will be made based on input from the LUPE Project Management and Technical Assistance teams.	D.Schaer/ LUPE	9-30-89
4. EAP/IPM will expand its sources of support and will look for alternate non-AID funding sources including overhead.	EAP	12/31/89

(Attach extra sheet if necessary)

APPROVALS

F. Date Of Mission Or AID/W Office Review Of Evaluation: (Month) 8 (Day) 7 (Year) 89

G. Approvals of Evaluation Summary And Action Decisions:

Name (Typed)	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer	Mission or AID/W Office Director
	D. Craig Anderson	Simon E. Malo Director, EAP	Robert Hanser, A/DP Carmen Zambrana, ODP	John A. Sanbrailo Director.
Signature	<i>DC Anderson</i>	<i>Simon E Malo</i>	<i>Robert Hanser</i>	<i>John A. Sanbrailo</i>
Date	<u>7/6/89</u>		<u>7/2/89</u>	

ABSTRACT

H. Evaluation Abstract (Do not exceed the space provided)

AID-sponsored Integrated Pest Management (IPM) activities at Escuela Agrícola Panamericana (EAP) were initiated in June, 1983 (OPG 522-0222). A second phase of the Project was initiated in September 1986 (via Project 522-0249). The IPM project was designed to 1) generate, validate and develop technologies and extension procedures for pest management programs to benefit small scale basic grain and vegetable farmers and 2) develop, validate and guarantee the use of innovative teaching materials for training pest management students at the University level. The second phase of the IPM project was designed as a five year program with funding in the last two years contingent upon an evaluation to be carried out in year three. However, it was decided by AID/Honduras that this evaluation should take place during year two in order to evaluate the feasibility of incorporating the IPM activities under the proposed LUPE Project. The Evaluation Methodology used consisted of interviews held with responsible program leaders of the divisions within the project, EAP administrators, students, and others knowledgeable and familiar with the project. Five days were spent on site with field staff of the project near Siguatepeque, Olancho and El Paraiso. Over 100 farmer cooperators were contacted in the field phase giving the team opportunity to observe and participate in research-extension activities. Major findings and conclusions are as follows:

1. The IPM Project is carrying out its mandate in teaching, research and extension very effectively.
2. Project funding should be maintained at US\$1,000,000 per year for the remaining years of the Project and beyond.
3. The IPM Project contributes to the increased production of maize, beans, cabbage and other crops.
4. The Project maintains effective functional linkages with other agencies and institutions both in and out of Honduras.
5. Each of the specialized centers serves an important function in Honduran Plant Protection. Several of the centers can be expected to become self-supporting.
6. The extension approach which involves farmers in the development process is effective and should be continued.
7. Extension, research and teaching components strengthen one another; both small farmers and students benefit from this project.
8. The IPM program is consistent with and should contribute to LUPE objectives. The IPM program should be incorporated into the LUPE project. The IPM plant protection technologies could serve to facilitate interaction with farmers.
9. Regional sources of revenue, especially ROCAP funding, should be considered because several components of the project are of a regional scope.

COSTS

I. Evaluation Costs

1. Evaluation Team

Name	Affiliation	Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (U.S. \$)	Source of Funds PD&S
Rodney Fink Milton Gertsch	Development Associates Inc.	IOC No. PDC-1406- I-83-7006, Work Order No. 83.	\$22,000	

2. Mission/Office Professional Staff

Person-Days (Estimate) 15

3. Borrower/Grantee Professional

Staff Person-Days (Estimate) 50

A.I.D. EVALUATION SUMMARY - PART II

SUMMARY

J. Summary of Evaluation Findings, Conclusions and Recommendations (Try not to exceed the three (3) pages provided)
 Address the following items:

- Purpose of evaluation and methodology used
- Purpose of activity(ies) evaluated
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned

Mission or Office: USAID/Honduras	Date This Summary Prepared: April, 1989	Title And Date Of Full Evaluation Report: Final Report on the Evaluation of the Integrated Pest Management (IPM) Activity at the Escuela Agrícola Panamericana (EAP), September 1988.
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1. Purpose of the Evaluation and Methodology
 The evaluation was designed to review and analyze the effectiveness of the IPM Project at the EAP. Five constellations of questions were addressed concerning the effectiveness and viability of the EAP/IPM research program, extension activities, teaching program, specialized centers and compatibility of the IPM Project with the proposed LUPE Project.

