

UNCLASSIFIED  
CLASSIFICATION

PD-AAP-217

ISN 34879

PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

1. PROJECT TITLE  INDIAN SETTLEMENT  (OPG No. 3/78)	2. PROJECT NUMBER 526-0120	3. MISSION/AID/W OFFICE USAID/Paraguay 000143
	4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 526-83-02	
<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION		

5. KEY PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING		7. PERIOD COVERED BY EVALUATION	
A. First PRO-AG or Equivalent FY <u>78</u>	B. Final Obligation Expected FY <u>80</u>	C. Final Input Delivery FY <u>82</u>	A. Total	\$ <u>659,309</u>	From (month/yr.)	<u>March, 1979</u>
			B. U.S.	\$ <u>459,545</u>	To (month/yr.)	<u>September 1982</u>
					Date of Evaluation Review	<u>February 1983</u>

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
<p>FINAL EVALUATION</p> <p>No further action is required in conjunction with this evaluation-</p>		

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT		
<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify) _____	A. <input type="checkbox"/> Continue Project Without Change		
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	<input type="checkbox"/> Other (Specify) _____	B. <input type="checkbox"/> Change Project Design and/or		
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify) _____	<input type="checkbox"/> Change Implementation Plan		
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P		C. <input type="checkbox"/> Discontinue Project		

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)		12. Mission/AID/W Office Director Approval	
Project Manager: Boris Michiluk (1978-1982)		Signature _____	
Program Officer: George W. Oglesby (1979-1982)		Typed Name	
Project Manager: Heriberto Coronel (1982-1983)		Abe M. Peña	
Evaluation Coordinator: Jacob B. Reimer, Director, ASCIM		Date	
		MAR. 29, 1983	

### 13. SUMMARY

The general goal of this project is to improve the standard of living of the Indian families of the Central Chaco. Two-thirds of Paraguay lies west of the Paraguayan River--70,000 square miles of scrub intermingled with grassy plains. While for centuries this has been home for a dozen Indian tribes, even today it claims only 2 % of the country's population. Mennonite groups moved into the Central Chaco from 1926 to 1947, setting in an area extending 50 kilometers on both sides of the Trans-Chaco Highway between Km. 350 and Km. 450 from Asunción.

### 14. EVALUATION METHODOLOGY

The staff of ASCIM (Asociación de Servicios de Cooperación Indígena) includes professionals of high technical competence in agriculture, cooperatives, public health, education, social work and social organization. USAID had found that ASCIM's periodic reports were honest, objective, and analytical, frequently recommending best solutions for problems. USAID's confidence in their ability to make a fair, constructive evaluation was borne out, and ASCIM's evaluation is incorporated completely in this report. ASCIM's recommendations, reflecting lessons learned, should be studied by future planners of projects carried out under similar conditions.

### 15. EXTERNAL FACTORS

As well documented in the ASCIM evaluation, several assumptions proved to be invalid. A lesson learned might be that some assumptions should be tested carefully for validity before committing time, people and money to a sub-project. Most of the invalid assumptions could have been investigated had it been apparent that the success of the sub-project depended on them. However, the difficulty in dealing with an organization located in a remote area should not be minimized, and USAID was flexible in working around the sub-projects that failed without adversely affecting the project goal.

### 16. INPUTS

Inputs were committed on schedule and have been accurately accounted for. Slight adjustments were made during implementation, with agreement of both parties. Inputs were properly and effectively utilized.

### 17. OUTPUTS

See ASCIM report.

### 18. PURPOSE

See ASCIM report.

19. GOAL

The general goal of this project is to improve the standard of living of the Indian families of the Central Chaco.

20. BENEFICIARIES

Forty indian families (about half Lengua, half Chulupi, two tribes of different languages, cultures, and traditions) with at least four children each.

21. UNPLANNED EFFECTS

None evident at time of evaluation.

22. LESSONS LEARNED

See ASCIM report.

23. ASCIM REPORT

USAID believes that the sincerity and professional competence shows through clearly in the evaluation report drafted by ASCIM. In order to maintain the fidelity of tone and meaning, the Mission has not edited the ASCIM report but incorporates it in this evaluation as it was written in English by the Mennonites.

# ASOCIACION DE SERVICIOS DE COOPERACION INDIGENA - MENNONITA

## A. S. C. I. M.

Personería Jurídica  
Decreto No. 37.174

« Sirviendo a las comunidades Indígenas del Chaco Central »

Correo: Filadelfia  
Chaco - PARAGUAY

Lengua - Chulupí - Toba - Sanapaná - Tapieté - Guaraní Occidental - Lengua - Chulupí - Toba - Sanapaná

### SUMMARY

This evaluation shows that we made progress with the USAID OPG 3/78 No. 526-0120 Project. But from the very beginning it was clear, that the project was too complicated for the technical staff of ASCIM, and that in some aspects it was based on nonfeasible suppositions.

The \$ 549.545.- the total amount invested by USAID in these projects has been well applied, that's what the evaluation shows; and it has brought us nearer to the goal of helping the Indians to reach a higher level and to become integrated citizens of the country. This fact has also been confirmed to us by the Indian leaders.

Example: A-3, B-1 and B-2

A-3. This sub-project was started with a false supposition, i.e. that Indians had working horses, which could draw "Toolbar" besides a plough.

For B-1 we expected a food-technician. But she arrived with a delay of 10 months and left ASCIM before having completed one year of work. There were no other professionals available, and so B-1 was carried through only partially according to its original plan.

B-2. Here the sub-project was planned supposing that CEPANSO - Buenos Aires and the competent national institution would cooperate. This cooperation was not offered and so the sub-project failed.

### Conclusion:

a) For future projects like the above, which require the cooperation of professionals and institutions, this cooperation should be secured beforehand, or it should at least be within the reach of the project.

In general, however, these deficiencies with regard to the individual projects did not delay the impact of the USAID-project on the Indian settlement. The overall impact is positive and reached most of the aspired goals, and in some cases even more than that. Some of the sub-projects have developed beyond the established score and their positive influence on the life of the Indian settlements continues.



agricultura - ganadería - cooperativismo - créditos - artesanía - desarrollo comunitario - entrenamiento profesional - educación primaria - educación de adultos - atención médica - salud pública

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Examples: A-1, A-2 and A-4 sub-projects, to mention only a few of them. It is obvious that these sub-projects surpassed by far the established scope. Within this top organization the 8 cooperative will probably be legalized and the integration of the Indians in the national agricultural will thus take place earlier than originally expected. C-1 also has a very positive and extensive impact on the social development of the Indians. This will show even more in the future.

Suggestion:

In the future ASCIM should plan the projects, which are financed from abroad in such a way, that the available personnel is in a condition to carry through these projects. The projects should be simple and clear so that the employees as well as the Indians can assess it and understand the established goals, in order to make them their own.

Filadelfia, February 1983

*J. Reimer*  
.....  
Jacob B. Reimer  
Director, ASCIM



agricultura - ganadería - cooperativismo - créditos - artesanía - desarrollo comunitario - entrenamiento profesional - educación primaria - educación de adultos - Atención médica-salud pública

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FINAL SUMMARY REPORT TO USAID MISSION TO PARAGUAY

OPG Nº 3/78

Subject: Project Nº 5260120  
Indian Settlement

A. AGRICULTURE

A-1 Settlement of New villages

The goal was to alliviate in part some crowded conditions on existing Agricultural Communities caused by a high percentage of landless families living with landowning relatives.

It was set forth, that 40 families would be settled on their own land, providing them with the basic agricultural equipment and an adequate infrastructure needed for a start.

Achievment

A total of 40 families were actually settled under this project. Most of them were young married couples living with the wives parents. In total 3 new villages were founded. In each case a local indigenous extension agent was trained and employed to supervise the settlement activities. He also served as go-between person for the ASCIM and the local communities.

One well and two ponds were constructed to service the need for potable water.

Each family received a plow, horse, harness, planter and access to a horse-drawn wagen.

They were also encouraged to build some kind of improved housing facilities. About 50% responded in constructing adobe houses with tile or tin roof. Most of the families make use of some improved form of the latrine.

about fifty hectares of land was cleared and a cattle raising project started in each village, although with very little success.

The biggest problem was the fact that most families were very young and found it difficult to breack their parental ties, leaving their plots for extended periods of time.

Farm-to-market roads were constructed 20 km as the project intended, as were about 70 km of fences to enclose farmland, horse and cattle pasture and roadsides.

## A-2 Extension Training Program

It was the objective to train native farmers as well as indigenous extension agents in such areas as plant propagation, plant protection, livestock production, and study the incidence of infectious anemia in horses. Furthermore, training in tractor maintenance and repair was to be provided to the Indian tractor owners and drivers. It was set forth, that a total of 20 indigenous people were to be trained in crop and livestock production skills.

Demonstration plots were to serve to show proper agricultural practices to the general Indian populace. Field days and special short courses were to be conducted at the village level to aid, stimulate and bring forth innovations.

### Achievement

The projected 20 people were trained. Although interest among Indian farmers to have their own extension agents is running high, some are unwilling or unable to pay their agents a salary.

The ASCIM budget did not provide salaries for them beyond project duration. As a result most of them work only periodically or quit altogether. For six of these people the ASCIM was able to arrange financing for their salaries. These six people are still working very actively and with success at their settlement and at the plant nursery in Yalve Sanga.

The demonstration plots were run for two years, the first year on a limited scale at Yalve Sanga. The purpose here was to demonstrate the effect of an herbicide called trifluralina in the control of southern sandbur (*Cenchrus echinatus* L.). Initial results were very favorable and acceptance of this new method of weed control by the Indian farmers was high. Later years however bore out, that the cost and high degree of technical skill required were simply out of step with the pace of the Indian farmers' development process. As a result more emphasis is now placed on manual weeding and horse-drawn equipment.

The second year the demonstration plots were established in all agricultural settlements to demonstrate correct agriculture practices in cotton production such as: seeding rate and plant spacing, howing, cultivating, insect control, harvesting and storage methods.

The results of these plots was favorable. It was demonstrated that a higher yield could be achieved with no additional input except timely and appropriate cultural practices which were all manual labor. Because these demonstrations ran for only one year no measurable impact could be observed among the Indian farmers.

Field days and short courses were held including two at the experimental farm to observe the heavy soil experiment. (see A-5)

The animal health technicians were trained in cooperation with the Servicio Agropecuario of Loma Plata. Most of these people quit their work after one or two years. After treating many sick animals and not receiving any remuneration from their clients they simply could no longer maintain an adequate supply of medications which made their work impossible. Two of these people are still actively engaged in animal health work.

Although a serious effort was made to systematically investigate the level of incidence of I.A. in horses no concluding result can be presented. The Indian technician trained for this purpose quit before the study was completed. Therefore the earlier reported guesstimate of 30% still stands.

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27 tractor drivers were trained in a special course held in conjunction with the Servicio Nacional de Promacion Profesional. Drivers were trained in machine maintenance and implement adjustment. Also driving skills and field preparation methods were taught. In addition the Taller at Yalve Sanga provided and continues to provide training in mechanics and machine maintenance. Also a field service could be provided to all settlements. This service continues to be offered through the Taller at Yalve Sanga, where at present 9 young Indian are trained as mechanics.

#### Situation at the end of the Project

The foundation and/or consolidation of 8 pre-cooperatives was achieved to a large extent. As expected, these pre-cooperatives render their services in the marketing of the products, and cooperative stores. Till now none of the cooperatives has been legally chartered, but a draft of the bylaws is already under consideration.

The elected cooperative leaders of the 8 pre-cooperatives have been trained and installed in their work as planned. Unfortunately trained personnel often leaves, so that their training is actually in vain and has to be repeated.

#### Outputs:

There are 8 pre-cooperatives, and their administration has been organized according to the Paraguayan cooperative law, i.e. each pre-cooperative has 1 board of directors, 1 supervisory board and assisting committees. 27 persons are systematically trained in their specialties (in courses and special instructions in the Ciclo Básico). B( Ciclo Básico - Basic Cycle of the High School)

#### Inputs:

The funds are spent according to budget, i.e. 1 technician in bookkeeping and his trips are being paid. The additional costs of the instructions courses were paid by the ASCIM and the FECOPROD members, who participated in the implementation of these courses.

#### Implementation

The implementation of A-2.4 and A-2.5 was carried through under the supervision of the cooperative consultation office of ASCIM. A bookkeeping technician has been employed. None of the cooperatives has been legally chartered as yet, but a draft of the bylaws has been prepared and revised by the Indian leaders and members.

The delay in the legalization is due to the following reasons: (1) a certain resistance of the Indian against new things. (2) Lack of experience and understanding for the Western (capitalistic) economic structure. (3) A modification of the object: To organize one common, integrated according to its desire, instead of recording each pre-cooperative seperatly, takes more time and study.

The DGC (Dirección General de Cooperativismo) has promised to cooperate and seems to be tolerant with regard to Indian peculiarities.

#### A-3 Mechanization

The objective was to develop a multipurpose horse-drawn toolbar that was to aid in increasing production at reasonable cost without complicated mechanization problems of fuel powered machines.

### Project achievement

A prototype was developed and tested at the settlements in Yalve Sanga. It was also loaned to several farmers which showed great interest in utilising it on their farms. Two main problems were encountered.

First the toolbar was too heavy for the small horses that the Indian farmers possess. A team of two horses could not pull the machine for more than a couple of hours at a time. Secondly the price exceeded conventional horse-drawn equipment that was already in use. As a result further development of the toolbar was cancelled. An analysis and comparison between toolbar, conventional horse-drawn equipment and fuel-powered equipment has been presented earlier in writing. For the money left in this project a tractor and equipment for the nursery was purchased, according to the proposal made by ASCIM and accepted by USAID.

### Situation at the end of the Project

The tractors with their implements are in action. The groups, who bought a tractor for themselves, have organized. The administration of their machines is in their hands and payments have been made, with some exceptions, and these funds now form the revolving funds, for which new tractors have been bought for additional groups in the meantime.

### Outputs:

There is a small difference between the number of purchased machines and implements and those originally planned. According to the demand and the funds available the following machines were purchased:

	Planned:	Purchased:
Tractors	5	6
Ploughs	5	6
Disc harrows	5	6
Sowing machines	5	4
Trailers	5	5
Cultivators	5	2

About 150 small farmers, united in 6 groups have become beneficiaries of this project. Additional six groups have made their down payments and also bought tractors and machinery partially financed by the repayment fund and partially by credits provided by MEDA-U.S. The revolving fund has been introduced by CCC and is being fed by the repayment funds, which the 6 groups are paying for their machinery. These farmers cultivate about 75 hactar additional of cash crops.

### Inputs:

The funds are being invested in this project according to plan. The down payments have been made by the groups and were employed for the purchase of the machines in a relation of 20% to the USAID funds.

### Implementation

The CCC accepted the implementation of the project. Eligible groups organized and were trained in administration and bookkeeping. Two of the six groups have problems in their administration and repayment. A measure to solve the repayment problems was the extension of the deadline from 5 to 7 years for repayment and the down payment change from 20 to 70%

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It is possible to purchase the Brazilian tractors "Massey Ferguson", which are well-known here. USAID gave their OK, since purchase and maintenance of this brand is very advantageous at this place.

#### A-4 Farmers Service Center

##### Situation at the end of the Project

The communal center for the agricultural districts has been established and today it serves 8 districts, and not only 5, as originally planned. It was possible to develop the project with the subsidy from another side, (1) so it is now possible to transport the goods to the settlements ( cooperatives) with the 5 ton truck, and (2) the Diesel Service station provides fuel to the agricultural machines of all settlements. Considerations have been made with regard to the joint marketing of the agricultural products.

##### Outputs:

- Three fulltime employed and trained persons serve the communal center, who are also fully responsible for its administration.
- The cooperative stores are supplied with goods periodically.
- The level of sales exceeds all expectations for the first years: Approx. 30 million \$s. in the first 2 years.
- The warehouse with a truck garage, truck and service station have been built or purchased respectively according to the need and are completely finished by now.
- After 3 years of activity the Center disposes of a selffinancing capital of 2.910.000 \$s.

##### Inputs:

All funds provided for this project, have been employed and were enough to develop the project according to plan. Additional subsidies, obtained through ASCIM were used for amplification (truck and garage).

##### Implimentation

The entire project was carried through in cooperation with the Indian leaders, united in the new institution CCC (Comité Central de Cooperatives = Central Cooperative Committee). Although ASCIM acted as the responsible and mediating institution at the beginning, the administration and responsibility was fully transferred to the CCC in the first year.

Considerations with regard to communal harvest sales led to the conclusion that the distances between the settlements and the center would make a common marketing unprofitable, but the down payment prices are established in mutual agreement and orientation is given with regard to the buyers. The marketing is carried through on the basis of the individual pre-cooperatives.

##### Conclusion

Indian extension agents have a place in the work of the ASCIM and are well accepted by their peers. However the ASCIM will have to provide funding for their salaries at least in the foreseeable future. Demonstration plots seem to serve well in stimulating and transmitting correct agricultural practices and the ASCIM should incorporate them as an integral part of their extension program. Advanced mechanization has brought about a small increase in agricultural production and also provided the Indian communities with transportation for their commercial and social endeavors.

Advanced technologies and mechanization can easily become pitfalls for smallscale farmers.

Providing land and support services for a new settlement does not guarantee actual agricultural production although land possession is valued very highly by the Indian.

#### A-5 Crop Production on Heavy Soil

##### Objective of experiment:

1. To increase the area of experimentation on heavy soil.
2. To determine what type of crops are most suitable for production on heavy soil.
3. To determine the economic feasibility of cropping heavy soil.
4. To compare different methods of cultivation on heavy soil.
5. To abide by a systematic crop rotation.

##### Preparation of the area of experimentation:

1. The 22 ha area selected for experimentation was cleared of brush with a bulldozer.
2. The bush rows were burnt and roots gathered from the entire field.
3. The entire field was worked with a deep tillage cultivator and ploughed several times prior to the first seeding.

##### Soil analysis:

Soil samples were taken in 13 locations throughout the field. There were only slight variations between samples.

The average of these samples was:

Acido Ext. meg/100 ml : 1,18 : pH : 6,62 : MO% : 1,6  
Ca meg/100 ml : 2,12 : Mg meg/100 ml : 0,326 : K meg/100 ml : 0,242  
Pppm : 82 : Sand % : 49,4 : Slin % : 29,6 : Clay % : 21.

The soil analysis confirmed the suitability of the experimental site for agricultural crops.

