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FINAL EVALUATION OF
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FARM COFFEE
PROJECT

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May 5, 1990

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Report Prepared for
USAID/Tegucigalpa, Honduras

May 5, 1990

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LIST OF ABBREVIATIONS

AHPROCAFE	Asociación Hondureña de Productores de Café Honduran Coffee Producers Association
BANADESA	Banco National de Desarrollo Agrícola National Agricultural Development Bank
BANCAHORRO	Banco de Ahorro Hondureño Honduran Savings Bank
BANCAHSA	Banco la Capitalizadora Hondureña Honduran Capitalization Bank
BANFFAA	Banco de las Fuerzas Armadas Armed Forces Bank (open to public)
BANHCAFE	Banco Hondureño del Café Honduran Coffee Bank
BC	Banco Central Central Bank
CATIE	Centro Agronómico Tropical de Investigación y Enseñanza Tropical Agriculture Center for Research and Teaching
ESF	Economic Support Funds Fondos de Apoyo Económico
FHIA	Fundación Hondureña de Investigación Agrícola Honduran Agricultural Research Foundation
GOH	Government of Honduras
IHCAFE	Instituto Hondureño del Café Honduran Coffee Institute
INA	Instituto Nacional Agrario National Agrarian Institute
PROMECAFE	Programa Cooperativo Regional para la Protección y Modernización de la Caficultura Regional Cooperative Program for the Protection and Modernization of Coffee
ROCAP	Regional Office for Central America and Panama (USAID)
	U.S. \$1.00 = 2.00 Lempiras (Lps.) -- Official rate of exchange (Through March 15, 1990)
	U.S. \$1.00 = 4.00 Lempiras (Lps.) -- Economic Adjustment Rate (March 15, 1990)

1 manzana = .698 hectares = 1.726 acres

EXECUTIVE SUMMARY

The appearance of coffee rust in Honduras in 1979 led to the Project. This disease causes premature defoliation, loss of yield and eventual death of coffee plants. Effective technical packages were developed for its treatment.

The stated Project purpose was "to mitigate the impact of coffee rust on small coffee producers and thus help them to increase yields and raise levels of real income." This was part of a larger developmental goal "to increase the income of the rural poor in Honduras, thereby contributing to an increase in GNP and foreign exchange earnings from coffee."

The purpose was to 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. Expenditures were programmed at US\$ 49,752,000 with A.I.D. bilateral funding of US\$20,750,000 and the remainder from Honduran counterpart funds.

The evaluation objectives were: "1) To evaluate the capacity developed 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; and 3) To review the data collected to determine Project impact and evaluate the validity and adequacy of the data."

The study methodology combined: a review of available IHCAFE reports and data, advisor reports, USAID documents and files; and interviews with IHCAFE personnel, banks, farmers and other interested parties. Data collected from 271 farmers selected at random and interviewed by trained interviewers during the field portion of the study were analyzed and included as part of the findings.

At the farm level coffee yields have increased from 6 to over 25 qq/manzana for those beneficiaries who planted during the 1982-85 period (coffee reached full maturity). Coffee renovation covered about 13,003 manzanas, which is over the 1991 goal of 13,000. Soil conservation measures have begun in all regions. IHCAFE has been able to directly service an estimated 9,815 small and medium size farmers and the number is increasing about 700 annually. The goal of reaching 10,400 should be reached by end-of-Project. Training has reached over 119,000 individuals (some more than once) in a total of 14,639 planned events over the life of the Project. The beneficiary

farmers report substantial change in their coffee growing practices since the Project began: for example, 89 percent reported the use of: field renovation (vs. 56% before); fertilizer (83% now vs. 30% before); insect and disease control (80% now vs. 19% before); and shade regulation (89% now vs. 74% before). Soil samples were taken and analyzed for one complete region and are now being collected in another. There are now 139 technicians working through the regional offices. Paratechnicians are integrated into on-going extension activities. The level of satisfaction of the beneficiaries is high with 90% reporting few problems meeting Project requirements. Farmers report 64 percent of the renovated plots as "good" or "excellent." Three main advantages mentioned were: credit (52%); higher levels of production (49%); and technical assistance (27%). The use of new technology has spread beyond the financed plots with 68 percent of the beneficiaries also reporting the use of recommended practices on additional plantings of their own and 55 percent reported their non-Project neighbors were using some recommended practices.

Credit repayments total over 20 million Lempiras which will permit continued lending in the future. On-farm coffee processing facilities were upgraded with the help of credit. Regular bank operating loans to cover annual coffee maintenance costs were extended to almost one-half of the beneficiaries. The Project has given formal credit experience to 62 percent of the coffee beneficiaries for the first time. Many of these will now be eligible for regular bank credit.

Data validity was good. Information gathered in the evaluation field survey was largely consistent with data provided by IHCAFE from other studies. But some discrepancies exist between Project and survey data. This could be due to bias by the extension agents collecting the data, or lack of accuracy by outside interviewers not well acquainted with the farmers' situation. Reports based on data collected by the Project were available and are used in the regional offices. A central office planning and policy department was established by IHCAFE in 1989 and was beginning to use the reports and data for planning purposes.

Project problems encountered were: the crop diversification program has not been successful; soil testing results have not yet been incorporated in farmer recommendations; level of loan repayment is not as high as desired with 25 percent of the beneficiaries indicating they were behind in payments; although most plots were in good or better condition, 12 percent were reported as "poor" or "lost." Beneficiaries mentioned Project disadvantages as: high interest cost (36%); poor quality of seed plants (15%); and poor advice (10%).

Several recommendations are made for future operations of the Project in the areas of institutional development, extension, credit, and technology diffusion.

For institutional development, combining the current departments of credit, accounting, and finance into a single Finance Department should be considered; the new Planning Division should continue to be strengthened so that clear guidance can be given to the USAID and other projects; the practice of integrating the Project advisors into the operational units of IHCAFE should continue so that the advances made now can continue; and, timely information should be collected from the banks, regional offices and other sources so that the computer center can prepare unified reports for all operational and management needs.