Interviews were held with program leaders of each division within the project, EAP administrators, AID officials, students, collaborators and outside sources familiar with the Project. Over 100 farmer cooperators were contacted. Collaborating organizations such as the Ministry of Natural Resources (MNR), Project HOPE, Peace Corps, Partners of the Americas and World Neighbors were interviewed. Extended field trips to sites where on-farm research and extension activities take place were carried out. In addition, teaching, training and extension materials were evaluated.

2. Purpose of the Activity Evaluated

The purpose of this project is to: (a) Assist the reform sector and small farmers, which are the principal basic grain producers in Honduras, learn cost effective and safe pest management techniques which will result in increased productivity, and subsequently have a direct effect on improving the quality of life for the participating farmers, (b) Improve the quality of pest management training received by the region's agronomists by strengthening the institutional capacity of the Escuela Agrícola Panamericana (EAP) by upgrading its pest management curriculum.

3. Findings and Conclusions

a) The IPM Project at EAP is an effective, well managed program which meets its teaching, research and extension mandates.

Effective teaching materials have been developed which can serve throughout Central America, such as life tables for corn and other crops which show in one simple diagram the life cycle of the crop and cycles of those pests which affect the crop. Handbooks such as the "Guide for Diagnosis and Control of Diseases in Plants" are used for teaching at Zamorano and throughout the C.A. Region.

Students receive a good balance of theory and practical training. Off station research and extension efforts feed back into the teaching process. Regional organizations, most notably ROCAP, should be encouraged to assume responsibility for support of these activities of a regional nature.

Good research techniques are used and effective collection, processing and dissemination of the information takes place. Research work is integrated with extension programs. Social scientists, especially anthropologists, are key members of the research-extension team. Farmers are involved throughout the technology development process in identifying research needs and in developing research and extension methodologies. Research programs emphasize non-chemical control procedures, minimal use of pesticides and effective use of alternative management techniques. Their recommendations for control of slugs in beans using baits combined

with other inexpensive techniques before the bean season begins has allowed farmers to produce beans where they had given up before due to slugs and thereby increase production significantly. This alone saves losses and adds to production by approximately \$1,000,000/year.

The Project has produced a large variety of attractive materials for extension use. The systematic evaluation and improvement of visual materials has resulted in printed materials which are effective and acceptable to farmers. Emphasis has also been placed on developing improved extension methodologies and special courses for training trainers. To date, over 1,600 trainers have participated in intensive short courses and nearly 17,000 farmers have been exposed to improved pest management procedures.

b) The six centers in place at the EAP are interrelated and serve the entire IPM Project. The value to students, teachers, extension workers and researchers will continue to improve as the centers develop their programs and databases. Several of these centers can be expected to become partially or completely self-sustaining and several will be of special value to LUPE.

c) IPM activities are, in general compatible with the objectives of the LUPE Project, and LUPE should find several IPM services attractive in project implementation phases. The work of the anthropologists and the strong technician-farmer linkages of the IPM methodology should be of particular interest to LUPE, as well as the general support and training services offered by EAP specialized centers.

4. Principal Recommendations

The IPM Project at Zamorano is an effective program in teaching, research, extension and train-the-trainer phases of Integrated Pest Management. The Evaluation Team recommends that the project should be maintained and funded for the proposed remaining life of the 5-year project and beyond. The technologies developed by this project should be validated and disseminated throughout Honduras. The final report listed 15 recommendations (see attachment B). This list has been reduced to four actions on the cover sheet in which related recommendations have been integrated. Some recommendations have not been accepted by the Mission (refer to Mission comments on Section L, and attachment B). The specific principal recommendations of the Evaluation follow:

- a) The AID commitment should be continued throughout the 5-year period with funding level of at least US\$1 million per year for the remaining years of the Project and beyond.
- b) The specialized centers are effective and should be retained and developed.
- c) The technology development and transfer methodology used by the IPM Project should be expanded to include other areas of expertise such as agronomy and rural development.
- d) The work of IPM is directly related to the proposed Project LUPE. If Project IPM becomes a part of LUPE funding should be at least US\$1 million per year. Funding should support research, extension and teaching as well as research on extension methodologies. Funding for both on and off-station research and extension work should be included. Support for the centers as well as anthropology and communication activities should also be continued.
- e) If fund reduction is necessary support to the centers should be reduced. Reduced funding will be possible within two years as certain of the centers become self-supporting. Regional agencies such as ROCAP should be encouraged to support regional efforts in biological control and university level teaching.
- f) The IPM Project should be part of LUPE. Current funding relationship with FHIA should be discontinued and the EAP's IPM Project should be funded directly by USAID/Honduras.
- g) If full funding is not possible, reduction of support should occur (in this order) for certain of the six centers, deletion of one work site, reduction of the cabbage program, and phase down of central support.

5. Lessons Learned

- a) Plant protection provides easy access to farmers because of solutions which are usually dramatic and positive.
- b) Continuing research in IPM is necessary in order to anticipate and correct early on the problems associated with technology innovation.
- c) EAP's IPM Project has developed an outstanding program in all phases of IPM. Adoption of methodologies developed will have a significant impact on food availability and gross domestic product in Honduras.

ATTACHMENTS

K. Attachments (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier; attach studies, surveys, etc., from "on-going" evaluation, if relevant to the evaluation report.)

- A. Basic Project Identification Data.
- B. Recommendations of the evaluation team.

Note: The final report of this evaluation was forwarded to AID/W on March 3, 1989.

COMMENTS

L. Comments By Mission, AID/W Office and Borrower/Grantee On Full Report

It is the Mission's consensus that the evaluation team did an outstanding, thorough objective job. They provided a clear and concise document which serves as the basis for decisions regarding the IPM Project. The team complied fully with the scope of work. The EAP is in general agreement with the team's conclusions and recommendations. EAP sees advantages and disadvantages to working through either FHIA or LUPE and it's interested in continuing dialogue with AID regarding what the best arrangement might be. However, the EAP prefers direct funding for the IPM Project.

The Zamorano IPM Project is probably the best, most successful, Integrated Pest Management Program in Central America. It provides practical cost effective solutions to pest and pesticide problems.

The Mission has supported this program since 1983 with a total of Lps.7,782,130 through January 1989 and given the continued support to the EAP and the extended period of funding to the IPM Project itself, the Mission feels that EAP and the IPM Project should now begin to obtain its own funding. The IPM Project should also start generating part of its own resources by charging for services. For the above reasons the Mission cannot agree fully with many of the Evaluations recommendations to continue funding at a high level for the full 5-year period. It is willing to encourage ROCAP support for IPM and provide funding for the IPM Project in 1989 with a dollar grant. One of the objectives of the evaluation was to see if LUPE and IPM were compatible and recommend collaboration where feasible. It is clear from the evaluation that LUPE will require and benefit from IPM services. However, the LUPE team should be responsible for the decision to contract with IPM for its services.

ATTACHMENT A

BASIC PROJECT IDENTIFICATION DATA

1. Country: Honduras
2. Project Title: Integrated Pest Management (IPM)
3. Project Number: 522-0249-IPM:
4. Project Dates: September 1986 - September 1989
 - a. First Project Agreement: PIL 93 11-26-1986 522-0283
 - b. Final Obligation Date: FY89
 - c. Most recent Project Assistance Completion Date (PACD): 9-30-89
5. Project Funding: (amounts obligated to date)
 - a. A.I.D. Bilateral Funding US\$
 - b. Other Major Donors US\$
 - c. Host Country Counterpart Funds US\$ 2,349,900
 - Total US\$ 2,349,900
6. Mode of Implementation: Direct Contractor, EAP
7. Project Designers: EAP (Keith Andrews/Carl Barfield).
8. Responsible Mission Officials:
 - a. Mission Director(s): Anthony Cauterucci John Sanbrailo
 - b. Project Officer(s): Richard Owens Blair Cooper
9. Previous Evaluation(s): None

ATTACHMENT B

RECOMMENDATIONS RESULTING FROM THE EVALUATION

The IPM Project at Zamorano is an effective program in teaching, research, extension and train-the-trainer phases of integrated pest management. The coordinated project should be maintained and funded for the remaining life of contract and beyond. The technologies of the project should be developed and expanded throughout Honduras. Specific recommendations follow:

(1) Recommend USAID/Honduras continue support of the EAP/MIP US\$1,000,000 per year. Funding through project LUPE is a viable alternative.