##### Crop rotation:

1. The entire experimental field was seeded to sorghum as a first crop.
2. The field was divided into three blocks, with each block being subdivided into an additional three plots.
3. A systematic crop rotation was implemented.

A total of 12 different crops were grown on the experimental site during the first four years. Results of the crops were:

1. Grain sorghum: has been grown for several years and had an average yield of 2.900 kg/ha. Nine varieties were grown in the last crop year. In some years birds cause considerable damage as the grain neared maturity.
2. Silage sorghum: has been extensively grown during the last two years. Five varieties were grown in the last crop year. An average yield of 76.700 kg/ha was obtained.
3. Cotton has been grown during the last two years. The five varieties grown in the last crop year had an average yield of 1.580 kg/ha. The previous years yields were considerably higher, varying from 2.200-3.000 kg/ha.
4. Several varieties of castor beans have been seeded at various times during the crop year. The yields have varied from 700-1.100 kg/ha depending on such variables as available moisture, frost damage, etc.

5. Sunflowers grow well on the experimental site, but were not planted during the last crop year because birds tend to destroy a major portion of the crop.
6. Wheat was planted in the winter during the last years. Reasonably healthy stands developed, but the risk of frost during the flowering stage remained a threat. The plants also tended to develop weak root systems which resulted in the plants falling over as the crop neared maturity.
7. Clover grows well on the experimental site and seems to be fairly disease and insect resistant. Two cuts yielded a total of 9.750 kg/ha green fodder or 4.250 kg/ha hay during the last year.
8. Alfalfa has been grown during the last two years. An average yield of 9.500 kg/ha green fodder or 4.000 kg/ha hay was harvested. Alfalfa is very susceptible to insect infestation and as a result requires a great deal of attention.
9. Lab-Lab beans have been planted as a green manure crop during the last three years. The plants are very disease and insect resistant, producing a dense mat that crowds out weeds and soon covers the entire area.

Summary:

Of the crops tested, grain and silage sorghum, cotton, castor beans, clover and Lab-Lab beans seem suitable, and would be recommended, for production on heavy soils.

General observation:

1. The soil where the bush was piled and burnt is still nonproductive. In future bush clearing operations different methods should be used to prevent soil non-productivity.
2. The heavy soil requires 30 mm of rainfall to make the seeding operation successful. If less rainfall is received the ground remains very lumpy and the seed generally germinates very poorly.
3. The heavy soil requires more field operations to prepare the seed bed for planting than the sandy soil generally cropped in the area. It also requires more energy (horsepower) to get the same job done. Thus more inputs per hectare are required for crop production on heavy soil than on light soil.
4. The heavy soil also forms a very sticky mud that makes field work impossible for several days after heavy rains. Water stands for several days in shallow pools without being absorbed into the soil, being evaporated instead. To prevent this the soil needs to be worked after every heavy rainfall, to allow moisture to penetrate the soil.
5. The heavy soil tends to compact readily and forms a crust after heavy rains. The crust does not permit tender young shoots to emerge. As a result the stand is often poor if a heavy rain falls shortly after seeding and a crust forms before the shoots are out of the ground. This problem will need to be overcome in order to crop the heavy soil successfully.
6. Returning large volumes of organic matter to the soil, improves the structure of the soil as well as aids in its water retention ability.
7. Yields on the experimental site are generally 30% higher than the same varieties on light soil.

Extension:

Cropping on the experimental site has drawn considerable local and international interest due to the fact that there is limited additional sandy soil that can be brought into production in the area. Expansion of crop production will thus of necessity need to be heavy soil.

Local farmers frequently visit the experimental site. Field days are held on an annual basis. In Excess of 300 natives were in attendance at one of these field

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days. Students from local schools, and students from the University of Asunción frequently visit the site. Information and lectures are given on request. Groups of foreigners, mostly Europeans, frequently visit the site.

Conclusion:

All the original objectives of the experiment have been realized. A great deal of useful information and data has been collected from the experimental site. A great number of questions and problems still need to be answered and solved. As a result the decision has been reached to continue cropping on the experimental site beyond the period of funding by USAID.

B. HEALTH

B-1 Nutrition

Project purpose as stated in the beginning:

The goal of this subproject was to prevent infant malnutrition by working on the following purposes:

1. Establishment of a selfsustaining foodmix production plant serving local needs.
2. An established nutrition education and surveillance program for mothers and young children.
3. A 20% reduction in the prevalence of infant malnutrition.

Project outputs as indicated and data of the programs carried out over 3 years:

	projected	completed		Total	
1. Production and distribution o food-mix (tons)(peanut flour) an experi-ment only - see interim report 9/81	100	77 9	80	81	
2. Indian women reached with some type of nutr. educ.	1.500	450	135	341	926
3. Women participating in nutrition "cursillos"	500	206	33	280	519
4. Training of 40 villagenutrition extensionists	40			60	60
5. Pre-schoolers exposed to foodmix	2.000	400			400
6. Children regular users of foodmix	500				
7. Surveillance of nutritional status in pre-schoolers	1.500	1.500			1.500

Observations in view of the project achievements and frustrations:

1. The goals set in the beginning have been helpful to sort out our possibilities and our limitations in the area of nutrition education and promotion.
  - 1.1. Major efforts have been made in the area of nutrition promotion and education on the village level.
    - a) Indian mothers and fathers take serious interest in learning about nutrition and food preparation.

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- b) A larger group of women have participated in cursillos for nutrition extensionists. Some of these should continue to take further courses, so they will be able to contribute on a local level.
- c) 6 Indian healthpromotors have been trained with major emphasis on public health and nutrition education. All six are working fulltime in their own communities

1.2. Through a rigerous child-clinic-program of all Indian groups the nutritional status of about 80% of all small children is under continues control. We are glad to see a certain improvement in the overall nutritional status of under-five children.

2. During the process we realized that some of the goals/outputs had been too idealistic.

2.1. The projected foodmix plant could not be established for various reasons.

- a) Difficulties with respect to appropriate machinery.
- b) Proper storing conditions for foodmix.
- c) Major difficulties of selling on a marketbase.
- d) Nutrition value, local product and side effects (aflatoxin) of peanut flour.

2.2. The projected program could not be carried out to satisfaction because of needed personnal.

3. That the goals will still continue to be in process over the next years, since knowledge about nutritional values and change of habits will still continue to be taught.

3.1. Not all goals have been acomplished as yet, but will be continued to be worked at. The employer of ASCIM and also the Indianleaders have learned a lot through this project and the Indian will continue to benefit out of it.

## B-2 The control of tuberculosis in dogs

### Objective:

To establish the occurrance of T.B. in dogs and find out what role it plays as a source of infection for humans. To work out a program that would control T.B. in dogs.

Presumable conditions expected at the end of the project.

a) More experience and information about tests used to diagnose T.B. in dogs.

b) More knowledge about the connection of T.B. among humans and among dogs in the Indian Settlement.

Actual Situation

a) Although we do have more information we could not increase our test knowledge because there was a lack of co-operation from the institutions in Asunción and from CEPANZO in Buenos Aires. However, it would seem that our studies indicate that the BCG test is usable for dogs but that the PPD test (tecnic Montoux) is of no value in this case.

b) We have not been able to prove or disprove the connection. The suspicion remains.

c) The reduction of about 50% of the dogs found to be T.B. positive.

d) A continuous control program.

c) This has been done. (Insofar as the tests are reliable)

d) This has been planned for the future. (see comment)

e) The people know more T.B. There have been informative lectures about T.B. in all the areas.

#### Executed

1. This has been done in a deficient manner. (see above)

2. This was done as far as possible. Sometimes there were no test materials.

3. This was done but not 100%.

4. Done.

5. Has not been done because the results are not clear enough.

#### Comment:

Thinking of a possible continuous control program of T.B. in dogs and in view of the results obtained till now one could recommend that in a simple program the number of dogs could be controlled. (e.g. one dog per family) In that way the number of dogs with a possible T.B. infection source would be reduced.

### C. EDUCATION

#### C-1 Education for professionals

1.3.1. Eighteen adults made the "Curso Rápido" (Short instruction course - Fast Course) and so finished the 6th grade. There were more students for this grade, but they did not want to participate. They preferred to stay with their work at the Cooperative, etc. and this was very reasonable, since there were no other persons to replace them. Although the number of persons who reached the 6th grade level was not very high, the working potential has increased in the co-ops, the schools and in other areas.

1.3.2. In the first 2 years 20 students made the "Ciclo Básico" (Basic Cycle) in two half-year courses. The curriculum was equivalent to that of the 1st course. In the 3rd half-year course a new group started, also with 20 students. Some left. The last group continues now in the 2nd half-year course, thus finishing also the 1st course of the "Ciclo Básico". So more qualified persons have been trained, who can take over responsibilities in their communities, since the need is growing continuously.

1.3.3. Finally 35 of 40 adult students remained to finish the 1st course of the "Ciclo Básico". These adults also received instructions on education, health, the co-operative system, secretarial and social work. The curriculum of this

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half-year course was analyzed so also to include this type of studies. The results of the larger part of these efforts were very positive.

1.3.4. 45 village school teachers received teaching instructions or pedagogic instructions in the "Ciclo Básico, short courses and visitations in the schools of their villages, the place of their practical work. In the area of education a progress can be observed, since the Indian teacher is now able to teach higher grades, which was impossible till now.

#### C-2 Production of textbooks:

The following books were printed:

- 2.3.1. 750 reading books for the 1st grade in Lengua and Spanish. In addition to this the 1.000 copies of the 2nd edition of the last project.
- 2.3.2. 717 reading books for the 1st grade in Chulupi and Spanish. In addition to this the 1.000 copies of the 2nd edition of the last project.
- 2.3.3. 280 books "Naturaleza, salud y trabajo" (Nature, Health and Work) of the 1st grade in Chulupi. The teacher's manual and 500 workbooks for the pupil. 276 copies of this book for the 1st grade in Lengua. 500 work books for the pupil. It was not possible to print the planned number of workbooks for lack of funds due to rising prices for materials. But stencils are available for another edition.
- 2.3.4. 750 reading books for the 2nd grade in Lengua and Spanish. In addition to this 1.000 copies of the 2nd edition of the last project.
- 2.3.5. 265 books "Naturaleza, salud y trabajo" (Nature, Health and Work) for the 2nd grade in Chulupi, Teacher's manual and 500 workbooks for the pupil. Besides 276 teacher's manuals in Lengua and 500 for the pupil. The budgeted sum did not cover the number of books agreed upon at the beginning. Finally, with an additional balance a second edition of the reading books is being printed. In addition to this the books, 1.000 copies of each, for preparatory school, 1st, 2nd and 3rd of arithmetic and 2 reading books in Chulupi and Lengua for the preparatory school. The expenses are lower, since the material, the printing plates etc. have been kept for reprinting. The interest of the students and the teachers increased enormously with this adequate material.
- 2.3.6. About 50 schools received additional materials like "Farolito", school supplement, dictionaries, books and maps. The teachers as well as the pupils have profitted enormously from this material. The schools are not in a condition to obtain it by themselves.
- 2.3.7. The pupils of the Fast Course received the necessary books for their studies. Most of them had families and did not have the means to pay for their utensils and books.
- 2.3.8. The pupils of the "Ciclo Básico" also received their materials for study.
- 2.3.9. Some 100 books were distributed between the schools for their small libraries as auxiliary material. Till now they had very little literature to amplify their knowledge.
- 2.3.10. 500 dictionaries in Lengua and Spanish were printed and 3.000 in Chulupi and Spanish. They are the first ones in our field. It is an excellent work.

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2.3.11. An audiovisual equipment helps to illustrate oral instruction to the students.

Summarizing it can be said that books were the most urgent need of the village

C-3 Construction

3 schools have been built in different places. The first one in Galilea of Yalve Sanga, which has a large number of pupils. The cooperation on the side of the parents has been very good. The settlers are Chulupi Indian, who are very much interested in school education. Since it was the first school, it was even possible to obtain some furniture for these funds.

The second school was built in Colonia 9, Campo Alegre. This village is located far away from the center. It develops well. Previously they had a small and dark ranch for school. The new school is big, well illuminated and fully meets the needs and expectations of the settlers. They have no alternative to send their children to another school.

The third building was constructed in Nich'a Tóyish, a new settlement of 10 Leguas. They are the settlers of the labour camp of Cayin ó Clim. The school is in the settlement. It has not been used as yet as a school in 1982. It meets the requirements of a good classroom for pupils as well as a meetingroom for parents. The opening of the school did not fail because of pupils or the parents, but because of the lack of a teacher. They are now looking forward to opening the grades of the primary school next year. The school is the pride of the people of Nich'a Tóyish. An additional balance of USAID helped to obtain banks and school desks as well as a blackboard for the school.

C-4 Fundamental Education for Indian women

4.1. Courses that were carried over a longer period of time have satisfied to a large extent the goals, in that many women were able to improve their knowledge in reading, writing, arithmetic and housekeeping.

The many shorter courses that were carried through at village level, showed a large participation, - thus an active interest in adult education, although the temporary results are not as satisfactory.

Completed:

First year:	Women reached
3 long term courses	89
5 short term courses	133
Second year:	
2 long term courses	53
1 short term course	34
Third year:	
3 long term courses	63
1 short term course	34

4.3. Women participate readily in public meetings, when invited by the male leadership and some are eager in manifesting their opinions regarding community values or needs, although this differs from tribe to tribe. Women participating in public meetings will also depend on community-leadership and organizational skill - training.

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### C-5 Skill Training

- 5.1. Summary: Research and planning have lead to a concrete program for the training of young people in general skills, agricultural experience and home economics to be started 1983 with funds from ICCO, Holland.
- 5.2. End of Project Status: (1) Considerable amount of information on trends of labor needs has been collected. (2) Three different national and one Argentininean schemes for training of rural indigenus manpower have been analyzed. (3) A project proposal for a training program in general skills, agricultural experience, and home economics has been completed and approved for 1983. (4) Some pilote experiences, including experiences of on-the-job training, and a project of cooperation with "Servicio Nacional de Promoción Profesional" have been gathered.
- 5.3. Project Outputs: (1) The most important achievement with regards to the manpower survey was the raised level of nonsconsciousness about needs and alternatives of skill training. (2) The survey data were not summarized in comprehensive report, as originally planned, but shared and discussed with groups, leaders and technicians. (3) 26 tractor drivers were trained in general mechanics and maintenance of agricultural implements.
- 5.4. Project Inputs: Not all resources planned for in this sub-project were needed, so a shift (documented in the progress reports) was made towards sub-project D-2.
- 5.5. Implementation: The project activities included literature research, visitations of training schemes elsewhere and conferences with communities. All three levels of activities have been executed, although not with the thoroughness aimed for, since the person responsible had too many other responsibilities to engage in.

### D. ADMINISTRATION AND PLANNING

The following was reached in the last three years with the help of the USAID project.

#### D-1 Road improvement

- 1.1. Access to all settlements, even in the rainy season.
- 1.2. Gain on time and lesser vehicle depreciation by improved road conditions.
- 1.3. Improved extension program, since agricultural extension agents, health promoters, school supervisor, etc. are able to serve the Indian communities in a more efficient way.

#### Outputs made in the three years:

- 1.3.1. 30 km of improved roads between Campo Alegre and Campo Largo.
- 1.3.2. 4 km of improved roads between Yalve Sanga and Trans Chaco.
- 1.3.3. 25 km of improved roads between Yalve Sanga and Pozo Amarillo.
- 1.3.4. 15 km of improved roads between Pozo Amarillo and La Esperanza.
- 1.3.5. 20 km of new roads to new villages.
- 1.3.6. 20 km of roads between villages in Yalve Sanga.

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1.3.7. 15 km of improved roads between villages in Campo Alegre.

1.3.8. 8 km of improved roads between Yalve Sanga and Molino.

#### D-2 Social Organization

2.1. Summary: An important step forward has been made in inter-village and inter-district organization; little impact could be made on the organization of labour communities (worker-villages).

2.2. End-of-Project Status: (1) Leaders of some thirty communities have participated in training conferences. (2) District leaders (of 8 districts) have gone through a systematic program of training, presently continuing as a regional council. (3) The idea of developing a statute remains undefined; two attempts were made to establish the base lines for it, but on both occasions the formalizing of the charter was postponed to a future date. The experience as such was valuable.

2.3. Project Outputs: (1) A total of 4 leadership training courses were conducted. (2) 30 monthly conferences were held. (3) A pick-up van was bought for the use of the regional council. (4) The Junta Directiva was helped to develop as a forum for voicing Indian concerns and expectations regarding ASCIM policies.

2.4. Project Inputs: All items budgetted under this sub-project were slightly overdrawn, due mainly to inflation between time of planning and executing. Unexpected expenses occurred with regard to the shipping and the maintenance of the vehicle.

2.5. Implementation: The promotion of regional cooperation could be done as planned with regards to training of leaders and exchange of ideas. The passing of the new Indian Law (Nº 904) was subject of study and concern of the last year, being partially responsible for the failure of agreeing on a statute for regional cooperation. - The purchase of a vehicle proved to be of a mixed blessing: on the one hand it improved the self-consciousness and freedom of the group; on the other hand it made expenses increase, mainly due to the project requirement of purchasing a North-American car.

#### D-3 Project administration

3.2.1. We have a more coordinated program.

3.2.2. We have improved supervision of special projects.

3.2.3. We have a more efficient technical team.

3.2.4. We have improved statistical data for evaluation.

February 1983  
J. Badelger

J. Beemer

UNITED STATES GOVERNMENT  
memorandum

DATE: April 11, 1984

REPLY TO  
ATTN OF: LAC/DP/SD, Jack Francis

SUBJECT: Mission Evaluations

TO: MO/PAV,

Our office received the attached evaluations, one of which did not have a PES cover sheet, from the Mission.

Please reproduce and distribute these evaluations as appropriate.

Thank you.

OPTIONAL FORM NO. 10  
(REV. 1-80)  
GSA FPMR (41 CFR) 101-11.6  
5010-114

: PD-AAP-046

FIRST EVALUATION  
OF  
SMALL FARMER COFFEE IMPROVEMENT PROJECT  
(No. 522-0176)

by

Ronald L. Tinnermeier  
Colorado State University

and

Charles D. Oberbeck  
University of Missouri

Prepared for:

USAID/Honduras  
Tegucigalpa, Honduras

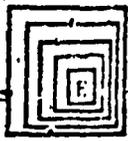
Under Contract No. PDC-1406-I-23-1142-00  
Work Order No. 23

February 15, 1984



EXPERIENCE, INCORPORATED  
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# EXPERIENCE, INCORPORATED

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10 February 1984

Mr. Jack Jordan  
USAID-AGR/Honduras  
APO Miami 34022

Subject: Small Farmer Coffee Improvement Project (522-0176)

Dear Mr. Jordan:

Enclosed are two copies of the final report of the evaluation of the subject project, per the terms of Contract PDC-1406-I-23-1142-00.