In extension, the para-technician program should be continued as a means of improving efficiency in outreach; the very small coffee farmers should be the focus of future efforts, but credit may not be the most appropriate mechanism; continual training at all levels is important with special emphasis on farm and financial management, production economics, group techniques and new technology; investigation should continue with emphasis on test plots at the farm level; diversification efforts should continue but be based on modifications suggested by soil and other studies; the group model of technology transfer should be applied where possible and directed toward total rural development; and the Project should consider the re-incorporation of an extension advisor to help in synthesizing the experience with PROMECAFE and other diffusion models.

In credit, training should continue at all levels and with special emphasis on repayment; a systematic procedure should be established so that banks can monitor disbursements and repayments; banks should be motivated to take greater responsibility for both technical and credit supervision (including loan collection) and keep IHCAFE informed of current delinquency problems; Project focus should be on the target group as originally defined; lending policy should continue to be directed toward individuals rather than groups; and a policy should be established for the use of any funds collected from defaulted loans covered by the uncollectible reserve fund (written off).

For technology and diffusion, a capability should be developed in IHCAFE for continued examination of the technological recommendations in light of changing coffee prices and soils tests; and standardization of weights and measures throughout the country should be considered as an important part of an improved marketing system for quality coffee.

The major lessons learned from the Project would be: (1) the importance of profitable technical recommendations to accompany credit, (2) the necessity of continually improving intra- and extra-institutional communications and coordination, (3) the feasibility of incorporating private financial institutions into a small farm credit system, (4) the feasibility of using para-technicians for direct farmer contact, and (5) no apparently successful project can afford to ignore the signals and underlying reasons for loan delinquency that seem to always appear over time. It also is evident that the poorest farmers are the most difficult to reach successfully in projects such as this; that felt needs (such as the presence of coffee rust) are important incentives for change; that programs such as this open credit doors for small farmers without previous experience; that the training opportunities afforded at all levels will have a lasting impact beyond project goals; and that on-going and on-site research and experimentation are necessary for project success and continuation.

BASIC PROJECT IDENTIFICATION DATA

1. Country: Honduras
2. Project Title: Small Farmer Coffee Improvement
3. Project Number: 522-0176 (Loan 522-T-044)
4. Project Dates:
 - a. First Project Agreement:
 - b. Final Obligation Date: March 11, 1987 (Final)
 - c. Project Assistance Completion Date (PACD):

Original:	May 26, 1986
Revised:	May 26, 1991
5. Project Funding:

a. A.I.D. Bilateral Funding	US\$ 20,750,000
b. Host Country Counterpart Funds	US\$ 29,002,000
Total	US\$ 49,752,000
6. Mode of Implementation:
 - a. Implementing Agency: Instituto Hondureño del Café (IHCAFE)
 - b. Major Contractors: At present one personal services contractor in credit, one in agricultural economics, and an USDA/PASA employee working in agricultural statistics.
7. Project Designers: USAID/Honduras and Government of Honduras
8. Responsible Mission Officials:
 - a. Mission Directors: John R. Oleson
 Anthony J. Cauterucci
 John A. Sanbrailo
 - b. Project Manager: John L. Jordon, USDA/PASA
9. Previous Evaluations: First Evaluation, January 1984.
 Second Evaluation, January 1986.

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FINAL EVALUATION REPORT**SMALL FARMER COFFEE IMPROVEMENT PROJECT
Project No. 522-0176 (Loan 522-T-044)****A. BACKGROUND****1. Evaluation Objectives**

The Small Farmer Coffee Improvement Project began with the signing of the Project Agreement in June 1981. Amendments to the original agreement in 1986 and 1989 added additional funds and extended the end of project to May 26, 1991. The purpose of the Project is to mitigate the production impact of coffee rust, a fungus, on small farm producers in Honduras by helping 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 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. The Project expected to reach 10,400 small coffee producers in ten years and to have considerable spread effects to others.

The objectives of the final evaluation as stated in the scope of work (Appendix A) include:

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.
3. To review the data collected to determine project impact and evaluate the validity and adequacy of the data.

Results of this evaluation also will be used for planning a proposed new activity in coffee.

2. Political and Social Context

Coffee is an important source of income for close to 60,000 Honduran farm families, with 72 percent being small producers, each with 5 manzanas (8.6 acres) or less of coffee in production. The coffee sector has historically been a significant source of Gross Domestic Product (GDP), foreign exchange, and rural employment. The economically active population associated with the coffee sector is estimated at 500,000 people. In addition, coffee is the major source of income for many low income families in the more marginal, mountainous regions of the country.

Coffee rust (La Roya) began to enter Central America in 1976, first in Nicaragua and then in El Salvador, both neighbors of Honduras. Its entry into Honduras seriously threatened this very important sector and, more importantly, the livelihood of many low income, rural families. The purpose of the Small Farmer Coffee Improvement Project was to mitigate the impact of coffee rust on small producers by helping them to increase yields and raise levels of real income. The Project was implemented by the Honduran Institute of Coffee (IHCAFE), established in 1970 to coordinate all the production and marketing activities in coffee.

The Project is consistent with USAID/Honduras rural development goals and strategy. The goals for the agricultural sector include increasing the income and living conditions of the rural poor, increasing foreign exchange earnings generated by agriculture, raising the contribution of agriculture to the GDP, and preserving and enhancing the natural resource base.

3. Study Methodology

The conclusions and recommendations of this report come from a review of periodic IHCAFE reports, advisor reports, USAID documents and files, intensive interviews with IHCAFE, bank, USAID personnel, technical advisors, farmers, and other interested parties. Most interviews with IHCAFE and banking personnel were held in private to gather as many honest and frank observations about the program as possible. Field visits were made to all regional offices including El Paraíso, Comayagua, Sta. Bárbara, Sta. Rosa de Copan, Yoro, La Paz, Olancho, Central and Cortés. Appendix C is a partial list of persons interviewed. Appendix D lists materials used during the evaluation.