Mission does not fully agree with recommendation (see Mission comments, Section L.)

(2) If the EAP/IPM is funded through USAID/LUPE, the mechanism should be a memorandum of agreement between USAID/LUPE and EAP outlining obligations of both parties. Funding should support the following:

To be determined by LUPE Action No. 3 on face sheet.

- a) Research both on and off-station;
- b) Extension development and validation activity;
- c) Teaching development and teaching research;
- d) Extension materials and methodology;
- e) Vehicles, teaching and research equipment, supplies and other needed materials;
- f) The six specialized centers; and
- g) Teaching development and teaching research.

(3) The AID commitment to EAP should be continued throughout the 5-year period and beyond.

Mission does not fully agree with recommendation (see Mission comments, Section L.)

(4) There should be close functional linkages between LUPE and EAP/IPM in order to facilitate:

To be determined by LUPE Action No. 3 on face sheet.

a) Pest management practices evolved by the IPM Project which are usable within the LUPE production and conservation enhancement effort;

b) LUPE's utilization of the extension/research methodology developed by the IPM Project; and

c) The possible use by LUPE of EAP capability on a negotiable fee basis for specialized activities such as soil testing, tissue testing, feed analysis, seed processing, anthropological and other surveys.

(5) AID/LUPE should fund the six specialized centers fully for two years followed by reduced funding as the Diagnostic Center and Pesticide Use and Efficacy Center generate replenishment revenue.

Mission does not fully agree with recommendation (see Mission comments, Section L.)

(6) Life tables research should be sustained, expanded and improved as other research extension avenues evolve.

Ongoing depends on Action No. 4 on face sheet

(7) If fund reduction is necessary, support to centers should be reduced. The plant protection base of the IPM Project should take the lead in information transfer and be the conduit for initial farmer contract and confidence building to be followed by other technologies appropriate to LUPE.

Apt to EAP, depends on Action No. 4 on face sheet.

(8) EAP/IPM should become the Center for plant protection and teaching improvement in Central America. USAID/Honduras should support and encourage ROCAP support to establish EAP/IPM as a center of teaching improvement for development, training and regional distribution of IPM instructional materials.

Action No. 2 on face sheet

(9) Regional agencies (ROCAP) should be contacted for support of a regional effort in biological control through the Biological Control Center.

Action No. 2 on face sheet

(10) EAP should be established as a single site not only for diagnostic services related to plant protection but also for soil testing, tissue testing, water testing and other services on a fee basis.

Not feasible under present circumstances.

(11) Anthropology work with EAP/IPM and the Rural Development Department of EAP should be considered for services (by memorandum of agreement) to support LUPE.

Action No. 3 on face sheet

(12) Other funding considerations for IPM/EAP (by USAID/Honduras or LUPE) are programs of training consulting agriculturalists, employment of 5 agronomos who would concurrently complete the EAP fourth year program, and thesis research of Central American students studying related work in the U.S.

Action No. 3
on face
sheet

(13) USAID/LUPE should contract with EAP as a resource institution capable of evolving crop production/farm production programs, including soil conservation, preparation, management, water management, post harvest problems and other areas of expertise.

To be
determined
by LUPE.
Action No.3
on face
sheet

(14) The IPM Project should be a part of LUPE. If not, the current funding relationship with FHIA should be discontinued and EAP/IPM should be funded directly by USAID/Honduras.

See Mission
Comments
Section L.

(15) In the event full funding is impractical, alternatives for reduction (in priority order) are the six centers, near deletion of the one resident site and the cabbage program, and phase down of central support because of less off-station work.

Apt to EAP,
depends on
Action No.4
on face
sheet