We have also sent you two additional copies under separate cover.

We hope you will find these to your satisfaction.

Sincerely,

  
Francine T. Dionne  
Projects Coordinator

P.S. Attached are number tables Ron Tinnermeier asked we send you.

## PREFACE

The evaluation team visited Honduras over a five week period to carry out the first evaluation of the Small Farmer Coffee Improvement Project as specified in the Project Agreement. During the evaluation, the team was greatly assisted by many individuals and institutions and is grateful for such assistance. In particular, we would like to thank and acknowledge the indispensable assistance of the Project Implementation Unit (Unidad Ejecutora) of IHCAFE headed by Roberto Banegas. All members of that unit were very cooperative in providing data, helping with appointments, and accompanying the team on field trips. In addition, the three unit advisors with Servicios Tecnicos del Caribe were of great assistance when called upon.

We especially appreciate the time and assistance of all of the directors, credit and extension agents, and other personnel in the regional offices. The evaluation would have been impossible without their able assistance.

The technical aspects of IHCAFE's recommendations to participating farmers was evaluated by Jorge Hernan Echeverri, PROMECAFE/Costa Rica, and we appreciate his critical assistance in that area.

Finally, we wish to acknowledge the help and support of the Office of Agriculture, and other staff of USAID/Honduras during the evaluation.

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\*Terms of Reference did not have a number 5.2.

## LIST OF ABBREVIATIONS

GOH	Government of Honduras
INA	Instituto Nacional Agrario National Agrarian Institute
IHCAFE	Instituto Hondureno del Cafe Honduran Coffee Institute
BANADESA	Banco Nacional de Desarrollo Agricola National Agricultural Development Bank
BANHCAFE	Banco Hondureno del Cafe Honduran Coffee Bank
AHPROCAFE	Asociacion Hondureno de Productores de Cafe Honduran Coffee Producers Association
FEHCOCAL	Federacion Hondurena de Cooperativas Cafetaleras Honduran Coffee Cooperative Federation
BC	Banco Central Central Bank
ESF	Economic Support Funds Fondos de Apoyo Economico

U.S. \$1.00 = 2.00 Lempiras (Lps.)

## EXECUTIVE SUMMARY

The Project Paper specified that:

"the first Project evaluation will take place at the end of the second crop year, and will test the success of the extension program in meeting the needs of the small producers. The division of labor between technical and credit extension agents will be examined to determine the utility of this approach in providing assistance to small farmers. The quality of the extension agents...what...they may lack...[and] the role of the banks... will be examined. The purpose of conducting this evaluation relatively early in the Project implementation period is to allow for necessary revisions in the Project management."

## 1. Recommendations

The following recommendations are taken from the end of each section in the main body of the report and are presented in that same order.

Conditions Precedent and Covenants

--Interest rates charged to the farmers should be maintained at or near market or permitted rates in the commercial sector for similar kinds of loans.

--A formal evaluation program should be established for the project to identify problems to resolve and areas of success to replicate. The evaluation needs to focus on: effectiveness of extension work, technical and economic feasibility of alternative technological packages, adequacy of administrative and logistical support at all levels, and the need for handling input supplies.

--Baseline data from a few existing and newly entering producers need to be gathered to serve as a basis for future evaluations of Project impact.

--The time required for processing requests for funds by participating banks through the Central Bank, the Ministry of Finance, USAID, and back, must be significantly reduced for effective operation of the project.

Institutional Development

--There is need to continually improve the data flow and information collection system of the Project by IHCAFÉ. Accurate credit flow and other data are not now readily available.

--The Central Bank should immediately credit the accounts of the participating banks upon receipt of requests for reimbursements through the Project, as specified in the Tripartite Agreement. This is not now being done.

--The maintenance of records on each sub-borrower in the Project in the Central Bank should be eliminated. This does not seem to be their appropriate role but rather that of the participating banks. If the Central Bank feels they are required to do this under existing agreements, then those agreements should be modified to eliminate this activity.

--The Central Bank should require only the minimal reimbursement information from the participating banks as suggested by the Tripartite Agreement. This includes name of bank, name of sub-borrower, and amount of disbursement. Other information just adds to the costs at all levels.

--The handling of capital reflows or loan repayments needs to be clarified. It is recommended that the holding of these funds for relending in the Project be at the participating bank level.

--In the absence of any change in the current reimbursement system (which involves considerable delay), the ESF rotating fund should be increased to \$500,000 rather than the current \$250,000 level.

--The IHCAFE counterpart for the foreign communications advisor should be named as soon as possible.

--Stronger IHCAFE support is needed for the communications and publications area associated with the communications advisor. The advisor position should be extended for at least one year from the time adequate support is provided.

--The functions of the soon to depart foreign extension advisor should be continued either through a direct replacement or through the use of short-term advisors. The use of short-term assistance is conditional on stronger support of the communications/publications area which complements some of the extension work.

--The Project should develop an internal capability or contract short-term advisors to carry out technical and economic evaluations of the technical recommendations and help identify alternative packages, and to provide training and materials on financial management for field agents and for participating farmers.

--Experienced extension agents should not be used in implementing area profiles. New extension agents might be utilized as a form of training and to acquaint them with their zones.

--Additional private banks and offices should continue to be encouraged to enter the Project to further provide improved credit access to beneficiaries.

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beneficiaries.

--No formal ties with the Land Titling Project are recommended at this time. IHCAFE offices in areas with land titling should be encouraged to review INA lists of new land title holders to keep informed about their own borrowers.

--New land titles should not be used as security for IHCAFE loans, since it only greatly increases lender and borrower transaction costs with little potential for improving loan repayments.

### Extension Activities

--If the Project expects to continue expanding through 1985, additional extension agents will be needed. Part-time assistance of additional secretaries during peak periods also will be required. ESF might be used for this purpose.

--Extension training in coffee culture and extension methods needs to be continued.

--Training of extension agents needs strengthening in the areas of farm and financial management, production economics, and group techniques.

--Training of participating farmers and their families (wives and sons) in farm and financial management and in technical coffee production greatly needs strengthening.

--Extension agents in one zone need to be transported to other zones and regions for short-term, intensive in-service training under existing strong extensionists. ESF support for this activity would be justified.

--Project management must assure that during this rapid expansionary period the extension agents do not feel excessive pressure to meet Project goals at the expense of good farmer selection and supervision.

--Project extension methods must gradually move away from the present highly paternalistic procedures where farmers are directly controlled and supervised.

--Continued work on farmer education programs is needed which will eventually allow farmers to work more on their own with less direct supervision by the extension agents.

--Further effort is needed in working with groups, using para-professionals (including farmer leaders), and in utilizing test plots on farmers fields and local demonstration plots.

--Farmers need to be provided financial management training to reduce

their dependence on the extension agents for loan information and in the proper handling of credit funds.

--IHCAFE should study the feasibility of shifting some of its coffee diversification research work to the small farm coffee producing areas, since the long-term prospects of coffee production are not good.

### Credit Activities

--Discussions should be held between IHCAFE and participating banks to identify measures that can be taken to minimize the delays and bottlenecks in loan processing that are likely to occur during the expected rapid Project expansion in 1984/1985.

--IHCAFE should develop a proposed schedule for loan processing which will help spread out the bank loan request and processing loads.

--The Project should continue to work with the target group and, rather than be tempted to work with medium sized or larger producers, find ways to more effectively work with large numbers of small farmers who are in most need of assistance.

--Mechanisms need to be established to determine the availability of non-Project production credit and its use by Project participants. At present, no such data are available. This information will be needed in the future to measure if the objective of providing production credit is being met and in what way.

--Extension and credit agents need to continually be made aware in training sessions and by administrative directives that borrower repayment is critical to the longer-term success of the Project. In turn, the agents should be asked to pass this message to the borrowers. However, at no time should they directly receive loan repayments.

--Immediate procedures should be implemented to reduce the excessive paperwork associated with loan processing. IHCAFE's documentation should be reduced to no more than 1 or 2 pages per borrower. Typing of documents should not be required if the handwriting is legible.

--Since a large portion of the agents' time is spent on credit and technical assistance activities, methods must be introduced to allow them to effectively work with a larger number of farmers at lower cost/borrower.

--All extension agents should be encouraged to maintain a summary sheet on loan balances and other pertinent information on their clients so they are more informed for their farm visits.

--Borrowers should be placed in categories according to their need for supervision. In this way the extension agents can allocate their time to

those farmers in most need. The criteria for establishing the categories can best come from the experienced agents themselves.

--IHCAFE should study the possible re-location of some of the field staff to reduce the non-productive time on the road between farm visits.

--A list of potential borrowers should be sent or discussed with the banks before beginning other loan processing activities to avoid spending a lot of time with a farmer who is later determined ineligible for a loan.

--The monitoring of delinquency and the gathering of arrears data needs to be further strengthened.

--An analysis of the desirability of extending upwards of 40% of renovation loans for labor payments should be implemented, especially where the labor may primarily come from the producer and his family. Reduction of credit for labor, where possible, may greatly reduce the financial risk assumed by the farmer.

--Present repayment schedules should be analyzed and made more consistent with harvest times and expected income flows.

--Farmers should be encouraged to pre-pay their interest and principal obligations, when possible, to help develop good financial discipline. Banks need to establish mechanisms to allow such pre-payment.

--The Project should experiment with moving away from extending credit in kind. Once alternative local input suppliers are available, IHCAFE should terminate its input handling and distribution work and concentrate on its credit and technical assistance activities.

--Current projections suggest that the \$9 million USAID loan will likely be completely disbursed by the end of 1984, or at the latest, during 1985, ahead of schedule. USAID should study the feasibility of increasing the size of the credit fund to allow for the expected continual expansion of the Project.

--Studies should be made of the feasibility of linking the USAID supported Rural Technologies Project to the IHCAFE Small Farmer Coffee Project to research, develop, and finance small-scale coffee processing equipment to help the beneficiaries partially process their coffee. Additional training of farmers in coffee processing will be needed if such equipment were made available.

#### Technology and Adoption

--Extension agents need more support in the analysis of soils and fertilization. Each region will have a different soil map so the same fertilization cannot be recommended country wide.

--Better soil conservation activities need to be incorporated into the program. The observed use of soil conservation varied from an excellent model of stone retaining walls and terraces, with production of 5 qq./mz. in the first year, to a manzana planted on a 35 degree slope with contour planting but no terracing and a high degree of erosion and poor plant development. Given the strong demonstration effects of this Project, good soil conservation should be a priority.

--As technification progresses, rust is being controlled on the technified area, but it is often not being controlled on the non-technified parcel. These old areas can serve as a breeding ground for the disease, and should be either sprayed or eliminated as the disease appears on them.

--Generally, there is poor coordination between research and extension. This needs to be strengthened to assure the long run optimality of the technical recommendations. It is especially important that the researchers help identify technical problems that arise in the nurseries and on farmers field. This capability has not yet been developed.

## 2. Summary of Findings

### 2.1 Overall Institutional Capacity Within IHCAFE and Involved Banking Institutions

IHCAFE is continuing to improve its effectiveness in coordinating the technical assistance and credit activities after a somewhat slow and disrupted start. A major cut in its operating budget due to a drop in the price of coffee exports and a change in higher administration as the project was being initiated caused considerable delay in the initial implementation stages. The budget cut resulted in a significant reduction in field staff just shortly after the project began. The change in higher administration also produced considerable uncertainty in the field. In addition, a decision by USAID to stop Project disbursements in May 1982 caused participating banks to stop processing loans and led to further chaos in the field. By the time disbursements were reinstated some of the field work had been set back by up to four months.

The second year of project implementation (1983) was more on schedule

and IHCAFE's coordination of the nursery activities, technical assistance, and credit was more satisfactory. No major problems were identified in terms of Project coordination during the early 1984 field trips by the evaluation team. Some delay was experienced the end of 1983 in getting improved seed for some of the nurseries due to poor weather at the source but this isn't expected to cause any serious problems, although it could make it more difficult to reach the optimistic goals for 1984.

The reimbursement system through the Ministry of Finance and the Central Bank is not operating as expected. Significant delays are being experienced and this leads to problems of adequate loan funds in the banks to finance the investment and nursery loans being processed by IHCAFE field staff.

The foreign technical advisors in extension, credit, and mass communications have been an important input to the Project and have helped promote the program with farmers, field staff, and participating banks. They also have actively participated in the training workshops for extension and credit personnel.

Initial institutional links have been established between IHCAFE and PROMECAFE and a pilot area profile study is expected to begin soon. PROMECAFE will take the lead on that activity and IHCAFE will provide some members of the design and implementation team.

The three participating banks in the Project have been able to handle the loan requests adequately. Funds have been scarce during certain periods of time because of the reimbursement problem mentioned previously. Good cooperation and communication between IHCAFE field personnel and the

bank credit officials seems to be very good. Of course, there is still room for improvement in coordinating credit processing activities.

## 2.2 Accomplishments with Respect to Extension Program

The Project Agreement contemplated an increase in the number of staff of the IHCAFE Extension Service, the division of responsibilities between credit agents and extension agents, and the development of new extension and farmer training methodologies to more effectively serve a large number of small farmers. The IHCAFE Extension Service had traditionally worked with a larger size farmer than is eligible for the AID/IHCAFE Project, and the predominant method was a one to one supervisory visit. While definite progress is being made toward the development and use of new extension techniques (especially group training and the use of farmer leaders and demonstration lots), the ability of the Extension Service to greatly increase the number of beneficiaries is limited by a cutback in personnel and a heavy workload in loan supervision by extension agents.

The progress made toward a reorientation of the extension methodology must be seen in light of the history of the Project. The first year of the Project was virtually consumed by the logistical problems of growing 3,000,000 healthy plants in participating nurseries so that field work could start in 1982. Extensionists spent the early part of 1982 promoting Project participation and learning about the formalities of the credit system. The work was seriously disrupted by the events as described in an earlier section.

Even with the problems of the first year, good progress has been made in developing an extension program which can work with the special problems

of small farmers. Most significant is the beginning use of group training and demonstration plots. Plans also are being made to use leader farmers. Most notable for their absence are the use of radio or audiovisual aids, area profiles, and a uniform system of evaluation and development of course content (both for farmer training and in-service training). The continued assistance of both the communications advisor and a short or long-term highly qualified and experienced advisor in extension methodology is imperative.

While it was not possible to interview a statistically representative sample of extension agents, it is apparent that there is a large degree of variation in capability of these agents among regions and among zones within regions. The success of this Project will depend heavily on a strong institutional commitment to continually evaluate the individual agent and bring the performance standards up to a more uniform level. Expansion of the Project requires a continued improvement of in-service training, better material and supervisory support for the extension service, and an increase in the number of field personnel.

### 2.3 Accomplishments with Respect to Credit Program

Three banks are now participating in the small farmer coffee-rehabilitation program. These are: BANADESA, the main public agricultural lending institution; BANHCAFE, a semi-autonomous coffee bank; and Banco de Occidente, a private bank. Banco Sogerin, another private bank, is expected to enter the Project in 1984.

The involvement of the credit and extension agents in helping the farmers obtain credit along with their technical assistance has been an

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important component of the Project. Most farmers are selecting the complete renovation model which requires considerably more capital investment to implement. As such, credit probably is highly desirable for them since many would not be able to make such an investment without credit.

Project borrowers with short-term loans for establishment of seedling nurseries are repaying well. Interest payments on the longer-term investment loans also are coming in on time. It is estimated that loan repayments are at the 90-95 percent level. Of course, few of the investment loans have principal due at this time so the true test of loan repayment will begin in two more years. However, field staff are very optimistic that with the expected high levels of production, loan repayments will continue to be high as long as coffee prices remain at current or higher levels.

#### 2.4 Accomplishments with Respect to Technology Transfer

IHCAFE has done a good job in delivering technical instructions to farmers, and farmers have been highly receptive to participating and following instructions. The evidence of this is in the physical development of the technified parcels, which is excellent. Some farmers are reaping harvests of 3-5 quintales per hectare after 17 or 18 months from transplanting. For these farmers, the levels of productivity they will be achieving will greatly surpass the estimates used to calculate financial feasibility of Model I (complete renovation of old coffee fields). Annual production could be on the level of 5, 20, 40, 60 qq/manzana (years 1-4) rather than 0, 0, 15, 40 as predicted. Generally, farmers who plant an

adequate number of improved plants and who provide continual care will be, technically, guaranteed good future production.

The problem is not whether farmers are following instructions, but rather: (1) are these instructions being revised, evaluated and fit to the individual needs of the farmer?, and (2) will the farmer become self-reliant in managing the technology?

Extension agents need more technical and economic support of their technical recommendations to assure they do fit the physical and economic conditions of the borrowers. As has been found in farming systems research in other countries, it will probably be necessary to identify a number of different technological packages which can more effectively fit the varied conditions and circumstances faced by the farmers.

### 3. External Factors Affecting Project Implementation

As mentioned previously, the major external factor affecting the Project was the drop in Honduras' export quota along with a drop in the price of coffee about the time the project was being initiated. Some administrative changes also occurred during this same period of time. Both factors seriously delayed Project implementation in 1981-82 but IHCAFE has survived the adversity and is now about on schedule. During this volatile period there was talk that IHCAFE should be dissolved. However, the AID/IHCAFE Project has given the institution new life. No other man-made disasters have directly affected the Project or the production of coffee. The other important assumption listed in the Project Paper Logical Framework was that coffee would continue to be profitable relative to the production of other products. This assumption still appears valid

since the coffee price has risen above the quite low price last year. If the price continues at this or a higher level, it appears the farmers will obtain good returns.

#### 4. Status of Inputs

The major inputs specified in the Project Paper were a credit fund, training for extension staff and farmers, purchase of vehicles and equipment, foreign technical assistance for research, training and credit, and evaluation/audits.

The credit fund, vehicle purchases, and foreign technical assistance disbursements are ahead of schedule (although research has not been supported to any great extent). The training of extension agents is moving ahead strongly. Farmer training is just beginning. Disbursement of funds for training has been less than projected in the Project Paper. The disbursement of funds for evaluation and audits are behind schedule but are now beginning to be disbursed.