A random sample was drawn of farmers participating in the Project through the end of 1989. The on-farm interviews took place during the period March 9 to April 11, 1990. Four experienced interviewers with coffee production backgrounds from the Santa Bárbara area interviewed the farmers. A copy of the questionnaire used during the interviews is in Appendix F. Average interview responses to the questions also were placed directly on the sample questionnaire in the appendix. Because of the dispersed locations of the sampled farmers, the local IHCAFE extension agents helped locate and take interviewers to the selected farms. But, the extension personnel were not present during the confidential interviews.

A sample size of 300 was chosen as the target number, considering time, resources and a need to minimize the sampling error. There were 283 interviews conducted and 276 finished with complete information. The sample size by region was: 9.8% in (REGION) I; 13.0% in II; 12.0% in III; 15.2% in IV; 13.0% in V; 9.1% in VI; 10.1% in VII; 8.7% in VIII; and, 8.3% in IX.

There was only one refusal, but a few other interviews were not possible because the farmers were not home at the time we called. We often could not make the long trip back to repeat the contact at another time. If another family member could not give complete information, we had to drop the case. The interview was of short duration, informal, but required specific answers. Most of the time and effort involved travel to reach the sampled producers.

The data gathered from this survey were also compared to the information that had been gathered earlier by the Evaluation and Monitoring unit of the Project. The information from the two sources compared closely on most items. (See Appendix G)

Both contractors shared in the preparation of the final report. Ronald Tinnermeier has extensive experience working with and evaluating small farm credit and development projects, especially in Latin America. Edgar Nesman is a noted authority on social impact studies and community development.

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 have led to some erroneous findings, omissions, or incompleteness in some subject matter areas. However, it is our opinion that these interviewing and data gaps will not seriously bias the conclusions presented in this report.

4. Report Organization

The report largely follows the evaluation summary format requested by USAID and specified in the evaluation scope of work. The Executive Summary and Project Identification Summary Data Sheet head the report and stand as "self-contained" documents. The present background section presents the objectives of the evaluation, the political and social context within which the project operates, and the methodology used for the study. The next section includes the main findings of the evaluation and includes sections on: conditions precedent and covenants; overall institutional development; extension activities; credit activities; project acceptability and technology adoption, and conclusions and recommendations. The appendix includes supporting documents, main contacts, references, basic data tables, and a copy of the questionnaire.

The sections on conditions precedent, general institutional development, and credit activities were the primary responsibility of R. L. Tinnermeier. The extension activities and project acceptability, technology adoption and diffusion were handled by E. Nesman. He also supervised the farm level interviews and analyzed the resulting data. Of course, both researchers shared responsibility for the general findings and the final report.

B. MAIN FINDINGS

The Project Logical Framework is attached as Appendix B. The Logical Framework provides a concise summary of the purposes, inputs and outputs, and accomplishments of the Project.

1. Conditions Precedent and Covenants

The conditions precedent to disbursement in the original agreement 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.

These conditions were met, although with some delay, except 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. An approved operational agreement exists and it is modified periodically to reflect actual program operations.

The addition of twenty new credit agents did not take place 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 (Much of IHCAFE's operating budget comes from this source), and (2) the expected need for credit agents declined since the agreements with participating banks shifted some 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. USAID canceled this condition precedent through Implementation Letter No. 34, on August 25, 1983.

The Special Covenants section of the original 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 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.

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
IHCAFE	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 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 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 reflect the true cost of capital. However, if other programs lending to agriculture don't raise their rates, the project will continue to 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 that paid in the informal or non-institutional markets (money lenders, "coyotes," truckers, etc.), estimated to be 30-40% annually.

Delay in processing participating bank requests for reimbursements is still slow. The process is now operating better than during the early stages of project implementation but there is still need for speeding up the process. The recent transfer of project management within the Central Bank to an agricultural project management unit with computer capabilities may help speed up the process.

Two additional conditions precedent were added to the Project Amendment 2, dated June 5, 1986. The first required IHCAFE evidence that they had successfully negotiated the involvement of the private banks using their resources for annual production credit for Project clients. Commitments by Banco Sogerin, BANHCAFE, BANADESA, and Banco de Occidente were made in August, 1986 and USAID accepted the condition precedent as having been met through Project Implementation Letter No. 46, August 25, 1986. The second condition required an IHCAFE feasibility study showing ways to improve the efficiency of coffee processing facilities and to develop a scheme for the privatization of public processing facilities. USAID Project Implementation Letter No. 54 deleted this requirement since it would be highly unlikely the very inefficient, out-dated processing facilities could be privatized. In that same letter, USAID accepted a shift of funds from large processing facilities to on-farm units (beneficios) for improving export quality coffee.

An audit of March, 1989, indicated two apparent non-compliance of terms by the GOH and IHCAFE relating to counterpart funds and vehicle use. These were satisfactorily responded to by USAID/Honduras.

2. General Institutional Development

a. Project Implementation

IHCAFE continues to improve its effectiveness in coordinating the technical assistance and credit activities of the Project. Many administrative problems were evident during the first evaluation but most of these were resolved. The major coordination responsibility is with the Coordinating Unit. Perhaps the biggest institutional challenge has been to integrate the operation of the Project into IHCAFE itself. Presently the Unit is responsible for Project coordination but field personnel, logistics, training, vehicles, and total budget responsibilities, among others, are with the traditional lines of authority within IHCAFE. The Extension Department, one of three within the Agricultural Division, is the primary administrative unit carrying out the Project technical assistance and credit

supervision at the farm level. The head of the Coordinating Unit was also named head of the newly formed IHCAFE Planning Division, which should further assure the integration of the Project into the activities of the institute.

Very little has been done about the Credit Department. Its current primary responsibility is the collection of past delinquent loans issued by IHCAFE before the USAID/IHCAFE Project began. The original Project design included some 20 credit agents in the field. That was modified through a Project Agreement where there would be one credit agent in each regional office (Comayagua implemented a different strategy with an equal number of credit and extension agents). The Credit Department lacks a role in these field credit activities. Given the design change and because the Credit Department is only working with past delinquency, it is unclear what its tie should be with the Project. It could play a role in loan collections but much of that work is in the field, not in the central office. Thus, some relocation of its staff to field locations would be required for it to work effectively with the Project. The DAI study suggested the credit department be combined with other components into an integrated Finance Department, but this has not been done yet.