#### 5. Status of Outputs

The proposed Project outputs, the indicators, and current status are summarized in the following table:

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Outputs	Indicator's (End-of-Project)	Status	
-IHCAFE's ability to help small farmers increased	3,000 new coffee farmers serviced	By end of 1983 about 1,600 new farmers had been helped	
	3,000 new farmers receive training	Same 1,000 have received training	
-Technology improved	6,000 Mz using improved varieties	About 2,080 Mz using improved varieties	
	6,000 Mz fertilized	About 2,080 Mz fertilized	
	6,000 Mz treated for pests	About 2,080 Mz treated for pests	
-Management by farmers strengthened	6,000 Mz under improved cultivation	About 2,080 Mz under improved cultivation	
	6,000 Mz of coffee being pruned	Technified areas won't need pruning until yr 5	
	6,000 Mz fertilized	About 2,080 Mz fertilized	
	6,000 Mz under proper shade	About 2,080 Mz beginning shade program	
	6,000 Mz at optimum plant density	About 2,080 Mz at optimum plant density	
	-Viable, self-sustaining credit system for small coffee farmers	By 1985, reflows begin to finance credit for farmers beyond original participants	Reflows from nursery loans now beginning--other reflows should begin in 1985

As can be seen, progress towards reaching the projected output targets

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is very satisfactory. Most of the end-of-project status indicators likely will be accomplished before the end of the Project. The one exception relates to plant pruning. It was estimated that 6,000 manzanas of coffee would be well managed using improved pruning techniques. Most of the Project participants have decided to completely renovate their 1 or 2 manzanas (Model I) financed by the Project (old coffee is completely destroyed and new planted). As a consequence, these new plants will not need pruning until after the indicated end of project. Those few farmers that are using partial renovation (Model II) appear to be following pruning recommendations. This had affected about 260 manzanas of coffee by the end of 1983.

In summary, the program is progressing satisfactorily towards reaching the output levels planned by end-of-Project. It does not appear that any changes are needed in outputs to be able to accomplish the Project purpose.

#### 6. Status of Project Purpose

The Small Farmer Coffee Improvement Project was initiated with the signing of the Project Agreement in June 1981. The purpose of the Project is to mitigate the production impact of coffee rust, a fungus, on small farm producers in Honduras by assisting as many of them as possible to increase their yields and incomes so they can afford the required rust control measures. The Honduran Coffee Institute (IHCAFE) is the primary implementing institution and is responsible for providing technical and credit assistance. A credit fund was established through the Central Bank for the participating public and private banking institutions. It was expected that the Project would reach 3,000 small coffee producers in five

years and would have considerable spread effects to others.

As stated in the outputs section, it is very likely that the Project outputs and purpose will be accomplished by the end of the Project (FY 86). The completely renovated coffee plots are generally in excellent technical condition and are beginning to produce at levels considerably above that anticipated at the start of the Project. Credit is reaching the Project participants and they appear very receptive to the technical recommendations. Two factors which might directly affect this outcome are the world price of coffee and the effectiveness of rust and disease control on the coffee adjoining the technified plots. The first factor is external and outside the control of the Project. The second factor is internal. Additional effort is needed to encourage farmers to control disease on the adjoining coffee so it doesn't jeopardize the new, technified coffee.

#### 7. Description of Project Beneficiaries to Date

The credit is reaching the target group as specified in the Project Agreement. The average farmer receiving technical assistance and credit for complete renovation (Model I), is about 40 years of age, has a total farm size of 15 manzanas (10.5 hectares), produces about 6 manzanas of coffee (4 hectares) with an average yield of 7.9 qq./mz, and is receiving about \$2,150 of investment credit per manzana (\$3,075/ha.). These farmers received an estimated Lps. 8355 in gross income (with considerable variability) in 1983, according to information obtained from a random sample of loan documents. About 1,839 loans for a value of \$5.3 million had been lent for investment (renovation) and nursery loans through the end of 1983.

Approximately 6% of the credit goes to farmers partially renovating their coffee (Model II). These farmers are considerably younger (average age is 28.6), have smaller farms (7.5 manzanas total and 5.1 manzanas in coffee, on average), and receive about one-half the gross income (Lps. 4466) of those applying complete renovation (Model I).

#### 8. Lessons Learned

The major lessons learned in this Project would be: (1) the extreme importance of profitable technical recommendations to accompany credit, and (2) the difficulty of channeling funds through the entire financial system. The first factor may well be the most critical in making this Project more successful than past supervised agricultural credit programs for small farmers in many developing countries. In the longer term, the goal of strengthening the overall financial system by channeling funds through it is important. However, in the shorter term, the difficulties and delays of instituting such a system can have very serious impacts on a program being implemented.

FIRST EVALUATION REPORT

## INTRODUCTION

The Small Farmer Coffee Improvement Project was initiated with the signing of the Project Agreement in June 1981. The purpose of the Project is to mitigate the production impact of coffee rust, a fungus, on small farm producers in Honduras by assisting as many of them as possible to increase their yields and incomes so they can afford the required rust control measures. The Honduran Coffee Institute (IHCAFE) is the primary implementing institution and is responsible for providing technical and credit assistance. A credit fund was established through the Central Bank for the participating public and private banking institutions. It was expected that the Project would reach 3,000 small coffee producers in five years and would have considerable spread effects to others.

The Project Paper specified that:

"the first Project evaluation will take place at the end of the second crop year, and will test the success of the extension program in meeting the needs of the small producers. The division of labor between technical and credit extension agents will be examined to determine the utility of this approach in providing assistance to small farmers. The quality of the extension agents...what...they may lack...[and] the role of the banks... will be examined. The purpose of conducting this evaluation relatively early in the Project implementation period is to allow for necessary revisions in the Project management."

Specific terms of reference were prepared for the evaluation and are attached as Appendix A to this document. The main part of this report is directly keyed to those terms of reference. Persons wishing more detail on the questions raised for the evaluation should refer to that appendix.

Evaluation Objectives

The objectives of the evaluation cited in the terms of reference are:

- (1) to evaluate the capacity developed so far by IHCAFE to coordinate Project activities and to provide improved extension services to small coffee farmers, and
- (2) to evaluate the efficiency developed by the involved banking institutions to provide credit to the Project's target group.

Evaluation Methodology

The evaluation activities were carried out during the period December 16, 1983 and January 26, 1984. Charles Oberbeck primarily focused on extension activities and technology adoption and diffusion (Sections 3 and 5 of the terms of reference). His in-country work covered the period December 16, 1983 to January 13, 1984. Ronald Tinnermeier was largely responsible for evaluating the status of the Conditions Precedent and Covenants, the institutional development, credit activities (Sections 1, 2 and 4) and completing the final report. His stay was during the period January 3-26, 1984. Jorge Hernan Echeverri, PROMECAFE/Costa Rica, visited coffee farms to evaluate the technical aspects of IHCAFE'S recommendations during January 6-9, 1984. The PROMECAFE representative in Honduras, Gilberto Vejarano, also accompanied him on the field trip. A separate technical report was submitted by PROMECAFE to USAID/Honduras but the conclusions have also been incorporated into the technical sections in this report.

The conclusions and recommendations of this report are based on the

review of periodic IHCAFE reports, advisor reports, USAID documents and files, intensive interviews with IHCAFE, bank, and USAID personnel, technical advisors, farmers, and other interested parties. Field visits were made to El Paraíso, Danlí, Comayagua, Sta. Bárbara, Sta. Rosa de Copán, Trinidad, and San Pedro de Sula. A partial list of persons interviewed is shown in Appendix B. An attempt was made to visit farms representative of different cases, i.e., good technical success, technical problems, credit problems, leader farmers, very small farmers, larger farmers, old, young, etc. The results of the interviews served to point up many possible problem areas, and to highlight successes. The only real difficulty in the farmer interviews was to elicit any criticisms of IHCAFE, which could be expected. Most interviews with IHCAFE and banking personnel were held in private to gather as many honest and frank observations about the program as possible.

A random sample of loan files for 1982 and 1983 was drawn from the records in the Tegucigalpa office to provide information on borrower characteristics that was not readily available from the reports.

Even though considerable effort was expended to gather the most reliable and accurate information possible, the short period of time and limited resources available for the evaluation may lead to some erroneous findings omissions, or incompleteness in some subject matter areas. Not all of the regions were visited which could result in some bias in the findings. Finally, loan records were not available for region 3 (Yoro) for 1983 so the sample on farmer characteristics does not include that region. Nor does the 1983 sample come from all loans made in that year since some of the more recent records had not yet arrived in the central office. How-

ever, it is our opinion that these interviewing and data gaps will not seriously bias the conclusions presented in this report.

#### Organization of Report

The rest of the report is organized around the terms of reference mentioned previously and found in Appendix A. The five main sections are: (1) Status of Conditions Precedent and Covenants, (2) Overall Institutional Development, (3) Extension Activities, (4) Credit Activities, and (5) Project Acceptability, Technological Adoption and Diffusion. Findings, observations, conclusions, and recommendations will be included in each of the sections. Each sub-section number and brief description of the question being studied corresponds with the more detailed terms of reference in the appendix.

## STATUS OF CONDITIONS PRECEDENT AND COVENANTS

## 1.1 Compliance with conditions precedent

The conditions precedent to disbursement included verification of: legally binding commitment of GOH to agreement; names and signatures of responsible persons; an administrative agreement among the Ministry of Finance, the Central Bank, and IHCAFE, delineating responsibilities for the credit fund; an operational plan showing division of labor between IHCAFE and participating banks and linkage between extension and credit activities; and the addition of twenty new credit agents in IHCAFE.

All of these conditions have been met, although with some delay, except for the last one relating to credit agents. Completion of the tripartite agreement was apparently more difficult than anticipated since it was not finished until mid-1983. This is because operating procedures, the interest rate and its distribution, and other administrative matters had to be agreed to by many different participants and the process was long and involved. USAID approved the tripartite agreement through Implementation Letter No. 30, dated July 1, 1983.

A draft operational agreement between IHCAFE and the participating banks was approved by USAID on July 21, 1983 (Implementation Letter No. 32). This agreement built on the tripartite agreement and specified Project objectives, borrower requirements, types of loans and terms permitted, areas of responsibility and operating procedures. The specifics of the agreement appear to be consistent with the terms outlined in the USAID/GOH Project Agreement.

The addition of twenty new credit agents was not implemented for two

major reasons: (1) IHCAFE faced a severe retrenchment at the time this condition was to be met because of the drop in revenues caused by lower coffee prices and a cut in the export quota for Honduras (Most of IHCAFE's operating budget comes from this source), and (2) the expected need for credit agents was reduced since the agreements with participating banks shifted some of the credit responsibility to those institutions. Also, the extension agents were doing much more of the credit work than originally planned which also reduced the need for credit agents. This condition precedent was cancelled by USAID through Implementation Letter No. 34 on August 25, 1983. Although more field extension agents may be needed in the near future, as discussed in later sections, the elimination of this requirement has not affected Project implementation. In fact, ten credit agents have been added to the regional staffs. However, these are not new additions but rather changes in functions of previous extension agents.

#### 1.2 Compliance with Covenants, particularly on production credit

The Special Covenants section of the Project Agreement included the provision of adequate production credit for participants through the banking system; the assurance that all credit for on-farm activities will be allocated reasonably and equitably; a GOH contribution of one million dollars to the investment fund (long term coffee renovation loans); a provision that the interest rates charged sub-borrowers under the Project will be no less than prevailing rates for similar kinds of loans by the end of the Project; establishment of an evaluation program as an integral part of the Project; and that there is prompt access by participating banks to all principal, interest, and other reflows to the investment fund for

relending.

For the most part these covenants have been met. The participants receiving investment loans for coffee renovation are just now beginning to request annual production loans. To our knowledge, adequate funds are available to meet those requests. Of course, as the program expands, shortages in loanable funds could occur so this question needs to be continually monitored. In addition, at this point in time there does not seem to be any bias in the allocation of Project funds among regions and farmers for either investment or production credit. Figures on the distribution of credit among regions and some selected borrower characteristics will be presented in a later section.

The GOH contribution to the investment fund has not yet occurred since the date for it to begin was changed from January 1, 1983 to January 1, 1984 through USAID Implementation Letter No. 26, dated March 14, 1983. The final GOH contribution is due on or before May 28, 1986. An initial contribution of \$250,000 from Economic Support Funds destined for Honduras is in process and is expected to serve as a rotating investment fund in the Central Bank. It is our understanding that the ESF qualifies as GOH contributions so this covenant is now being met.

The interest rate charged the small farm coffee producers was established by the tripartite agreement and is subject to yearly change. The proposed and current rates are as follows:

Interest Rate Components	Initial Proposal	Current Rates
Participating Banks	3.0%	6.0%
Bad Loan Reserve	6.6	4.5
Guarantee Fund	2.0	0.0
Central Bank	0.5	0.5
USAID Loan Interest	2.0	2.0
INCAFE	3.0	4.0
Borrower Interest Rate	17.0%	17.0%

SOURCE: USAID, Tegucigalpa

The current interest rate charged participating farmers is close to but not at the current market rate. Banks are now charging 19% on their own funds but this is not necessarily the market equilibrium rate since it is the maximum permitted by GOH policy. Some have commented that the Project interest rate charge is too high. However, the project will need to strongly resist pressures for reducing the interest rate (unless market rates drop significantly). Instead, it should be argued that the heavily subsidized rates in other programs should be raised to more closely reflect the true cost of capital. Nevertheless, it is recognized that if other programs lending to agriculture don't raise their rates, the project will receive criticism. Still, we estimate that about one-half of the project participants have never received formal or institutional credit. For them, the current 17% interest charge is likely to be considerably below what they are used to paying in the informal or non-institutional markets (money

lenders, "coyotes", truckers, etc.).

The two areas mentioned in the covenants in greatest need of improvement are the evaluation program and the procedures by which participating banks obtain reimbursements for their lending to coffee producers. No doubt, the evaluation in this report meets part of the evaluation requirement. IHCAFE follows a type of Critical Path Method established by the Ministry of Finance to determine if the project implementation is on schedule. In this regard, periodic evaluation meetings have been held with the IHCAFE Planning Office (the next one is set for February 1984). Extension supervisors, project staff and the foreign technical advisors informally monitor and evaluate the activities of the field offices and extension and credit agents but no other formal evaluation procedures were identified in the Project. No continuing evaluation/analysis of the technical and economic foundations for the farmer recommendations is done. Thus, it appears this is an area that could use some further strengthening. The AID/IHCAFE project is now entering a very critical stage and it's very important that a formal program for continuous program evaluation be established. In this way, any problems in administration, operations, extension, farmer technology adoption, non-profitability of recommendations, etc. can be identified and resolved. At the present time, no baseline data about participants in the Project is being collected (other than what is gathered for the loan application and approval process). As a consequence, it will be difficult to study the Project impact after five years since there will be no beginning data with which to make comparisons. The area profile studies will provide some general information about each zone and its producers, but it may be advisable to carry out or contract a few

detailed case studies in each zone to serve as a basis for future Project evaluation.

Another problem is the delay in processing participating bank requests for reimbursements. The process is now operating better than during the early stages of project implementation but there is still need for speeding up the process. IHCAFE is anticipating a rapid program expansion during this next year and any significant delay in access to funds by banks could seriously jeopardize the success of the project. In fact, at the end of our evaluation visit calls were being received by the central office stating that loan processing was stopping because of present delays in reimbursements. It is not clear exactly where the greatest delay exists in the system since there are many participating institutions. A one or two week delay at each stage in the process can lead to one or two months delay in total. If such a delay is transferred to the field so loans cannot be made on time for coffee nurseries or for investment loans, the productivity and profitability of such investments may quickly decline. This problem is discussed in more detail in Section 2.2.

#### RECOMMENDATIONS:

--Interest rates charged to the farmers should be maintained at or near market or permitted rates in the commercial sector for similar kinds of loans.

--A formal evaluation program should be established for the project to identify problems to resolve and areas of success to replicate. The evaluation needs to focus on: effectiveness of extension work, technical and economic feasibility of alternative technological packages, adequacy of

administrative and logistical support at all levels, and the need for handling input supplies.

--Baseline data from a few existing and newly entering producers need to be gathered to serve as a basis for future evaluations of Project impact.

--The time required for processing requests for funds by participating banks through the Central Bank, the Ministry of Finance, USAID, and back, must be significantly reduced for effective operation of the project.

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## OVERALL INSTITUTIONAL DEVELOPMENT

## 2.1 Effectiveness of IHCAFE in project implementation

IHCAFE is continuing to improve its effectiveness in coordinating the technical assistance and credit activities after a somewhat slow and disrupted start. A major cut in its operating budget due to a drop in the price of coffee exports and a change in higher administration as the project was being initiated caused considerable delay in the initial implementation stages. As will be explained in more detail in the extension activity section, the budget cut resulted in a significant reduction in field staff just shortly after the project began. The change in higher administration also produced considerable uncertainty in the field. For example, it was reported that there were at least three changes in leadership in a couple of the regions in 1982. Although this was not common in all regions, it does reflect some of the leadership problems experienced in the field during this time. In addition, a decision by USAID to stop Project disbursements in May 1982 caused participating banks to stop processing loans. Although the stop in disbursements may have been considered justified by the donor, it did lead to further chaos in the field. By the time disbursements were reinstated some of the field work had been set back by up to four months. This delay resulted in some farmers dropping out of the Project and made it necessary for extension agents to make a rapid, and perhaps, poor selection of new farmers. No doubt this pressure to make up for lost time also resulted in some poor technical recommendations, less supervision of nurseries and farmers, and less attention than normal to other responsibilities.

The second year of project implementation (1983) was more on schedule and IHCAFE's coordination of the nursery activities, technical assistance, and credit was more satisfactory. No major problems were identified in terms of Project coordination during the early 1984 field trips by the evaluation team. Some delay was experienced the end of 1983 in getting improved seed for some of the nurseries due to poor weather at the source but this isn't expected to cause any serious problems, although it could make it more difficult to reach this years optimistic goals.

No specific determination of the adequacy of IHCAFE's accounting system was made but a few spot checks in the regions were carried out. Those checks showed that procedures do exist at the field level to control the use of Project funds and distribution of inputs. Although IHCAFE is not able to stock all inputs needed by the participating farmers, BANADESA and a few private sources are used when needed. To date, farmers seem to have adequate access to inputs. However, with the expected rapid growth of participants in 1984, careful planning on IHCAFE's part will be required to assure such input availability continues. Even so, there does seem to be a problem with data flows as discussed under evaluation, section 1.2. Reliable and accurate data on credit flows by region, month and type of loan still do not seem to be readily available. These and other data on Project operations are critical for continual monitoring and adequate management of the system. The Project implementing office is looking into the possibility of utilizing a large computer in the Ministry of Finance to help process such data. However, an advisor to the Ministry of Health, Mr. John Holly<sup>D</sup>, tried to set up such an arrangement and was very dissatisfied. Therefore, IHCAFE may need to study the feasibility of using a micro-

computer to handle the data processing.

### 2.2 Effectiveness of Central Bank in managing loan funds

As discussed in section 1.1, the effectiveness of the reimbursements to the participating banks continues to be a problem. Unless this process is greatly speeded up, future delays in reimbursement could seriously jeopardize the program this next year when a significant increase in credit reimbursements is expected. The recently implemented 500,000 lempira (2 lps.= U.S.\$1) rotating investment fund from Economic Support Funds may alleviate the delays to some extent, but that by itself may not be adequate. If the current delays of one to two months continues, given the projected credit flows, a doubling of the rotation fund (one million lempiras) may be justified. In the absence of any increase in the rotation fund, it is imperative that the time delays of reimbursement be reduced, either through elimination of some of the steps (institutions) or through increased efficiency of the process. Another alternative would be for the Central Bank to credit the account of the requesting bank immediately upon receipt of the appropriate documents, as specified in the tripartite agreement. It's our understanding that currently the Central Bank credits the participating bank's account once reimbursement is received from the Ministry of Finance. A private bank soon to enter the project seems to expect the reimbursement system to operate similar to their rediscount lines with the Central Bank. USAID may wish to explore the reasons why the Project reimbursement system can't operate in a form similar to the rediscount system which doesn't seem to involve any significant delays at all.

As of the end of 1983, the Central Bank indicated that it had provided

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about 1.5 million Lempiras of its own funds to cover the requests from the participating banks while waiting for reimbursement from USAID, through the Ministry of Finance. But two important points need to be made: (1) the Central Bank itself contributes to much of the delay, and (2) no mention is made of the reflows, or repayments flowing back through the system. As a minimum, over Lps. 500,000 should have flowed back to the Central Bank from repayments of the 1982 nursery loans. In this regard, future tripartite meetings should consider how these reflows are to be handled. Should they be distributed by the Central Bank or should each participating bank hold its own reflows for relending to Project participants?

The Central Bank also is asking for much more sub-borrower information from the participating banks than suggested by the tripartite agreement. This increases the paperwork for all parties concerned. The agreement states that lists for reimbursement will contain "as a minimum: (i) name of the bank that has extended the loan, (ii) name of the sub-borrower, (iii) amount which has been lent and other necessary information for the reimbursement request". Of course, the last part of the statement permits a pretty open interpretation of what information is needed. The Central Bank now receives information on all scheduled disbursements and payments for each loan as well as the latest disbursement for which the request is being made. Apparently, the Central Bank is maintaining a record of disbursements and loan balance for each sub-borrower, which might explain some of the delay at that stage. It would appear that such control is not the function of the Central Bank but rather of the participating banks which also maintain individual accounts on each sub-borrower. Convincing the

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Central Bank to receive only the minimum data specified in the tripartite agreement might be another approach to reducing the reimbursement delay.

### 2.3 Effectiveness of foreign technical assistance

In general, the assistance of the foreign advisors seems to quite effective. All of the advisors are well-known in the field, respected, and very active. Some personality conflicts were identified, as might be expected, but their work hasn't been seriously affected by this.

The functions of the advisors has changed somewhat over that originally planned. Fewer credit agents (now 10 instead the proposed 20) means some of the credit advising is associated with the extension agents as well. The area profile studies have not yet been initiated. When they are started, the primary responsibility will be with PROMECAFE rather than the extension advisor. All of the foreign advisors have actively assisted in the development and presentation of in-service training seminars and materials for the extension agents and other field personnel. The media advisor began his assignment in July 1982 so work in the communications and mass media program is just beginning. A plan of work has been presented to IHCAFE but no decision has yet been made. He also is waiting for a permanent counterpart to be officially named. It would appear that this is an area that needs stronger support by IHCAFE and USAID to be effective. Also, since the extension advisor position will soon be vacant, it is important that those functions be covered by another long-term advisor or by selected short-term consultants. If the communication/media activities are adequately supported, as recommended, then it may be possible to use the communication advisor to fulfill some of the extension needs and bring

in others for special or unfilled needs. It is especially important to include, as a minimum, some short-term assistance to organize and guide an economic evaluation of the Project and its technical recommendations and to assist in training extension agents and farmers in financial management. Finally, since the project is just beginning to work with groups for extending technology and credit, the advisors have not been actively involved in group activities. IHCAFE, historically, has had some very bad experiences with extending credit through organized groups so it is wise that they are proceeding with caution under this project.

#### 2.4 Link with regional institutions

IHCAFE's main link with regional organizations is through PROMECAFE. Their ties with the research/experiment station appear to be very strong. Technicians from PROMECAFE periodically visit the country, publications are exchanged, and IHCAFE technicians participate in regional meetings. The link for the extension/social science areas is not nearly as strong but is being developed. PROMECAFE is taking the lead in implementing the area profile studies with IHCAFE collaboration. An IHCAFE counterpart for PROMECAFE in Honduras has been named and has spent three months in CATIE, Costa Rica receiving special training on area profiles. He, three other IHCAFE technicians, and two of the foreign advisors attended a 4-day seminar on profiles in El Salvador in November of 1983. Approximately \$50-60,000 has been tentatively committed to starting the area profiles in Honduras. The Comayagua region has been selected as the pilot profile. The formation of the implementation team and the operational plan are expected to be completed during February 1984. USAID has been asked to help finance

the area profile studies. The evaluation team did not have enough time to study the nature of the proposed profile studies so we feel no recommendation is warranted. However, we do suggest that the extension agents not be used for the area studies since it will likely compete directly with their technical assistance and credit responsibilities. This is already happening in the Sta. Barbara region where extension agents are currently helping with the coffee rust study and little activity is evident in the Project while they are away. Perhaps, if new agents are added, it might be appropriate to use them in the studies to initiate their training and to acquaint them with their respective coffee zones.

#### 2.5 Effectiveness in promoting bank participation in project

IHCAFE, with the assistance of the foreign advisors, has been relatively successful in attracting banks to the program. Those presently active include BANADESA (public), BANHCAFE (semi-autonomous), and Banco de Occidente (private). One more private bank, Sogerin, is expected to participate in 1984. BANADESA accounted for about 67% of the value of loans extended (Lps. 5,979,376) through the end of September, 1983 with BANHCAFE accounting for the rest (33% or Lps. 2,984,376). The IHCAFE lending activities make up a significant source of lending funds for some BANADESA offices as shown in Appendix Table C-1. For example, over 61% of the Comayagua office loan portfolio is associated with the AID/IHCAFE Project. In Sta. Barbara, IHCAFE's portion is 55% and in Yoro it is 36%.

BANHCAFE began lending for coffee nurseries the latter part of 1983. It was created in 1980 with offices in Tegucigalpa and San Pedro de Sula but has been opening up small offices in the coffee area to handle the

increasing loan applications and servicing. Offices (oficinas representativas) are now open in El Paraíso, Catacamas, Comayagua, Marcala, Trinidad, and Sta. Rosa de Copán. An office is expected soon in Yoro. Although BANHCAFE only handled about half the volume of BANADESA through September, it appears to be expanding rapidly. BANHCAFE also has agreements with other banks in the zones serviced by them which permits borrowers to obtain loan disbursements and to make loan repayments without going to the more distant BANHCAFE offices in San Pedro de Sula or Tegucigalpa.

Banco de Occidente, Sta. Rosa de Copán, began extending credit for 17 nurseries in November 1983 for a total of \$263,000 (about 980,000 plants). They expect the credit demand resulting from the distribution of these plants to reach about one million dollars during 1984. They expect around 15% delinquency and feel the bad loan reserve and the 6% spread for the bank will make the program continually attractive.

Banco Sogerin, San Pedro de Sula, has recently approved entry into the project. They plan to provide one million lempiras of credit to members of the Triniteca Cooperative, Trinidad, using the cooperative for loan processing and as guarantor of the loans. They also plan to pass along two percentage points of their 6 percent commission to help cover part of the cooperative's processing costs. Of course, as the Ohio State University (Cuevas) study indicates, where IHCAFE and other organizations like a cooperative, are doing a lot of the credit processing for the banks, a fairly large subsidy is implicitly being passed to the banks. This point probably should enter any future discussion about the distribution of the interest charged the coffee producer by the Project (presently at 17%).

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## 2.6 Link of Land Titling and Coffee Projects

At present there is no formal link between the two projects nor has there been any communication between INA and IHCAFE in Sta. Bárbara where the first land titling is taking place. INA titles small farms if they have no less than .1 hectare nor more than 17 hectares of coffee. Otherwise, the lower limit is 5 hectares. The titling is only on state or municipal land and the payment is Lps. 60-100/ha. depending on the quality of the land. The payments can be made over five years with no interest charge. The title is given to the farmer even though he may not have yet paid for all of the land. We do not recommend any formal association at this time but an informal exchange of names might be of use. The INA office in Sta. Bárbara said they could check out small lists of IHCAFE borrowers to see if they have new titles but if it were a large list the IHCAFE people would have to review the lists themselves. There are two potential problems from land titling that could affect the IHCAFE project. First, a borrower could receive a new title and then use it to get credit elsewhere. If there weren't knowledge of this by either lender, then the farmer might over-extend himself. If this becomes a problem, the IHCAFE Project might informally hold the farmer's title until the loan is repaid. The second potential problem might come from the banks formally requiring the title as security for the IHCAFE loan. This should not be permitted since it will significantly increase the costs of lending for the bank as well as the farmer. There is little evidence in credit studies that such security with small farm loans makes any difference in repayment. After having just issued a new title by one government agency, it is difficult to see another government agency expropriate the land because of loan delin-

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quency. Other than checking the lists of new land title recipients to keep IHCAFE informed about its borrowers, we do not recommend any other activity at this time.

#### RECOMMENDATIONS:

--There is need to continually improve the data flow and information collection system of the Project by IHCAFE. Accurate credit flow and other data are not now readily available.

--IHCAFE should study the feasibility of utilizing a micro-computer to handle the processing of Project data.

--The Central Bank should immediately credit the accounts of the participating banks upon receipt of requests for reimbursements through the Project as specified in the Tripartite Agreement. This is not now being done.

--The maintenance of records on each sub-borrower in the Project in the Central Bank should be eliminated. This does not seem to be their appropriate role but rather that of the participating banks. If the Central Bank feels they are required to do this under existing agreements, then those agreements should be modified to eliminate this activity.

--The Central Bank should require only the minimal reimbursement information from the participating banks as suggested by the Tripartite Agreement. This includes name of bank, name of sub-borrower, and amount of disbursement. Other information just adds to the costs at all levels.

--The handling of capital reflows or loan repayments needs to be clarified. It is recommended that the holding of these funds for relending

in the Project be at the participating bank level.

--In the absence of any change in the current reimbursement system (which involves considerable delay), the ESF rotating fund should be increased to \$500,000 rather than the current \$250,000 level.

--The IHCAFE counterpart for the foreign communications advisor should be named as soon as possible.

--Stronger IHCAFE support is needed for the communications and publications area associated with the communications advisor. The advisor position should be extended for at least one year from the time adequate support is provided.

--The functions of the soon to depart foreign extension advisor should be continued either through a direct replacement or through the use of short-term advisors. The use of short-term assistance is conditional on stronger support of the communications/publications area which complements some of the extension work.

--The Project should develop an internal capability or contract short-term advisors to carry out technical and economic evaluations of the technical recommendations and help identify alternative packages, and to provide training and materials on financial management for field agents and for participating farmers.

--Experienced extension agents should not be used in implementing area profiles. New extension agents might be utilized as a form of training and to acquaint them with their zones.

--Additional private banks and offices should continue to be encouraged to enter the Project to further provide improved credit access

to beneficiaries.

--No formal ties with the Land Titling Project are recommended at this time. IHCAFE offices in areas with land titling should be encouraged to review INA lists of new land title holders to keep informed about their own borrowers.

--New land titles should not be used as security for IHCAFE loans since it only greatly increases lender and borrower transaction costs with little potential for improving loan repayments.

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## EXTENSION ACTIVITIES

## 3.1 Extension Department expansion

As seen in Table 1, the Extension Department is comprised of approximately 68 extension agents plus eight regional directors. At the time the Project Paper was written, there were 85 agents. Additional agents had been hired in 1982, bringing the number to 95, but budget limitations within IHCAFE brought about a sharp reduction in 1983. Generally, the cutback was simply an elimination of newly hired personnel, so that the average years of experience among the group that stayed (4.57 years) was higher than the average years of experience of the group that was eliminated (3.92 years). IHCAFE is now interviewing technicians for 12 new extension agent positions, which would bring the total back to 79.

Table 1. IHCAFE Extension Agents by Year

Region	Number of Agents		Average Experience*	
	1982	1983	1982	1983
1. Sta. Bárbara	18	10	4.2	4.0
2. Copán	11	7	4.6	4.8
3. Yoro	10	7	3.1	3.6
4. El Paraíso	8	7	4.2	4.0
5. Comayagua	10	8	4.2	4.4
6. La Paz	7	6	4.3	5.8
7. Olancha	9	8	4.5	4.8
8. Cortés	11	7	3.8	5.4
9. Central	11	8	5.6	4.6
Total	95	68	4.4	4.6

\*Average experience with IHCAFE as of Dec. 1982.

Source: IHCAFE

Approximately 80% of the agents have an educational preparation that is equivalent to graduation from the John F. Kennedy School, not a high

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level of technical achievement (El Zamorano is considered high, Catacamas and CURLA mid-level, and JFK lower). While this level may be adequate to start the job, it indicates a need for strong in-service training. About 24 of the agents have three years or less experience with IHCAFE.

### 3.2 In-service training of extension personnel

In-service training for extension agents has taken several forms: formal courses, regionally managed field training, informal training by foreign advisors, and centrally managed informal training. All areas need strengthening. The high rate of turnover of staff and the prospects for hiring new extension agents make continued training in basic coffee culture and extension methodology very important. Experienced extension agents with good technical and methodological backgrounds still need training in farm financial management to be able to meet the demands of the AID/IHCAFE Project. Most importantly, all extension agents must be evaluated continually, and, when deficient, must be given more individualized supervision and training. The quality of the extension service is highly variable.

Appendix Table C-2 lists the formal courses given in the last two years. Many were on disease control or simply the use of spray equipment. It is difficult to judge the quality of these courses, but it is apparent from interviews that basic farm management, production economics, and financial management have not been learned by, at least, some of the agents. An understanding of these fields is essential to a program that introduces small farmers to several thousand Lempira debts. Extension agents expressed a desire for more courses in extension methodology, and

especially techniques for managing group training. Most said they did not need more courses in disease control.

Much of the training received by extension agents during the last two years has been through direct supervisory visits by both Project Management and technical advisors (Servicios Tecnicos) from the AID/IHCAFE Office in Tegucigalpa. Some of this has been simply motivational, some training in specific credit formalities, and some general orientation in technology or extension techniques. The extension agents appear very receptive to this type of close supervision, which is instructive rather than disciplinary. It is also apparent that the Agricultural Division of IHCAFE does not have the personnel available to make similar training visits country wide. It is, therefore, essential to the Project that another very highly qualified and field-oriented extension advisor be contracted to replace Santiago Vivaldi, who is leaving soon. If the communications and publishing area is adequately supported, as recommended by this report, then a full-time replacement for the extension position may not be needed since the communication work can replace, in part, some of the extension advising function. In this way, short term extension, farm and financial management, and other technical advisors could be brought in as needed.

The other principal type of training received by IHCAFE extension agents is at the regional level. The regional director is responsible for assigning new agents to an experienced agent for side-by-side orientation for several weeks until the new agent is considered ready to work on his own. The regional director is also important because he is the one who does most of the supervision and evaluation of the agents. Under this system, the quality of training received is dependent on the quality of the

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regional director. It would be very advisable to provide support funds to cover the extra logistic costs of taking extension agents out of their region for very short periods for in-service training under strong extensionists of other regions.

### 3.3 Importance of area profiles

The Area Profile activity was designed to achieve a dual purpose: the collection of better information about the coffee sector (especially characteristics of small farmers), and training of extension agents through the investigative field work. Both ends are considered important by both the IHCAFE administrative personnel and many of the extension agents. No field work has been done to this date, as explained earlier, but work may begin in 1984.

Because of limits on the extension agents' time, this activity will require careful review and a decision as to the relative importance of the information to be gathered and the inclusion of the extension agents in an educational activity. The last complete survey of the coffee sector is more than 10 years old, and new data are important for assesement of IHCAFE priorities and strategies. The recent spread of La Roya and Broca through the country along with the virtual ceiling on national production (ICO quota system) strongly suggest that the structure of the coffee sector will be changing dramatically in the next decade. Decisions as to the level of support needed for the AID/IHCAFE Project and other similar programs would best be made on the basis of more recent socio-economic and technical profiles.

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### 2.4 Organization and effectiveness of project promotion

Project promotion in the first year was mostly informal and based on personal visits by the extension agents to farms with which they were acquainted. All of the extension agents interviewed indicated that they encountered at least a very healthy scepticism among farmers. Also, first year credit delays hurt the Project's credibility. Virtually, all extension agents indicate, however, that by the second year promotion had become unnecessary. The plant development in the first year's plantings was dramatic, and the demonstration effects have led to many farmers seeking to enter the program.

Because of the very strong demonstrational impact of a technified coffee farm, it is unlikely that additional promotional activities will be a concern. To the contrary, it may become necessary in the future to promote restraint on the part of farmers who may attempt to copy the technification without adequate training or supervision.