Over the life of the project, particularly during the last two years, there has been much information gathered on the operation of the project at the beneficiary level. Most of these data were gathered with the help of the local extension agents and then confirmed with field checks. The computer facilities at the national office are being continually upgraded so that this information is timely and useful at all levels. The coffee production information is useful beyond the project office as an input in national economic policy determinations. The computer facilities at the regional offices have also been helpful in the information link. There is now telephone service to all the regional offices and there is the possibility of fax service in the future. Our field interviews with project beneficiaries largely confirmed the accuracy of the data that are being gathered.

Considerable data are now on the microcomputers and a large number of Project reports and summaries have been published. Most of the regional offices are actively using their computers and, as a result, are able to submit more timely reports to the main office. Nevertheless, some problems on data collection and use still exist. Regional office staff need to be continually trained in the use and maintenance of their equipment. Especially important will be training on how regional offices can generate information useful for project implementation, monitoring, and evaluation at that level.

The biggest weakness in data collection and use at present relates to incomplete credit and loan delinquency information. The main office does depend on monthly or other periodic reports

from the various participating financial institutions and these are often delayed or submitted with errors. Furthermore, the banks do not have a consistent reporting format so many of the data are not comparable. The credit advisor is working hard with the banks to obtain such standardized data on a timely basis. This effort is especially important now since the Project is facing increasing loan delinquency and must be current on the repayment status of borrowers and regions so that problems can be attacked immediately. However, staff at all levels are very much aware that this is a critical time for the Project. As a consequence, all regional offices have formed an interinstitutional credit collection committee to study loan collections and to take appropriate action for problem cases. These committees are made up of IHCAFE regional directors, extension/credit agents, and bank representatives.

Availability of quality seed on a timely basis for the nurseries in all of the regions was a serious problem in the initial years of the Project. Lack of good seed was a problem in the field in 1984 and was still a problem the first part of 1986. However, this was not found to be a serious problem during the current evaluation field visits. But some internal IHCAFE documents still mentioned seed problems, suggesting this problem has not disappeared entirely. Nurseries are now established on farms and little financing goes toward the larger, harder to manage nurseries.

The control of Project funds by IHCAFE appears to be adequate. Periodic internal audits have been completed in the regions. When a problem arises or is suspected, the auditors are sent to the field to look into the matter. An outside auditing firm was employed to look at the credit side of the Project and their report was released in 1986. No major problems were identified by that audit. The USAID Regional Inspector General for Audit reported findings from a detailed audit of the Project in early 1989 by the Price Waterhouse accounting firm. That audit found weaknesses in procedures to control the use of loans for intended purposes, poor procedures to control delinquent loan payments, lack of an accounting system procedures manual, project accounting records not always in accord with USAID/Honduras records, poor filing system for supporting documentation, and lack of a plan to use microcomputers. All problem areas have been studied by IHCAFE and have been, or are being resolved, in the view of USAID. This evaluation concurs with that conclusion.

IHCAFE no longer handles input supplies for the participating farmers. Farmers either go to private suppliers or to BANADESA, the major governmental distribution network for the rural areas.

b. Loan Fund Management

The long delays associated with the banks receiving their reimbursements through the Central Bank (BC), as identified during the first evaluation, seem to have been completely resolved. The participating banks indicated that the present turn-around for reimbursements is one month or less and delays are no longer a problem. Nevertheless, it would appear this turn-around time could be reduced after the process is computerized which is now in process.

The BC is now asking for less information about the individual farmer loans which should also have contributed to speeding up the process. No significant problems in the discounting system were identified during the evaluation nor were any mentioned by the BC or the participating banks. In summary, the rather serious delays at the beginning of the Project have been eliminated and the system is operating well now. Loans for Project borrowers covering operating and maintenance costs are also available through BC discounting procedures. All participating banks seem aware of and are using such funds for Project clients.

c. Foreign Technical Assistance

The assistance of the foreign advisors continues to be an important element in Project implementation. All the advisors are known in the field and have, or are making significant contributions to the Project (except for recent arrivals, of course).

The present advisors actively assist in the development and presentation of in-service training seminars and make regular visits to the field offices. Their work is a key part of the Project and should be supported and continued, especially if any Project extension takes place. It is through their efforts that considerable data on Project activities and accomplishments are readily available.

The credit advisor position has been especially important since credit is a major aspect of the coffee improvement project. The first advisor was very instrumental in implementing credit procedures and in training field staff. The third credit advisor (Honduran) has only been with the Project a few months but is obviously going to be very important in the loan collection efforts and in continued training of personnel. A revised credit manual reflecting many changes since 1986 is now in draft form and should be released shortly.

A Rural Sociologist was part of the advisory team during the first phase of the Project. He worked with the regional offices in a self-evaluation of administration and extension methods. At

that time, the regional administrators, the agents, the para-technicians and the beneficiaries came together to look at key aspects of the project. The impact of the self-evaluation process was mentioned in all of the regions where it was completed. It was seen as an important step in improving the communication process at all levels. It also gave the extension agents some needed feed-back on their effectiveness and areas of needed improvement. This professional was not replaced after the contract was finished.

The agricultural economist also has made significant analytical contributions to the Project. Works completed include: a study of the returns to alternative investment plans used in the field, repayment capacity under different scenarios, an estimate of the effects of different coffee prices at the national and producer levels, Project impact estimates, and production forecasts, among others. A replacement agricultural economist joined the Project in March, 1990.

An USDA/agricultural statistician with the Project has been instrumental in introducing an area frame sampling procedure to IHCAFE. This has permitted annual, representative field surveys to gather not only Project data but general information on all coffee producers. Based on these data, IHCAFE has released two annual production forecasts for the coffee sector. That work is now being integrated into the newly formed Statistics Department of the Planning Division.

d. National and Foreign Institutional Links

PROMECAFE completed an area profile study for the Comayagua region. The four volumes resulting from the study were completed in 1986 but few copies were available. A field survey of coffee producers in the Olancho region was completed in early 1990 but the data have not been coded or analyzed yet.