### 2.5 Borrower selection criteria and effectiveness

Selection criteria include the guidelines used for defining the target group, the extension agent's own technical and personal evaluation, and the banks' judgement of credit worthiness. The project guidelines are that the beneficiary have 10 or less hectares in coffee, averaging 15 or less quintales per hectare, and 50% or more of his income be from coffee. The other two sets of criteria are not specifically defined. The selection process, generally, is that the extension agent (either himself or through the credit agent) first checks with local lenders; if the potential participant either has not had credit before or has an acceptable credit

record, then the extension agent makes his decision based on the individual's moral standing in the community and his perceived technical ability as a farmer. Moral standing relates mostly to the person's reputation for honesty, and is necessarily very subjective. The technical capability of the farmer is determined by an inspection of his farm and household, taking into consideration the number and quality of his farm enterprises.

In addition, the extension agents interviewed indicated that a very important criterion is accessibility of the farm and distance to other participants. In the interest of efficiency they are selecting farmers that are near to the zonal office and near to other participants. Most agents appear to prefer that participants solicit entry into the program as a group. Some will not consider an application unless the individual identifies himself with or can be fit into a group of farmers for the purpose of training activities.

Another criteria applied in at least one region is residency on the farm. It appears that resident farmers are considered more responsible than farmers who live in town and commute. It also appears that there is a social basis to this criterion, in that resident farmers are considered more legitimate in their need for assistance.

It appears that the selection criteria are effective in reaching the target group (see sections 3.6 and 4.2). There are, however, cases where the participant is clearly ineligible, and other cases where the participant is of questionable technical ability. Common sense suggests that the extension agents will be under pressure to bend the guidelines, both from personal pressure and as eligible participants become scarcer and more

remote. Most agents indicated that they made some bad selections the first year because of time pressure. An important way to protect the selection process is to keep each agent's workload reasonable. A spot check of farms visited (including one with L 59,000 annual gross income) indicate that extension agents are filling out credit forms honestly. It is important that they not feel pressured to misrepresent farmers to fill credit goals.

### 3.6 Extent of Project coverage

The regions with the greatest coverage are Comayagua, Sta. Bárbara, Olancho, and Sta. Rosa de Copán, although all nine regions are being serviced. No detail is yet available as to where the greatest incidence of coffee rust is located but it appears to be affecting all regions to some extent. More information on rust will soon be available after the current rust field survey is completed. More details on farmer characteristics and distribution can be found in sections 4.2 and 4.3.

### 3.7 Current extensionist/beneficiary ratio and adequacy

The approximate beneficiary/extensionist ratio as of 10/83, by region, is as follows: (1) Sta. Bárbara 24:1; (2) Sta. Rosa de Copán 32:1; (3) Yoro 12:1; (4) El Paraíso 15:1; (5) Comayagua 47:1; (6) La Paz 14:1; (7) Olancho 36:1; (8) Cortés 22:1; (9) Central 3:1. The national average is 24:1. The number of Project beneficiaries that an extension agent can attend effectively will depend on the physical terrain of his zone, the quality of the agent, and how much of his time he dedicates to this Project. Extensionists appear to be making between 25 and 60 farm visits per month, with an average around 40. If they visit each farmer 4 times per year they

could serve 120 farms. Some agents have suggested 40-60 farmers as an acceptable ratio. If these farmers are Project beneficiaries, however, the agents must not only visit the farms, but must also spend office time to work on credit formalities and farm plans, and to prepare, promote, and deliver group oriented training activities. The number of Project beneficiaries that can be served with any effectiveness is probably no greater than 60. There are extension agents who are near their limit now (and who are working virtually 100% of their time with the Project). If the Project almost doubles in size in the next year, as projected, several regions will be unable to effectively handle more beneficiaries in 1985.

The problem cannot be seen by mere national averages. Each zone will have a different capacity. It is very apparent, however, that further expansion of the Project will require an increase in full time extensionists and continued part time assistance during peak work periods (credit activities, especially).

### 3.8 Replacement of on-farm visits with a farmer education system

The extension methodology used with Project beneficiaries is highly variable. As mentioned, the success of the Project depends upon continuing to strengthen the weaker or less experienced agents and better training for all agents in financial management. Generally, however, the extension service appears to be making good progress toward organization of farmers into groups, use of demonstration lots, and in some cases, use of leader farmers. Supervision is still highly paternalistic, though, and participant farmers are simply following instructions. Continued work is needed to achieve a system of education that can monitor the

participants' improvement, and eventually allow the farmer to work primarily on his own.

Among farmers and extensionists interviewed, there was definite evidence of both good organization of farmers into training groups and use of demonstration lots for training purposes. There are currently only a few formal demonstration lots in use, but most extensionists have, at least, informal demonstration lots on farmers' fields. The great bulk of the technical material can be taught best in this way. Farmers are formed into groups, given a short lesson in some aspect of coffee culture, and then taken to the field for a demonstration of the technique. Groups are often being formed without the extensionists' urging, around a natural leader (sometimes the manager of the Project nursery). In these cases, the opportunity for informal self-training and demonstration among these groups is very high.

The greater apparent deficiency of the program to this point is that supervision is still highly paternalistic. All of the farmers interviewed were simply following directions in at least some aspect of management of their technified coffee, and some seemed reluctant to believe it was really their coffee. While strict supervision is necessary and desirable, especially during these first years of the Project, there appears to be a need for a better process of evaluation of farmers' progress toward educational goals. Extension agents fill out supervisory forms to indicate that certain technical steps have been accomplished for the purpose of credit disbursements, but there is no similar report about the farmers' understanding of these technical steps.

The area where the farmers are most dependent is in management of

their finances. Even the most educated of the participants interviewed does not keep a record of his debts or a copy of his financial plan. They rely heavily on the extension agents for information about their loans (all of them did know the total amount of the loan, though). As mentioned, there is an urgent need for the extension agents to receive training in farm financial management, for them to develop a program of financial education for the farmers, and for the extension agent to learn how to evaluate the farmer's progress toward understanding how to manage a farm that is more dependent upon purchased inputs and good financial management.

There is also a need to incorporate follow up training through alternative media such as radio, videotape, slides, and pamphlets. IHCAFE has used radio programs, but most broadcasts are on price information at present. The Servicios Tecnicos del Caribe advisor, Carlos Rivas, has made good progress toward organizing the technical aspects of several media programs, and has formed a cooperative agreement with INA for production of materials (INA has a complete studio). IHCAFE has not, however, assigned a counterpart to Rivas as yet. His work will only be effective when he can be training a counterpart, and it is recommended that he stay in the country for a least one year after he is assigned a counterpart.

Appendix Table C-3 describes the formal courses given to farmers in 1983. These are of limited use for Project participants, and are directed at a generally more sophisticated audience. Some thought is now being given to incorporating sons and wives into the farmer training program and this is highly commendable since they often are the ones directly responsible for some of on-farm activities.

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An additional topic that might be included in farmer training relates to crop diversification. Since the long-term prospects for coffee are not entirely positive (internal and external per capita consumption is declining over time), the farmers should at least be made aware of some possible substitutes for coffee. Unfortunately, the limited IHCAFE coffee diversification activities are not in the small farm coffee areas but on the more humid coastal zones. Nevertheless, IHCAFE should consider the possibility of doing some of the diversification work in the areas where the Project is strong so that recommendations can be given farmers on this important topic as well.

### 3.9 Effect of training program on farm technification

The training program has achieved excellent results so far in the technification of farms. Continued progress is needed, however, to allow the Project expansion, and to move farmers toward self reliance.

#### RECOMMENDATIONS:

--If the Project expects to continue expanding through 1985, additional extension agents will be needed. Part-time assistance of additional secretaries during peak periods also will be required. ESF might be used for this purpose.

--Extension training in coffee culture and extension methods needs to be continued.

--Training of extension agents needs strengthening in the areas of farm and financial management, production economics, and group techniques.

--Training of participating farmers and their families (wives and sons) in farm and financial management and in technical coffee production

greatly needs strengthening.

--Extension agents in one zone need to be transported to other zones and regions for short-term, intensive in-service training under existing strong extensionists. ESF support for this activity would be justified.

--Project management must assure that during this rapid expansionary period the extension agents do not feel excessive pressure to meet Project goals at the expense of good farmer selection and supervision.

--Project extension methods must gradually move away from the present highly paternalistic procedures where farmers are directly controlled and supervised.

--Continued work on farmer education programs is needed which will eventually allow farmers to work more on their own with less direct supervision by the extension agents.

--Further effort is needed in working with groups, using para-professionals (including farmer leaders), and in utilizing test plots on farmers fields and local demonstration plots.

--Farmers need to be provided financial management training to reduce their dependence on the extension agents for loan information and handling of credit funds.

--IHCAFE should study the feasibility of shifting some of its coffee diversification research work to the small farm coffee producing areas, since the long-term prospects of coffee production are not good.

## CREDIT ACTIVITIES

## 4.1 Organization and strengthening of Credit Department in IHCAFE

Very little has been done relative to the Credit Department. No additional staff members have been added. In fact, the number of personnel in that unit also was reduced with the general retrenchment of budget and staff in 1982, as discussed in section 1.1. There now are 6 or 7 persons in the department who are primarily working with other non-AID loans (a fairly small volume) and trying to recuperate some of the delinquent loans from past programs (said to total about Lps. 30 million). The foreign credit advisor has worked informally with the head of the Credit Department and he has attended the credit training seminars presented through the AID/IHCAFE project.

The possible future relationship of the Credit Department to the AID/IHCAFE Project is not clear at this time. It would seem that there should be a closer tie with the Implementing Unit but the present Credit Department activities don't closely fit the needs of the Project. It could play a role in loan collections as they become more important but much of that work is in the field, not in the main office. Thus, if the Credit Department were more integrated into the Project it would require assigning some of the personnel to regional offices to assist with loan collections and with summarizing credit data in the field.

## 4.2 Effectiveness of banks in approving and administering loans

The approval process by the banks seems to be functioning pretty well. However, the basic grains lending does slow down the processing of the IHCAFE loans during certain times of the year since the banks give first

preference to their own customers. The only complaints of significant delays were during this period or when the banks stopped processing loans because reimbursement through the Central Bank was being delayed (See sections 1.1 and 2.2 for additional information). There is concern that the big push by IHCAFE this year could lead to some serious delays in loan processing, especially in BANADESA branches where basic grains are important. Discussions should be held with BANADESA, and with other banks if also affected, to see what temporary measures could be taken to handle the expected large loan processing demands during certain periods. Perhaps they would be willing to hire temporary help or bring credit officers from other branches with less of a credit load to help out. Of course, the more IHCAFE can spread out its workload on loan preparation and submittal, the easier it will be for the banks to handle the loan approvals.

The credit is reaching the target group specified in the Project agreement as determined by a small, random sample of information from loan files in the central office. The average farmer receiving technical assistance and credit for complete renovation (Model I) in 1982 was about 39 years of age, had a total farm size of 15 manzanas (10.5 hectares), total coffee of a little less than 6 manzanas (4 hectares) with production at 7.9 qq.(100 lbs.) per manzana. The average loan size in 1982 was Lps. 4965 or Lps. 4043 per manzana. Farmers receiving credit for partial renovation of their coffee (Model II) were a little younger (35 years), had smaller farms (6 manzanas or 4.2 hectares total), less coffee (4.2 manzanas or 2.9 has.) and obtained Lps.1798 of credit per manzana. For more detail by region please refer to Appendix Table C-4.

The average 1983 borrower was 40 years of age, was fairly similar in size to those of 1982 (16.5 manzanas total and 6.1 manzanas in coffee), received Lps. 5619 per loan and Lps. 4302 per manzana, and earned about Lps. 8355 gross annual income. A breakdown of these characteristics by region can be found in Appendix Table C-5.

The averages also were calculated according to the credit experience of the farmer: no formal credit, credit with BANADESA, and credit with other formal lenders. This information was available only for the 1983 sample. Over one-half of the borrowers had never received formal or institutional credit before joining the IHCAFE Project. About 30% had previously worked with BANADESA and another 19% had worked with other credit institutions. Those with no previous credit experience tended to be younger, had smaller farms and less coffee, had lower coffee yields, and earned less gross income as shown in the following table.

Table 2. 1983 Sample Data by Source of Credit

	Age	Loan Size Lps.	Manzanas			Prod/Mz. in qq.	Loan/Mz. Lps.
			Total	In coffee	Financed		
<u>No formal credit: N=66 (51% of total sampled)</u>							
Average	37.4	5598	14.0	5.3	1.3	8.0	4389
<u>BANADESA credit: N=38 (30%)</u>							
Average	43.3	5616	18.6	6.5	1.3	8.9	4404
<u>Other banks: N=25 (19%)</u>							
Average	44.0	5678	19.7	7.4	1.3	8.6	4376

### 4.3 Level of funding and credit flows

The most complete figures on the number of loans and volume are available through September 1983. At that time, a total of 1784 loans worth Lps. 8,963,509 had been approved. Of that, Lps. 5,971,622 or 67% had actually been withdrawn. These flows were for financing coffee nurseries with terms up to 18 months and for renovation of existing coffee (partial or complete renovation), as shown below.

Table 3. Total Accumulated Credit Flows Through September 1983

Loan Type	No. of Loans	Lps. Approved	Lps Withdrawn	Number of Plants
Investment (Renovation)	1,580	6,767,665 (75.5%)	4,236,905	
Nurseries	204	2,195,844 (24.5%)	1,734,716	4,335,700
Total	1,784	8,963,509 (100%)	5,971,622	

It should be pointed out that there are several planned disbursements for the renovation loans over the first two years of the loan, which explains some of the delay in disbursements. Withdrawals are permitted more quickly for the nursery loans since they are shorter in term. Based on preliminary credit figures presented in the last quarterly report of 1983, it's estimated a total of 1,839 nursery and investment loans for a value of Lps. 10,666,625 were approved by the end of 1983. Of this, it's estimated that Lps. 6,735,169 or 63% was withdrawn. A summary of credit flows by type of loan and year is shown in Table 4. For a breakdown by region,

please refer to Appendix Tables C-6, C-7 and C-8.

Table 4. Estimated Credit Flows by Type of Loan and Year

Yr and Type Loan	No. of Loans	Value Approved	Value Disbursed
		(In Lempiras)	
<u>1982</u>			
Investment Loans	674	3,675,312	2,320,612
Nursery Loans	56	692,914	459,850
Total	730	4,368,226	2,780,462
<u>1983</u>			
Investment Loans	897	4,039,961	2,433,843
Nursery Loans	212	2,258,438	1,520,864
Total	1109	6,298,399	3,954,707
<u>Accumulated to Dec. 31, 1983</u>			
Investment Loans	1571	7,715,273	4,754,455
Nursery Loans	268	2,951,352	1,980,714
Total	1839	10,666,625	6,735,169

Source: IHCAFE, Informe Trimestral, Oct-Dic.1982; Astacio; and Informe Trimestral, Oct-Dic.1983 (preliminary).

Note: These figures come from a mixture of IHCAFE and bank reports so they can only be considered estimates and may differ from strictly bank reports.

Most of the investment credit has been used for completely renovating 1 or 2 manzanas of coffee (destroying the old and planting new). This is referred to as Model I and accounts for almost 94% of the investment credit extended as shown in Appendix Table C-8. Model II (partial renovation) is less popular and has not even been utilized in some of the regions. This is just the reverse of what was projected in the Project Paper where it was estimated that 20% of the credit would go for Model I and 80% would be for Model II. Many reasons are given to explain the different distribution. The first, and probably most important, is that the majority of the coffee plots are very old and unproductive. Thus, complete renovation was more attractive than trying to rejuvenate the old plants. Other reasons might be

that the fertilization and other cultivation recommendations for Model II might bring considerably more risk than similar advice under Model I but with new plants. Also, more money is available with better terms for Model I and could be important to farmers facing serious liquidity problems although this was not thought to be important by field workers. The heavier emphasis on Model I will likely increase the demand for credit over time since a larger investment is required.

In summary, at this point in time the credit is getting to the target group, although sometimes delayed. The beneficiaries are just now reaching the stage where they will be needing annual production (maintenance) credit. Those that have requested such credit have been serviced. The real test of the availability of production credit will come next year when all the disbursements for many of the investment loans extended in 1981 and 1982 will have been completed and the farmers will be asking for annual loans to cover production costs. However, there is some concern that the farmers may drop back in their application of the recommendations once the original disbursements of the investment loan are completed. If so, this will mean less production credit will be needed. The GOH counterpart contribution for the investment fund is now in process as discussed in section 1.1.

#### 4.4 Role of IHCAFE credit and extension agents in credit

Since there are now 10 credit agents rather than the 20 originally planned, their functions are also different from early plans. Although the 1983 Cuevas study suggested the credit and extension agents were handling essentially the same functions, we found this not to be entirely so. The credit agents seem to help orient the extension agents in completing the

loan applications, they check and revise all applications prepared by the extension agents, they serve as the link with the credit institutions to coordinate loan disbursements, and they help resolve problem cases with the banks. The extension agent is primarily responsible for gathering data from the farmer and filling out the loan application forms. They also make farm visits at the time of the application and as each disbursement is made. In some regions both the credit and extension agents carry out the pre-harvest farm visits (controles de vigilancia), while in other areas they seem to place the primary responsibility on the credit agent. The sharing of such responsibilities will likely change in the future as each group further defines its role. It doesn't appear that one, or even two, credit agents in each region will be able to do the pre-harvest visits alone--the extension agents will need to help since such visits must be done in a fairly short period of time before harvest if they are going to be effective in determining loan repayment abilities of the farmers. Since only interest payments have been due for most borrowers to date, the exact roles of the credit and extension agents in monitoring loan repayments have not yet been clearly defined.

The involvement of the credit and extension agents in helping the farmers obtain credit along with their technical assistance has been fairly effective in Project implementation. As explained earlier, most farmers are selecting the complete renovation model which requires considerably more capital investment to implement. As such, credit probably is highly desirable for them since many would not be able to make such an investment without credit.

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However, a major problem arises from this heavy involvement in credit and technical assistance activities--the cost per loan and farmer is high. The Cuevas study concluded that close to 80 percent of IHCAFE's personnel costs and 77 percent of its operating costs were associated with these two activities. The evaluation team also observed that the major portion of the agents' time was spent with processing loans and in providing on-farm technical assistance. Since about 24 loans are now handled per agent, this results in very high lending costs. However, significant expansion of the Project is expected in 1984 which should reduce per borrower costs. Nevertheless, IHCAFE is going to have to find more effective ways of extending credit and assistance to many more farmers to reduce those costs.

Reducing the heavy reliance on many application and supervision forms is one recommended way. Presently, each loan request includes an application form, a credit report, a farm map and other data form, a cash flow/capacity to pay form, and a detailed investment plan. Further documents are completed by the participating credit institution. As each loan disbursement is made, a farm supervision report is submitted by the extension agent. Finally, a pre-harvest report on the condition of the coffee is prepared at the end of the season. An original and three copies of these forms are prepared which makes it necessary to type the hand written forms prepared by the agents. This adds to the costs of loan processing and may slow down submittal since some zone offices don't have a secretary. Such data would be nice to have for each borrower, but it is just too expensive to do this for small farm credit programs. Rather, similar data could be prepared for categories of farmers to serve as guidelines instead of for each individual. One extension agent estimated that he spent about 20

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minutes with each farmer on first contact, another 60 minutes gathering farm and borrower data, and then up to three hours in the office to complete all of the forms. The experiences in other countries suggest that, over time, all of the loan documents will look very similar since the extension agents try to save time by using the same data for everyone. In fact, there is some evidence that this is already happening. Some supervision reports look much the same. Rather than indicating what the individual farmer really needs for the next disbursement, the agent just says "refer to the original investment plan". This suggests either he didn't visit the farm, or that he didn't really discuss the next disbursement need with the farmer. Either way, the form becomes just a formality and is therefore meaningless for the Project. It is our opinion that if the Project is to reach many more farmers at a reasonable cost, this heavy paperwork must be reduced significantly. We feel that the farm map and cash flow sheet could be eliminated, the investment plan greatly simplified or eliminated, and duplication of information on more than one form reduced in such a way that only a one or two page loan document would be needed (plus the loan contract with the bank). Why is a typewritten report needed if the hand written forms are legible? If fewer copies were required, then the agents' hand written original reports would be adequate. The final test of an existing form is how it is used. If it is seldom or never used it should be eliminated. A proposed formal evaluation program mentioned in an earlier section might help identify which data are really needed.

At present, none of the copies go to the farmer or to the extension agent working with the farmer. Some agents prepare their own summary sheet

showing loan and other information about their clients which is used during their farm visits. All field agents should be required to maintain such current data so that they can directly discuss each farmer's situation during the farm visit. This information will be much more useful for the agent than spending hours in the office filling out forms. The field agents also need to find ways of extending credit more efficiently. Perhaps borrowers can be placed in categories according to their need for supervision, and the number of farm visits and disbursements per loan might be reduced for those who appear to be doing well. In this way the agents can concentrate their time on those borrowers in most need or with serious problems. It also appears considerable time is spent on the road going from one area to another. The time on the road is not productive. Thus, relocation of personnel to the zones where most borrowers are located might help or more promotion may be required in the zones where they are already working so they can attend more farmers during each visit.

Since close to 20 percent of the IHCAFE recommended borrowers are turned down by the participating banks, the field personnel need to spend the minimum time possible with farmers during that initial selection period so the time is not wasted. Once the farmer passes the initial screening by the bank, then the application and other forms can be completed. Some of the regions now are just sending a list of potential borrowers to the banks for checks on past delinquency or other problems before anything else is done. This procedure should be adopted by all of the regions.

The monitoring of loan repayments is not yet a major responsibility of the field agents since few loans have become due to date. The few 1981-82 nursery loans are due and have generally been repaid. Exact figures on

repayment are not available, but it looks like nursery loan repayments and renovation loan interest payments are between 90 and 95 percent. A list of delinquent loans by region is now being prepared and a new regional reporting form is being prepared which will give a summary of loan repayments, extent of delinquency, and the amount of restructured or refinanced loans by month. These data will be especially important to monitor repayments as more and more loans become due.

The amount of payment for labor under the Model I investment plan might also be an area that could be studied for maintaining good loan repayment. Presently, up to 40 percent of the loan can be used to cover labor costs. If much of that labor comes from the farmer and his family, this payment is essentially for their subsistence, but based on expected future earnings. If those earnings don't materialize because of poor prices or harvest, the loan will likely be delinquent. Farm families who have other sources of income to carry them through that initial two-year period of no coffee production, should not borrow money on their own labor. As an example, one farmer withdrew Lps. 8,449 of which Lps. 4,211 was for labor. He is now Lps. 874 in arrears. If 1-2,000 less had been used for labor payment under the loan, he might have been able to entirely pay off the loan. It is hard to give specific recommendations on labor payments since each farmer's situation is different. Nevertheless, this is an area that needs to be monitored carefully so farmers are not subjected to any more financial risk than necessary.

Another credit area in need of analysis is the repayment schedules. Interest payments are now scheduled for April of each year but harvest

normally occurs in November and December. Most farmers sell at harvest so it may be appropriate to move up the repayment date. It also appears that production on the newly renovated coffee plots will be much higher than initially projected. Thus, farmers should be encouraged to pay back the principal early if possible. There are reports that some farmers have been turned away by BANADESA when wishing to pay interest early. Such action does not encourage good financial discipline and management. Thus, both early interest and principal repayments should definitely be encouraged and the banks must find ways to accommodate such requests.

#### 4.5 Adequacy of loans in kind and in cash for technification

As discussed in earlier sections, the credit has helped the participating farmers technify their coffee plots. However, it is not clear that credit in kind has made any particular difference. The inputs do appear to be available to the farmers, either through IHCAFE, BANADESA outlets, or through private distributors. Some feel the farmers will use cash credit for other than Project purposes but there is no assurance that credit in kind won't be sold for the same reason. Tying the disbursements to specific recommendations and their supervision are much more important than the credit being in kind. The major dangers of credit in kind is that there may be pressure on the technicians to recommend inputs that are available in IHCAFE rather than what is most needed and the input handling costs may be high.

Most credit institutions in other developing countries have gradually moved away from handling inputs due to problems and costs associated with handling and selling the inputs. Thus, it is recommended that as soon as

alternative sources for inputs are available in the zones and regions, IHCAFE should get out of the input supplying business. An internal audit of IHCAFE could help identify the portion of operating costs associated with handling and storing the inputs now used.

#### 4.6 Availability of production loans

Project borrowers are just now beginning to request production loans so it is still too early to determine the adequacy of the production credit from other sources. To this date there have been no problems for those wishing such credit.

#### 4.7 Project's financial needs for the 1984-85 period

The Project started slow in 1981-82 but picked up speed in 1983. There is optimism that 1984 will be even better. The financial plan for 1984 is as follows:

Table 5. Financial Plan -- 1984  
(In Lempiras).

Item	Period				Total
	Jan-Mar	Apr-June	July-Sept	Oct-Dec	
Nurseries	1,269,900	423,250	423,250	-0-	2,116,400
Loans	2,276,250	9,812,025	847,375	1,979,800	14,915,450
Sub-total					17,031,400
Training	-0-	-0-	15,000	15,000	30,000
Demo Lots	-0-	80,000	80,000	80,000	240,000
Publications	-0-	30,000	-0-	-0-	30,000
<b>Total</b>	<b>3,546,150</b>	<b>10,345,275</b>	<b>1,365,625</b>	<b>2,074,800</b>	<b>17,331,200</b>

Source: IHCAFE, Unidad Ejecutora

This is a very ambitious plan, especially for the volume projected for the renovation loans. The Lps. 14,915,450 planned for renovation loans is

equivalent to about 2700 loans, some 900 more than the total loans extended from the beginning of the Project through the end of 1983, and close to three times the number extended during the year of 1983. The field staff in a number of the regions are optimistic that they can more than double the number of beneficiaries in their area. But reaching such a goal will require a lot of coordination in plant distribution, credit, provision of inputs, and technical assistance, as discussed in some earlier sections of this report. At the end of 1982, there was indication of an excess of plants in one of the regions. The same could happen during this production cycle, but on a larger scale, since the nurseries have been established before the exact number of renovation loans (borrowers) have been identified. Some similar projections were made by Astacio and are presented in Appendix Table C-9.

Assuming the estimated value of loans approved as Lps. 10,666,625 or \$5,333,212 through the end of 1983 (Table 4), then \$3,666,638 remains to be disbursed of the original \$9 million USAID loan for credit. This is equivalent to Lps. 7,333,376, about one-half of IHCAFE's projection for 1984. Thus, if IHCAFE reaches only 50% of that projected for next year, the USAID loan should be completely disbursed. If IHCAFE reaches 75% of projected needs, there will be a shortfall of approximately \$1.9 million. Given these scenarios, it appears most of the present loan will be disbursed by the end of 1984.

The 50% scenario discussed above also will result in the goal of 3000 farmers being reached, but one year earlier than specified in the Project Agreement. Assuming the Project can continue to identify qualified borrowers, USAID may wish to add to the credit fund to allow for such

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further expansion. However, it appears the growth during 1984 will likely utilize any excess capacity in terms of field staff and new extension agents will need to be added to allow further growth (as discussed in more detail in the extension section of this report).

An additional area that may merit future USAID/IHCAFE support is in the processing of coffee. Most Project participants now sell their coffee at harvest, with little or no processing. Of course, as coffee is processed, the producer generally receives a higher price. Also, the price variability appears less at higher price (processed) levels. Thus, it would be appropriate to study the possibility of incorporating some research, development, and introduction of small-scale coffee processing equipment into the Project. If such technology is labor intensive, it could add to the returns to labor of the Project beneficiaries and their families. The existing USAID supported Rural Technologies Project is not now doing any work with coffee processing equipment but could be a potential source for such equipment. This should be looked into further.

#### RECOMMENDATIONS:

--Discussions should be held between IHCAFE and participating banks to identify measures that can be taken to minimize the delays and bottlenecks in loan processing that are likely to occur during the expected rapid Project expansion in 1984/1985.

--IHCAFE should develop a proposed schedule for loan processing which will help spread out the bank loan request and processing loads.

--The Project should continue to work with the target group and, rather than be tempted to work with medium sized or larger producers, find

ways to more effectively work with large numbers of small farmers who are in most need of assistance.

--Mechanisms need to be established to determine the availability of non-Project production credit and its use by Project participants. At present, no such data are available. This information will be needed in the future to measure if the objective of providing production credit is being met and in what way.

--Extension and credit agents need to continually be made aware in training sessions and by administrative directives that borrower repayment is critical to the longer-term success of the Project. In turn, the agents should be asked to pass this message to the borrowers. However, at no time should they directly receive loan repayments.

--Immediate procedures should be implemented to reduce the excessive paperwork associated with loan processing. IHCAFE's documentation should be reduced to no more than 1 or 2 pages per borrower. Typing of documents should not be required if the handwriting is legible.

--Since a large portion of the agents' time is spent on credit and technical assistance activities, methods must be introduced to allow them to effectively work with a larger number of farmers at lower cost/borrower.

--All extension agents should be encouraged to maintain a summary sheet on loan balances and other pertinent information on their clients so they are more informed for their farm visits.

--Borrowers should be placed in categories according to their need for supervision. In this way the extension agents can allocate their time to those farmers in most need. The criteria for establishing the categories

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can best come from the experienced agents themselves.

--IHCAFE should study the possible re-location of some of the field staff to reduce the non-productive time on the road between farm visits.

--A list of potential borrowers should be sent or discussed with the banks before any other loan processing activities begin to avoid spending a lot of time with a farmer who is later determined not eligible for a loan.

--The monitoring of delinquency and the gathering of arrears data needs to be further strengthened.

--An analysis of the desirability of extending upwards of 40% of renovation loans for labor payments should be implemented, especially where the labor may primarily come from the producer and his family. Reduction of credit for labor, where possible, may greatly reduce the financial risk assumed by the farmer.

--Present repayment schedules should be analyzed and made more consistent with harvest times and expected income flows.

--Farmers should be encouraged to pre-pay their interest and principal obligations, when possible, to help develop good financial discipline. Banks need to establish mechanisms to allow such pre-payment.

--The Project should experiment with moving away from extending credit in kind. Once alternative local input suppliers are available, IHCAFE should terminate its input handling and distribution work and concentrate on its credit and technical assistance activities.

--Current projections suggest that the \$9 million USAID loan will likely be completely disbursed by the end of 1984, or at the latest, during 1985, ahead of schedule. USAID should study the feasibility of increasing

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the size of the credit fund to allow for the expected continual expansion of the Project.

--Studies should be made of the feasibility of linking the USAID supported Rural Technologies Project to the IHCAFE Small Farmer Coffee Project to research, develop, and finance small-scale coffee processing equipment to help the beneficiaries partially process their coffee. Additional training of farmers in coffee processing will be needed if such equipment were made available.

## PROJECT ACCEPTABILITY, TECHNOLOGICAL ADOPTION AND DIFFUSION

## 5.1 Farmer acceptance of technification program

Farmers have accepted this program with enthusiasm. The reason that Project disbursements are high relative to the number of participants is that the majority are opting for drastic renovation. Most farmers are aware of the interest they are paying and know that the rate is lower than that for informal credit (2-4% monthly). Gradual renovation appears to be more prevalent the first rather than the second year. Perhaps farmers have more confidence after seeing good results. For the rest of the Project, partial renovation will probably be more of a technical consideration. In order to partially renovate a farm, the coffee must be of an improved variety and in reasonable good condition. Most of the small farm participants have old plantations of the unimproved, typical variety.

The farmers seemed willing to accept organization into groups for training, and they are all glad to have extension agents visit their farm.

## 5.3 Effect of coffee price drop on beneficiary interest

Current prices are high (about Lps. 150/quintal). Even when prices were very low last year, farmers continued to participate. It is doubtful that current prices will ever affect Project participation much, because there will always be expectations of improvement by the time the loan is due. Prices will affect loan repayment, however, and, for that reason, emphasis is given to training in financial planning and continued economic evaluation of technical models.

This Project can help farmers get a better price for their product to

the degree it frees them from the need for informal credit, which is often tied to a sales agreement. Two of the twelve farmers visited indicated they had already enjoyed this benefit.

#### 5.4 Following of instructions by farmers

The great majority of participants are following instructions closely. It appears that less than 3% have been problems of complete non-compliance. If farmers can continue to apply proper management practices (fertilization, weed, pest, and disease control, pruning, etc.) their technical and financial success will be assured (assuming prices do not fall drastically).

As mentioned, farmers have not yet demonstrated the ability to manage their farms alone. In fact, their early success may lead to early loan repayment, which might cause them to be less carefully attended by the extensionists. This initial success should not be allowed to lead to complacency. The farmers need several years of assistance to learn this technology.

Additionally, the recommended technical models need to be reviewed regularly under a proper research and evaluation methodology. In addition, mechanisms need to be established to incorporate the coffee researchers in the Project to helping identify technical problems in nurseries and on farmers plots. Especially important is a test of the cost effectiveness of various levels of management.

#### 5.5 Satisfaction with credit and technical assistance

Farmers seem satisfied with the credit so far. During the first year, there were many cases where the loan disbursement was delayed so long that

the farmers either dropped out of the program or rushed their field work. That continues to be the biggest threat. Overly complex loan forms and regulations, along with bureaucratic delays can result in a great technical handicap to the participant farmer.

While farmers did not express this concern, it is obvious that the credit program must be designed in a way that includes the farmer in learning how to manage money. With all of the credit forms (6 pages) and copies going to every other interested party, the farmer is not even given a copy of his own financial record.

#### 5.6 Involvement of marketing cooperatives

IHCAFE officially encourages cooperatives, but at the field level, promotion will depend on the success of the local cooperatives. Many coffee cooperatives have had financial problems.

An interesting phenomenon, which may be isolated to the one case observed, is an interest in the formation of a marketing cooperative among Project beneficiaries in one area. This is to market the coffee as higher quality and asking a premium price. Quality premiums are currently not paid in Honduras, whereas they are in some other countries. In the example observed (El Paraiso and Copan), the promoter of this activity was the manager of the Project nursery who is also the President of the Junta Local (AHPROCAFE). He had not received much assistance from either IHCAFE or FEHCOCAL.

Because of the financial problems many coffee cooperatives have had, it is not advisable to adopt an overall policy regarding membership, but rather allow and encourage promotion in areas with strong cooperatives.

The Credit Advisor is studying the possible entry of 8 of the 28 FECOCAL cooperatives into the Project and working through their Juntas Locales (local committees) to establish new nurseries. The new plants produced in the nurseries would then be distributed to the cooperative members and credit extended where needed.

#### RECOMMENDATIONS:

--Extension agents need more support in the analysis of soils and fertilization. Each region will have a different soil map so the same fertilization cannot be recommended country wide.

--Better soil conservation activities need to be incorporated into the program. The observed use of soil conservation varied from an excellent model of stone retaining walls and terraces, with production of 5 qq./mz. in the first year, to a manzana planted on a 35 degree slope with contour planting but no terracing and a high degree of erosion and poor plant development. Given the strong demonstration effects of this Project, good soil conservation should be a priority.

--As technification progresses, rust is being controlled on the technified area, but it is often not being controlled on the non-technified parcel. These old areas can serve as a breeding ground for the disease, and should be either sprayed or eliminated as the disease appears on them.

--Generally, there is poor coordination between research and extension. This needs to be strengthened to assure the long run optimality of the technical recommendations. Its especially important that the researchers help identify technical problems that arise in the nurseries and on farmers field. This capability has not yet been developed.

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S22-0176ATTACHMENT ASTATEMENT OF WORKBackground

Coffee rust is a fungus which causes premature defoliation, loss of yield and eventual death of the coffee plant. Untreated, rust is expected to cause a loss of production of about 15% within two years of its appearance and up to 50% within five to six years. Coffee rust has spread worldwide from Sri Lanka where it virtually eliminated coffee production in the 19th century. It appeared in Nicaragua in 1976 and in El Salvador and Honduras in 1979.

The purpose of this project is to mitigate the impact of coffee rust disease on small coffee producers in Honduras by assisting as many of them as possible to increase their yield so as to be able to afford rust control measures, thereby allowing them to maintain and in some cases to increase their level of real income. The purpose will be achieved by strengthening the capacity of the Honduran Coffee Institute (IHCAFE) to develop and deliver needed services to the small coffee farmers and by the establishment of a credit fund to be managed by BANADESA and private banks. It was expected that the project would reach approximately 3,000 small coffee producers in five years, and that it should generate considerable spread effects as it introduces improved technology. Expenditures to date now exceed \$2.6 million.

Article I. Title

First formative evaluation of the Project Small Farmer Coffee Improvement.

Article II. Objectives

1. To evaluate the capacity developed so far by IHCAFE to coordinate project activities and to provide improved extension services to small coffee farmers.
2. To evaluate the efficiency developed by the involved banking institutions to provide credit to the project's target group.

Results of this evaluation will be used to improve current project management arrangements.