Coordination and communication between PROMECAFE and the USAID/IHCAFE Project seems to be weak, often resulting in conflicts in program operations. For example, the Olancho study did not coordinate with the data collection and analysis efforts of the AID/IHCAFE Project researchers. It would seem their studies should be coordinated and made complementary to the on-going data collection and analysis efforts of the Project. PROMECAFE has introduced the group model being used in the Comayagua region. Other regions are interested in the experiences with the group model but are skeptical of the approach since IHCAFE has had high loan delinquency rates with groups organized in the past. Observations of this evaluation team concerning group activities are summarized in the section on extension activities.

The strongest regional links with PROMECAFE are in the technical areas through the distribution of bulletins and other information releases and through their participation in national technical seminars on coffee production. ROCAP has also been involved in many of the same activities.

The Project is now funding some soil classification studies in the Santa Bárbara and Comayagua areas so ties have been established with a national soils laboratory (FHIA). The Santa Bárbara study has been completed. The Comayagua soil samples have been taken but the analysis and final report are in process.

The Project, with the active help of the credit advisors, has been relatively successful in attracting banks to the program. Those presently active include BANADESA (public), BANHCAFE (semi-autonomous), Banco de Occidente (private), and Banco Sogérin (private). Four other banks have been accepted into the program and are in varying stages of implementation. These include: Banco de los Trabajadores, BANCAHORRO, and Banco de las Fuerzas Armadas, and BANCAHSA, which are all private. BANADESA handles over one-half of the loan volume, BANHCAFE around one-fourth, and Banco de Occidente and Banco Sogérin cover the remainder. The new banks are just beginning to handle Project loans. Sogérin has only been working with the Triniteca Cooperative in Trinidad, but is now inactive due to problems of repayment by that cooperative.

The credit provided through the USAID/IHCAFE Project is a significant part of BANADESA's portfolio in many branch offices. Because of the smaller amounts involved, the Project credit is less important in the other banks' portfolios, although its importance varies by region.

3. Extension Activities

a. Personnel

Although the Project Agreement anticipated an expansion in the number of coffee extension agents in the field, the GOH was not able to comply with this goal. As shown in Appendix Table E-14, the number of extension agents has stayed about the same over time rather than increase as was proposed. The condition precedent was modified by USAID when it was realized that the GOH would not be able to add more extension personnel due to budget constraints. This constant number of agents has been compensated for by hiring temporary field extension workers paid for by Project funds through the USAID/IHCAFE Project Unit and by using local farmers as para-technicians.

The estimates for the number of para-technicians varies from 150-300 depending upon the source. Since the para-technicians work only part of each week, the numbers at any one time are not known with accuracy. The para-technicians have had about 5.9 years of schooling, on the average, and the majority are coffee farmers who have participated in the Project. The para-technician system seems to be working well after a few years of operation, but its application varies greatly from region to region. In some regions the para-technicians are only seen as messengers of the Project to help notify clients of meetings, planned extension agent visits, etc. In others, the para-technicians are used as assistants by the extension agents in extending and in checking on use of technical recommendations. Nevertheless, the use of para-technicians plus additional emphasis on working with groups of coffee producers can help overcome the limited number of extension agents. Even so, if the Project expects to expand much more, it will probably have to hire additional field staff.

Approximately 80 percent of the agents have an educational preparation that is equivalent to graduation from the John F. Kennedy School, not a high level of technical achievement. While this level may be adequate to start the job, it indicates a need for continued strong in-service training.

In-service training for extension agents has taken several forms: formal courses, regionally managed field training, informal training by foreign advisors, on-the-job training by those more experienced, and centrally managed formal training. All areas still need strengthening. Some extension agents have attended almost all available courses (normally those agents closer to Tegucigalpa or San Pedro Sula) while others have attended few or no courses. Some complain of course duplication. Even experienced agents with good technical and methodological backgrounds still need training in farm and financial management to be able to meet the demands of the Project. No records were

found of who had or had not attended courses. Thus, the invitations to future courses will be a hit and miss situation. It would be advisable for IHCAFE to maintain up-to-date records on training received by name, subject, and level of training to guide future training activities.

The other principal type of training received by IHCAFE extension agents takes place 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. Most new agents go through a month long orientation at the training center in La Fe but some miss this because of timing problems. 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 regional director.

The regional credit agents may receive the same general training offered the extension agents but they also are given special workshops specifically oriented towards loan extension and repayment.

b. Project Promotion and Coverage

Although promotion was a specific need when the Project first began, it is no longer of high priority. The relative success of the Project in terms of increased coffee production on the technified parcels has generated considerable interest on the part of other producers so promotion is no longer needed. The problem may now be how to service all of the requests.

The number and value of loans extended by model, region, and year are shown in Appendix Tables E-1 through E-6. IHCAFE technical assistance and credit reached an estimated 9,815 coffee farmers. This represents about 47 percent of the estimated 21,000 coffee producers in the country with less than 21 manzanas of coffee in production or 27 percent of all coffee producers.

The data in Table 1 provide additional insights on coverage by region. It should be recognized that these figures are based on the area frame sampling surveys and are, thus, only estimates. A 95 percent level of confidence was used to generate the numbers.

Table 1. Extent of Coverage Within the Small Farm Coffee Project by Number of Farmers, Area Covered, and Region

Region	Number of			Total Area (Mnz.)		
	Farmers* (Total)	IHCAFE Borrowers	(%)	in Coffee	IHCAFE Financed	(%)
Sta. Bárbara	3,257	938	29	16,641	1,453	9
Copan	3,508	1,535	44	13,971	2,244	16
Yoro	1,591	1,234	78	7,381	1,551	21
El Paraíso	2,359	1,404	60	12,012	2,067	17
Comayagua	2,130	1,316	62	10,653	1,672	16
La Paz	994	810	81	4,144	1,046	25
Olancho	2,419	1,096	45	11,406	1,289	11
Cortés	3,262	745	23	16,415	988	6
Central	1,495	737	49	6,429	803	12
Total	21,016	9,816	47	99,053	13,114	13

SOURCE: Area Frame Sample Data, Departamento de Estadística, IHCAFE.

As can be seen, the extent of coverage varies from region to region. Of course, it should be remembered that these are very rough estimates and should be used with care. Even so, it does appear that there is still considerable room for Project growth within the small farm coffee sector, assuming the remaining farmers are receptive to receiving technical assistance and credit. The "sondeo" method of studying an area might be applied to measure the number and characteristics of those not yet reached.

The earlier estimate of women participants was about 7%. We found the percentage to be slightly higher (9.7%) in our sample. In a few cases, the interview was conducted with another person who had more knowledge about the loan and the crop; usually the husband or a son. Most of the women actually took part in the operation of the coffee plot and some in the actual field labors. We found that the women also participated in the extension meetings and in some of the short courses.

We found no women extension or credit agents. We did find some women in bank positions related to the project. Some women also participated in the organized groups in the Comayagua

region. There was at least one training course organized especially for women at the Panamerican Agricultural School at Zamorano. There were three regions that specifically mentioned working together with women personnel from other agencies to help solve community problems.

To a large degree the effectiveness of extension activities can be measured by the adoption of recommended practices by the beneficiaries. In terms of project promotion, 82.5% of the respondents indicated that they first learned of the Project from the extension agents. A few (0.7%) indicated that they heard about it from the credit agents or the para-technicians (1.8%). Friends or neighbors accounted for an additional 15.0%.

A 1986 study by Seligson found that for a small sample of Project participants in Comayagua, about 31 percent had only been visited by IHCAFE technicians once a year or less. Our larger field survey suggests a higher contact rate. At the time of the survey in March 1990, most of the beneficiaries (52.2%) said they had contact with someone from IHCAFE at least once a month. An additional group (37.7%) said they had contact at least "a few times during the year." An estimated 5.8% said they had contact only about once a year and some (3.6%) said they never had contact or at least not recently.

We were also interested to find out if the contact was individual or in a group. Respondents reported that the contact was usually with the extension agent and alone (76.4%); some reported meeting with the extension agent but in a group setting (11.2%). Contact with the para-professionals was indicated by 21.7% and with the credit agents, 11.6%; in both cases, meetings were usually individual rather than in a group setting.

The extension agents used a variety of teaching methods in their work with the beneficiaries. We asked the farmers if they had participated in any of the meetings where talks or demonstrations were presented. About 78.1% of the farmers said they had attended such meetings. We then asked which topics or themes were of most use to them. The following are those mentioned as most useful (We recorded up to three topics from each farmer if that many were mentioned):

-Disease Control, 43.1%;	-Planting Methods, 10.1%
-Fertilizer Use, 24.4%;	-Shade Control, 9.4%
-Pruning, 15.6%;	-Seed Bed Preparation, 8.0%
-Plant Nurseries, 17.0%;	-Soil Conservation, 7.2%
-General Culture, 12.7%;	-Compost Prep. and Use, 4.7%

A number of other special topics were also mentioned: seed selection, irrigation, soil analysis, coffee processing and farm management.

Considerable time, effort and funds have been used in short courses for the beneficiaries so we were interested in finding the importance of these activities. Of those interviewed, 56.4% reported that they had participated in at least one of the courses. We also asked them which themes or topics were of greatest utility. The responses were similar to those mentioned earlier and were:

- | | |
|--------------------------|--------------------------|
| -Disease Control, 19.6%; | -Soil Conservation, 7.2% |
| -General Culture, 11.2%; | -Plant Nurseries, 7.2% |
| -Fertilizer Use, 10.1%; | -Coffee Processing, 5.8% |
| -Planting Methods, 8.7%; | -Shade Control, 4.7% |
| -Pruning, 7.6%; | |

They also mentioned compost use, seedbed preparation, irrigation, soil analysis, human relations, cattle raising, coffee marketing, farm management, credit management and crop diversification.

We were interested in the location of the courses and found that 45.3% reported attending courses at the regional level, 22.5% in the local community, 14.9% at La Fe (the national training center), and a few (3.6%) at the Panamerican School of Agriculture or at an international center. The importance of these educational activities in the Coffee Improvement Project were confirmed both, from our conversations at the regional level, as well as from individual farmer interviews.

Successful rural development projects usually "spill over" beyond the target units. We asked the beneficiaries two questions to measure the overall diffusion of the coffee improvement practices recommended by the project. First, we asked them if they were using any of these practices in other plantings of coffee on their own farms that were not financed by the project. Many of the respondents said they did (70.4%). Then we asked which practices they were using in this manner. The following list gives an idea of the practices that are part of this diffusion:

- | | |
|-------------------------|--------------------------|
| -Fertilizer Use, 29.0%; | -Planting Methods, 12.3% |
| -Pruning, 25.4%; | -Weed Control, 7.2% |
| -Shade Control, 17.8%; | -Compost Use, 4.0% |

They also mentioned seed beds, soil conservation, drastic renewal and "everything".