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Article III. Statement of Work

A. Methodology

Contractors should contact Samuel Tenorio, BANADESA, and Roger Marin, BANHCAFE, for credit experience under the project. Within IHCAFE, Roberto Banegas, Project Coordinator will be the primary contact. Contractors should give major emphasis to field work in the Santa Bárbara and Santa Rosa de Copán areas which are areas of most intense activity under the project. IHCAFE will coordinate field visits with these regional offices to assure maximum exposure to activities and problems. Field work should approximate one half of total work days requested. In addition to visits to IHCAFE regional offices, contractors should contact maximum numbers of participants possible, utilizing group meetings where applicable and if not possible, assure that visits to individuals are carried out. IHCAFE will provide contractors with all quarterly reports and quarterly reports from Servicios Técnicos del Caribe technicians working on the Project. It is anticipated that two people will be required for approximately one month each.

B. Specific Terms of Reference

1. Status of Conditions Precedent and Covenants

- 1.1. To what extent the GOH has complied with the conditions precedent to additional disbursements?
- 1.2. To what extent the GOH has complied with the covenants stipulated in the Project Agreement, particularly the covenant on production credit?

2. Overall Institutional Development

- 2.1. How effective has been IHCAFE in implementing the project given additional on-going activities. In this respect,
  - (a) has IHCAFE proven to be an effective institution in coordinating the credit and technical assistance delivery services to project beneficiaries; and
  - (b) has IHCAFE's Accounting Department shown satisfactory capacity to manage project funds, to establish the accounting system needed to control the use of project funds, and to procure and sell needed agricultural inputs to participating farmers?

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- 2.2. How effective has been the Central Bank in managing loan funds and in making capital available to BANADESA, BANCAFE and Banco de Occidente according to project needs?
- 2.3. What has been the effectiveness of short and long term foreign technical assistance on:
- (a) the creation and staffing of the credit agent positions in support of the extension activities organized;
  - (b) the definition of the in-service training program for extension agents;
  - (c) the implementation of the area profile activity; and
  - (d) the development and implementation of media programs designed to train coffee farmers in IHCAFE's technification models; and
  - (e) the implementation of credit activities for groups?
- 2.4. What support links have been developed between regional institutions (e.g., IICA and PROMECAFE) and IHCAFE, and to what extent these links have facilitated the implementation of the project?
- 2.5. How effective has been IHCAFE in promoting the participation of additional banks in the project?
- 2.6. To what extent are the Titling Project and the Small Farmer Coffee Improvement Project being coordinated, and what formal linkages should be established between both to maximize impact?

### 3. Extension Activities

- 3.1. Has the Extension Department within IHCAFE been expanded as a result of project activities?
- 3.2. What is the status of the in-service training program instituted to improve the capacity of IHCAFE extension agents to transfer technology to coffee farmers? That is,
- (a) What kinds of training activities have been organized?
  - (b) What has been the quality of training received up to date?
  - (c) To what extent the content of courses, seminars, and workshops organized is relevant to field activities planned for extensionists?
- 3.3. What importance has IHCAFE given to the preparation of area profiles? Are these profiles being prepared? If so,
- (a) to what extent data collected for such profiles is relevant and accurate;

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- (b) what use do extension agents make of profiles, and  
(c) is information collected being updated?
- 3.4. What project promotion activities are being organized, ~~how~~ do extension agents participate in the organization of ~~such~~ activities, and to what extent are they being effective in getting ~~target~~ farmers involved in the project?
- 3.5. What selection criteria are being used to select project beneficiaries, have extension agents participated in the definition and application of such criteria, and how effective are ~~they~~ in reaching the project's target group? In this respect, ~~are~~ such selection criteria useful in identifying and reaching ~~small~~ coffee producers as anticipated by the Project Paper?
- 3.6. What is the extent of project coverage at this time? ~~What~~ type of coffee farmers are presently participating in the project, and are the more affected areas by coffee rust being serviced?
- 3.7. What is the current extensionist/beneficiaries ratio? Is this ratio adequate to provide needed technical assistance?
- 3.8. To what extent is the system of on-farm supervisory ~~visits~~ being replaced by a system of farmer education? That is, ~~has~~ ~~ICAFE~~ translated its technical models into technology transfer messages that can be easily understood by project beneficiaries? In this respect,
- (a) is a gradual approach being used to get small coffee farmers involved in the project and is this approach ~~adequate~~;
- (b) is formal instruction being provided to groups of ~~small~~ coffee producers;
- (b) are extension agents establishing demonstration ~~lots~~ in cooperation with local producers;
- (c) are radio broadcasts and mobile training units ~~being~~ used to either train or reinforce training; and
- (d) who is currently receiving individualized/intensive ~~assistance~~ and to what extent this type of assistance is being ~~utilized~~ as a training follow-up mechanism?
- 3.9. What is the effect of the new training program on the ~~rehabilitation~~ of the farm?

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#### 4. Credit Activities

- 4.1. What arrangements have been made by IHCAFE to adequately organize and staff its Credit Division? To what extent the project amendment in this respect has proven to be an adequate decision?
- 4.2. How effective have been BANADESA and BANCAFE in approving and administering subloans to small coffee farmers and in providing them with needed banking services? In this respect, what has been the credit flow to project beneficiaries so far? Are disbursement rates anticipated for the initial years of project implementation being attained?
- 4.3. What level of funding is now available for the credit program, including both investment and production loans? Is the GOH making available stipulated counterpart for such program?
- 4.4. What role has been played so far by IHCAFE credit agents in the development of credit plans for small coffee farmers, in assisting them in loan management, in distributing inputs and in monitoring loan repayments? Has the involvement of IHCAFE credit agents in such activities proven to be effective in project implementation?
- 4.5. To what extent the provision of loans in kind and in cash proven to be an adequate system for the technification of participating farms? In this respect, has IHCAFE proven to be an efficient institution in providing small coffee farmers the needed commodity inputs to technify their fincas?
- 4.6. Are production loans in addition to investment loans being made available to participating farmers by BANADESA and IHCAFE?
- 4.7. What are the project's financial needs for the 1984-85 period? What credit disbursement levels can be anticipated for such period given current credit demand and implementation capacity by participating institutions?

#### 5. Project Acceptability, Technological Adoption and Diffusion

- 5.1. Have target farmers accepted the technification program proposed by IHCAFE technicians? In this respect, to what extent (a) the credit terms designed, (b) the type of assistance offered, and (c) the possibility of a gradual renovation of damaged plantations have enhanced project involvement?

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- 5.3. Has any previous interest in the project among beneficiaries been affected by the current drop in world coffee prices?
- 5.4. Are (persistant) project participants adequately following instructions provided by IHCAFE technicians? That is, are participating farmers replacing old coffee varieties by new ones, repopulating their plantations to optimum levels, and utilizing fertilizers, pest control practices, advanced shading and pruning techniques as expected? If not, why not and what modifications must be introduced for technology transfer to occur?
- 5.5. Are project participants satisfied with the credit assistance (e.g., both investment and production credit) and technical assistance being provided under the project? If not, what are their complaints, and how can existing problems be overcome?
- 5.6. To what extent has IHCAFE acquired the capacity and is involved in promoting the advantages of processing and marketing cooperatives through its technical assistance activities? Have farmers shown any receptivity to such promotion? If not, what modifications must be introduced for the adopted cooperative involvement strategy to be effective?

#### Article IV. Reports

The contractor(s) are expected to present a final evaluation report by February 15, 1984. This report should follow the Project Evaluation Summary (PES) format and it should have the following sections:

1. Recommendations
2. Summary of Findings
  - 2.1. Overall Implementation Capacity within IHCAFE and involved banking institutions.
  - 2.2. Accomplishments with respect to Extension Program
  - 2.3. Accomplishments with respect to Credit Program
3. External Factors affecting project implementation
4. Status of Inputs
5. Status of Outputs

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6. Status of Project's Purpose
7. Description of Project Beneficiaries to Date
8. Lessons Learned

Article V. Relationships and Responsibilities

The contractor(s) will receive technical direction from Brian Rudert and Jack Jordan from the Agriculture Office at USAID/Honduras.

Article VI. Term of Performance

Beginning on/about December 15, 1983 and ending on/about February 15, 1984.

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Fernando Montes	
Mario Contreras	

## Appendix Table C-1

## COMPARISON OF BANADES CREDIT FLOWS FROM IHCAFE AND OWN FUNDS

	AID/IHCAFE Loans 1982-1983 (1)	1982 Loans with BANADESA Funds (2)	AID/IHCAFE Funds as % of (2)
OFICINA PRINCIPAL	11,611	29,228,500	
COMAYAGUA	1,43,899	2,305,100	61.8
CHOLUTECA	82,722	8,621,500	
EL PARAISO	14,812	1,644,400	14.9
DANLI	38,930	3,935,700	9.6
EL PROGRESO	24,621	2,033,700	
JUTICALPA	21,549	5,192,300	
CATACAMAS	12,443	1,920,600	
MARCALA	33,289	1,877,800	
LA ESPERANZA	72,564	1,698,800	
OLANCHITO	46,913	1,272,600	
SAN PEDRO SULA	45,549	43,735,000	
PUERTO CORTES	17,618	1,351,100	
SANTA BARBARA	79,075	1,272,100	55.7
SANTA ROSA DE COPAN	1,34,942	5,327,200	29.9
YORO	13,918	1,148,900	36.0
MINAS DE ORO	88,205	587,200	
SAN LUIS	85,452	400,300	
LA PAZ	11,770	N.A.	
TOTAL	L 6,68,884		

Source: BANADESA, Planning and Finance Dept.; Memoria 1982.

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Appendix Table C-2

## FORMAL COURSES FOR EXTENSIONISTS

<u>Topic</u>	<u>Date</u>	<u>Number of Participants</u>
Methodology	03/82	30
Spray equipment	03/82	30
Coffee culture	08/82	15
Rust/broca	08/82	30
Spray equipment	10/82	12
Coffee culture	10/82	40
Farm management	11/82	29
Farm management	11/82	24
Farm management	04/83	30
Agricultural credit	05/83	31
Coffee culture (disease control)	06/83	30
Methodology	11/83	27
Soil conservation	12/83	17

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Appendix Table C-3  
COURSES FOR PRODUCERS, 1983

No.	Name	Place	Date	Number of Producers
1.	Coffee culture Royo-Broca	El Paraíso	12-23 April	24
2.	Coffee culture Royo-Broca	Pinalejo, Sta. Bárbara	9-20 May	23
3.	Coffee culture Royo-Broca	Santa Rosa de Copán	13-17 June	32
4.	Coffee culture Royo-Broca	Marcala, La Paz	27 June-1 July	31
5.	Coffee culture Royo-Broca	Comayagua	11-15 July	32
6.	Coffee technology and farm administration	El Paraíso	12-19 July	30
7.	Coffee culture Royo-Broca	Colinas, Sta. Bárbara	25-19 July	35
8.	Coffee culture Royo-Broca and farm administration	Comayagua	25-30 July	27
9.	Coffee culture Royo-Broca and farm administration	Las Guanchías, El Progreso	01-08 August	29
10.	Coffee culture Royo-Broca	Yoro	15-19 August	N/A
11.	Coffee culture Royo-Broca	Choluteca	November	N/A
12.	Coffee culture Royo-Broca	Catacamas, Olancho	December	N/A

Appendix Table C-4  
1982 SAMPLE DATA FROM IHCAFE FILES

	Age	Loan Amt.	Mz. per Farm	Mz. in Coffee	qq/Mz.	Credit Lps./Mz.
<u>Model I - All Regions</u>						
Ave.	39.3	4965	15.1	5.7	7.9	4043
S.D.	11.4	-0-	23.9	3.5	2.9	434
<u>Regions</u>						
1. Sta. Bárbara n=14						
Ave.	38.3	5287	10.1	6.0	7.6	4464
S.D.					2.4	470
2. Copán n=9						
Ave.	40.2	5838	10.1	2.8	7.9	4336
S.D.					4.9	254
3. Yoro n=9						
Ave.	37.6	5193	28.7	8.0	6.8	4674
S.D.					1.5	-0-
4. El Paraíso n=9						
Ave.	43.7	5023	38.8	9.2	8.3	4274
S.D.					3.9	702
5. Comayagua n=13						
Ave.	40.5	4816	11.8	5.9	8.1	4256
S.D.					2.1	582
6. La Paz n=10						
Ave.	39.9	6309	10.6	4.0	9.9	4674
S.D.					3.0	-0-
7. Olancho n=10						
Ave.	40.2	4659	6.5	6.1	8.2	4312
S.D.					3.7	551
8. Cortás n=12						
Ave.	40.6	5417	22.8	5.9	6.1	4329
S.D.					1.5	94
<u>Model II</u>						
All regions n=14						
Ave.	34.7	2906	6.0	4.2	8.4	1798
S.D.					2.5	477

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Appendix Table C-5  
1983 IICAFE SAMPLE DATA FROM FILES  
(EXCLUDING REGION 3)

			Loan	Hs.	Total	Hs.	Gross	Coffee	Loan	Gross	Gross Inc./
			Age	Ant.	Fin.	Hs.	Income	qq./ms.	Lpn./Hs.	Inc./Ms.	Hs. Coffee
Ave.	Total	n=129 (Model 1)	40.4	5619	1.3	16.5	8355	8.3	4302	825	1438
S.D.			11.6	2113	-0-	21.9	5925	3.3	608	532	736
Region 1	Sta. Bárbara	n=22									
Ave.			44.4	5755	1.2	14.9	7155	8.8	4775		
S.D.			13.0	1886	-0-	13.6	-0-	2.6	129		
Region 2	Copán	n=27									
Ave.			38.6	5716	1.3	30.3	11353	9.9	4276		
S.D.			8.9	2348							
Region 4	El Parícut	n=9									
Ave.			42.7	5680	1.3	16.6	10997	9.3	4139		
S.D.			13.0	2610							
Region 5	Comayagua	n=30									
Ave.			39.7	5258	1.3	9.6	8112	8.2	4197		
S.D.			10.2	1904							
Region 6	La Paz (only 2 cases)										
Ave.			27.0	7174	1.5	11.0	15,000	11.3	4837		
Region 7	Olancho	n=20									
Ave.			40.5	5683	1.2	11.7	7296	7.2	4757		
S.D.			11.1	1814							
Region 8	Cortés	n=15									
Ave.			37.4	4975	1.2	16.1	4462	6.2	4115		
S.D.			11.6	1898							
Region 9	Central	n=4									
Ave.			49.5	8096	2.0	11.5	6100	7.1	4048		
Model 11											
Ave.			28.6	2394	1.3	7.5	4466	7.1	1811		

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Appendix Table C-6

ESTIMATED ACCUMULATED NUMBER, VALUE OF LOANS, AND PERCENT DISBURSED BY ZONE  
DECEMBER 31, 1983

Region	Loans*	Value of	Value	%
		Loans Approved	Disbursed	Disbursed
1. Sta. Bárbara	320	1,867,292	1,043,118	.56
2. Sta. Rosa de Copán	287	1,608,961	1,071,641	.66
3. Yoro	129	799,355	479,954	.60
4. El Paraíso	144	707,834	518,560	.73
5. Comayagua	412	1,953,134	1,290,526	.66
6. Marcala, La Paz	112	837,583	575,962	.68
7. Olancho	304	1,624,774	1,013,388	.62
8. Cortés	198	1,004,865	604,119	.60
9. Región Central	33	262,824	134,821	.51
TOTAL	1839	10,666,625	6,735,169	.63

\* Number of Investment Loans estimated for period Oct.-Dec. 1983 based on region average loan size since data not readily available. Values also are estimates since exact figures for Oct.-Dec. 1983 are not yet available.

Source: Astacio, Tercer Informe....and IHCAFE, Informe Trimestral....  
Oct.-Dec. 1983.

Appendix Table C-7

ACCUMULATED NUMBER AND VALUE OF NURSERY LOANS, BY ZONE, TO DECEMBER 31, 1983

	Loans	<u>Amt. Approved</u> (Lps.)	<u>Amt. Disbursed</u> (Lps.)
1. Sta. Bárbara	60	561,190	426,945
2. Sta. Rosa de Coán	43	386,272	232,195
3. Yoro	44	435,792	234,313
4. El Paraíso	30	161,149	117,762
5. Comayagua	26	394,034	311,286
6. Marcala, La Paz	22	341,650	217,453
7. Olancho	13	305,781	241,566
8. Cortés	23	287,148	153,222
9. Región Central	7	78,336	45,972
<b>TOTAL</b>	<b>268</b>	<b>2,951,352</b>	<b>1,980,714</b>

Source: Astacio, Tercer Informe....and IHCAFE, Informe Trimestral...  
Oct.-Dec. 1983.

Appendix Table C-8

ACCUMULATED COFFEE INVESTMENT (RENOVATION) LOANS BY MODEL AND ZONE THROUGH  
DECEMBER 31, 1983

Region	Value of Loans Approved		
	Model I	Model II	Total (Lps)
1. Sta. Bárbara	1,306,102	-0-	1,306,102
2. Sta. Rosa de Copán	1,222,689	-0-	1,222,689
3. Yoro	363,563	-0-	363,563
4. El Paraíso	490,107	56,578	546,685
5. Comayagua	1,334,302	224,798	1,559,100
6. Marcala, La Paz	495,933	-0-	495,933
7. Olancho	1,138,914	180,079	1,318,993
8. Cortés	711,966	5,751	717,717
9. Región Central	180,597	3,894	184,491
TOTAL	7,244,173	471,100	7,715,273

Source: Astacio, Tercer Informe...and IECAFE, Informe Trimestral...  
Oct.-Dec. 1983.

## PROJECTED ESTIMATE OF SEEDLINGS AND CREDIT NEEDS FOR 1984

	Region	Plants	Total Manzanas		Credit Needs	
			I	II	I	II
1.	Sta. Bárbara	1.4	453	155	2,265,000	337,500
2.	Sta. Rosa de Copán	1.0	300	111	1,500,000	277,500
3.	Yoro	1.0	300	111	1,500,000	277,500
4.	El Paraíso	.8	240	88	1,200,000	220,000
5.	Comayagua	1.0	300	111	1,500,000	277,500
6.	Marcala, La Paz	1.2	360	133	1,800,000	332,500
7.	Olancho	1.0	300	111	1,500,000	277,500
8.	Cortés	.8	240	88	1,200,000	220,000
9.	Región Central	.6	173	67	865,000	167,500
TOTAL		8.8	2,666	975	13,330,000	2,437,500

Source: Astacio, Tercer Informe....

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