Diffusion of recommended practices to non-Project neighbors was also ascertained. More than one-half (56%) of the respondents indicated that they had observed their neighbors using some of the recommended practices. We also asked them for specific examples of the practices and obtained the following responses:

- | | |
|--------------------------|-----------------------------|
| -Fertilizer Use, 31.2%; | -Seed Bed Preparation, 8.7% |
| -Disease Control, 13.4%; | -Soil Conservation, 6.9% |

- Pruning, 12.0%;
- Planting Methods, 10.5%;
- Compost Use, 5.4%
- Weed Control, 4.3%

It should be pointed out that IHCAFE field personnel also work with coffee producers who are not part of the USAID/IHCAFE Project. Extension agents indicated they spent anywhere from 80 to 100 percent of their time with the Project. No doubt, the estimates of the agents in the self-evaluation include all contacts with farmers, however incidental. But many non-Project producers are influenced by the Project. The 1989 National Coffee Survey estimated 40 percent of the non-Project coffee producers had implemented new practices as a result of Project influence. Our producer survey suggested an even higher multiplier effect of the Project. Sample respondents estimated that 55 percent of their non-Project neighbors had implemented some of the technical recommendations of the USAID/IHCAFE Project.

c. Beneficiaries

Selection criteria include the guidelines used for defining the target group as spelled out in the Project Agreement, the extension agent's own technical and personal evaluation, and the bank's judgment of credit worthiness. General Project requirements for coffee renovation include: no more than 21 manzanas nor less than 1.5 Mzs. of planted coffee; per manzana yields of less than 13 quintals (pergamino seco); adequate resources for coffee production; and access to infrastructure to permit technical assistance and marketing. A maximum of five manzanas can be financed through the Project. Those wishing loans for diversification must meet essentially the same conditions. Farmers wishing coffee processing loans can have up to 30 manzanas of coffee in production. Maximum loan size per manzana financed is now Lps. 3,800 for Model I and Lps. 2,000 for Model II. Maximum loan size for processing facilities is Lps. 15,000.

Most agents now recognize that they made some bad selections the first few years of operation and these are now showing up as delinquent borrowers. Selection seems to have improved in recent years as the field technicians gained more experience. Also, in some regions the para-technicians apparently play a critical role in helping the extension agents decide whether or not a given farmer should enter the Project because of their extensive local knowledge. Agents also use accessibility, sometimes residency on the farm, and moral standing in the community as selection criteria. It appears that the selection process is consistent with the target group specified in the Project Agreement, although an estimated 35 farmers have received credit who did not meet the requirements of the Project. This small number of outsiders is not considered significant given the more than 9,000 borrowers. Nevertheless, field offices and participating banks need to be continually reminded of the

borrower selection criteria specified in the Project Agreement. Once a borrower is found to be outside the Project selection criteria, the loan should be shifted immediately to non-Project funding sources.

As determined by recent field sample surveys, the average farmer receiving technical assistance and credit for complete renovation (Model I), as of the end of 1989, was about 39 years of age, had a total farm size of 30 manzanas (21 hectares), total coffee of a little less than 6 manzanas (4 has.) with production at 13.6 qq. (100 lbs.) per manzana. The average loan size approved was Lps. 4,070 or Lps. 3,131 per manzana. The average size of coffee plot financed by the Project was 1.3 manzanas.

Using the current number of extensionists as shown in Appendix Table E-14, the number of beneficiaries per agent is illustrated in Table 2.

Table 2. USAID/IHCAFE Beneficiaries per Extension Agent by Region - 1989

Region	No. of Agents	Farmers per Agent	Region	No. of Agents	Farmers per Agent
Sta. Bárbara	15	62	La Paz	12	68
Copan	14	110	Olancho	9	122
Yoro	10	123	Cortés	12	62
El Paraíso	13	108	Central	6	123
Comayagua*	14	94	National Ave.		93

*Six of 8 credit agents assumed for extension functions to be comparable.

SOURCE: Regional Offices, IHCAFE

Clearly, there is great disparity among the regions in terms of the number of Project borrowers handled by each extension agent. However, a number of caveats are in order. The regional estimates do not include the temporary staff since their distribution is not known. Furthermore, these figures are only in terms of the Project participants and do not include other beneficiaries of IHCAFE's services. Also, farmers are more dispersed in some regions as compared with others, so fewer can be reached with equal resources. But it would appear that some extension agents need to be added to some of the regions.

These figures also indicate there may not be much excess capacity in the system since field interviews suggested that each agent can not effectively handle many more than 80 borrowers when they are receiving credit. Even so, most of the regional offices indicated it would be possible to reach more borrowers without significant increases in personnel.

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 and in working with groups. To date, the only regions organizing groups are the Comayagua, Olancho, and Central regions, probably because IHCAFE had such a poor experience working with groups in the 1960's (primarily for credit purposes). Field staff in other regions are very skeptical about the long-term benefits of groups, given the very high delinquency rates associated with past IHCAFE organized groups. However, if the Project is going to continue to expand, some type of farmer grouping or association will be needed given current field staff numbers and resources.

The experimental model of technology transfer to groups has been used in the region of Comayagua since 1985. This model has been based on a group approach rather than the individual farm visitation model that has been used traditionally. The model is now used completely in all of the areas of the region and has been introduced in the Olancho and Central regions. In Comayagua, there are an equal number of extension and credit agents. The extension agents are responsible for the teaching aspect of the work and the credit agents are responsible for loan supervision. There is an overlap of roles so that either of the two can fill in for the other when they make visits to the farm or community.

This program was being experimented with at the same time that the present project was being initiated so that they have both grown together. It is felt that if the groups had been functioning well at the beginning of the project, it would have been much easier to select and supervise the beneficiaries. Now, most of the new loan applicants are selected from the organized groups, which serve as a medium for promotion as well as sorting out the applicants.

Farmer supervision is still highly paternalistic and participating 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. While strict supervision is necessary and desirable, there appears to be a need for a better process of evaluation of farmers' progress toward educational goals.

The area where the farmers are most dependent is in management of their finance and farms. Farmers often rely heavily on the extension agent for information about their loans. With the current high coffee prices, the farmers are even further in need of financial education so they can use any increased income wisely. Farm management was mentioned as one of the most important topics for future beneficiary training. We sensed that it was part of a growing realization that not all of the beneficiaries have made the best use of their increased income. We also sensed that part of the loan repayment problem is related to lack of record keeping and simple budgeting. Farm management is the top training item that has been requested by the agents for this coming year, indicating that they feel the need for further training so that they, in turn, can offer more local training. This topic has already been included in some of the group meetings in the Comayagua region.

An additional topic that might be included in farmer education programs relates to crop diversification. IHCAFE seems to be more aware now about the need for diversification as compared with a few years ago. Unfortunately, moving from a specialized system around coffee to a more general technical assistance program has many traps. In addition, most of the IHCAFE diversification work is located in the more tropical areas of the country where little coffee is grown. The movement into cardamom was a disaster since the market was quite small and prices dropped precipitously as increased output hit the market. IHCAFE should do more of the diversification testing on farms in the coffee areas so recommendations can be given the farmers on this important topic. Such work should not be just limited to export type crops. Livestock and other locally consumed products may have greater potential for many producers. The last project amendment allowed the integration of fruit and other tree species into the diversification program. This option appears to have considerable potential but needs to be investigated and introduced carefully.

It appears IHCAFE is in need of additional policy analysis and direction in its work, not only for diversification, but more generally. It must clearly define its goals and purposes and translate those into clear courses of action. At present, there seems to be considerable confusion as to what IHCAFE is trying to accomplish. The newly formed Division of Planning is expected to provide some leadership in evaluating and defining the policy and direction IHCAFE should follow in the future.

d. Para-technicians

The para-technician program continues to function in all of the regions. They are more active in some regions and some of the offices within the regions than in others. There seems to be less emphasis in the use of para-technicians now than there was

earlier. The program is flexible and varies with the agent and the time of year. The para-technicians are used for specific tasks and for a specific time but there is considerable turnover.

4. Credit Activities

One of the outcomes of the project is that it has opened the door to credit for many small farmers that have never had credit before. This question was discussed in each of the interviews with bank personnel and they felt that it was one of the positive outcomes of the project. No figures were given but all mentioned that they now had many new clients for regular bank loans as a result of the new credit experience. On the negative side, they also mentioned that some of the very small producers were having extreme difficulty meeting the pay back requirements and they would likely fail and this would close the door to any regular credit to them in the future.

a. Level of Funding and Credit Flows

Information on the number of loans and volume are available through December 1989. Five different types of loans are extended through the Project: (1) complete renovation (Model I), (2) partial renovation (Model II), (3) plant nursery establishment, (4) diversification (alternative crops), and (5) coffee processing facilities. The accumulated figures for these loan categories are shown in Table 3.

Table 3. Total Accumulated Credit Flows, by Purpose, Through December 1989.

Loan Type	No. of Loans	Lps. Approved (000)	Lps. Disbursed (000)	No. of Manzanas
Model I (complete)	10,061	50,318.7	42,614.3	12,487.0
Model II (partial)	330	852.3	720.3	516.0
Nurseries	847	8,060.6	6,006.3	NA
Diversification	40	147.8	56.0	44.5
Processing	374	1,803.3	1,714.1	NA
Total	11,652.0	61,182.7	51,111.0	13,047.5

SOURCE: Appendix Tables E-1 to E-7. NA = not applicable.

By the end of 1989, a total of 11,652 loans (all types) worth Lps. 61,182,700 had been approved. Of that amount, Lps. 51,111,000 or about 84 percent had actually been disbursed. It should be pointed out that there are several planned disburse-

ments for the renovation loans over the first two years which may explain some of the delay in disbursements. Withdrawals are permitted more quickly for the nursery and processing loans since they are often shorter in term. Additionally, prudent borrowers seldom withdraw the total amount of credit available to them.

The distributions of all accumulated credit flows by region are shown in Table 4. Santa Rosa de Copan was the largest region in terms of both number of loans and value of loans approved. It was followed by El Paraíso and then Santa Bárbara, Yoro and Comayagua. This distribution of credit is fairly consistent with the coffee area estimated for each region. Census estimates of coffee areas show Santa Bárbara to be the largest region (for target producers of the Project with 1.5 to 20 manzanas of coffee), followed by Santa Rosa de Copan and Cortés.

Table 4. Total Accumulated Credit Flows by Region Through December 1989 (all loan types).

Region	No. of Loans	%	Lps. Approved (000)	%	Lps. Disbursed (000)	No. of Manzanas
Sta. Bárbara	1,269	13	7,474.2	13	5,797.0	1,456.0
Copan	1,939	20	11,087.0	19	8,649.3	2,202.5
Yoro	1,438	15	7,740.3	13	6,619.3	1,545.0
El Paraíso	1,666	17	8,200.9	14	7,221.4	2,068.0
Comayagua	1,522	16	7,378.1	12	6,320.1	1,681.0
La Paz	972	10	5,459.4	9	4,453.1	1,043.5
Olancho	1,020	11	5,202.8	9	4,919.7	1,245.5
Cortés	972	10	4,915.7	8	3,838.5	1,003.0
Central	854	9	3,724.3	6	3,292.6	803.0
Total	11,652	100	61,182.7	100	51,111.0	13,047.5

SOURCE: Appendix Tables E-7 through E-10.

The number, value of loans approved, and value disbursed for Model I loans (the major credit activity) over the life of the Project are shown in Figure 1. As can be seen, the peak in loan activities was in 1987 and has been declining since that time.

The reasons for the decline in recent years are unclear. Lack of loan funds does not appear to be a problem. It could be because the system has almost reached its maximum coverage

Figure 1.

possible with existing personnel and facilities or it could be because the coverage area is almost saturated in terms of potential numbers (clients meeting Project requirements). It's our judgement that both scenarios hold, depending on the region. Some regions seem to be handling a large number of loans and would probably find it difficult to reach many more producers (under the current approach of working with individual farmers). Other regions appear to have already reached a fairly high percentage of the potential number of producers meeting Project entry requirements.

For example, in the La Paz region, the Project has reached an estimated 85 percent of the coffee producers with 2-20 manzanas of coffee. All or a portion of the remaining 15 percent may not meet the credit or other conditions for entering the Project. The Yoro region has covered an estimated 80 percent of its potential clients. Coverage by other regions ranges from 25 to 67 percent of those potentially available in terms of coffee area in production (See Appendix Table E-11).

Women borrowers made up approximately 7 percent of all borrowers through the end of 1989, as shown in Table 5. However, they represented almost double that figure in the regions of Santa Bárbara and La Paz. These figures are based on estimates from the area frame sampling results so will differ somewhat from figures on borrower and loan numbers in other sections of the report.

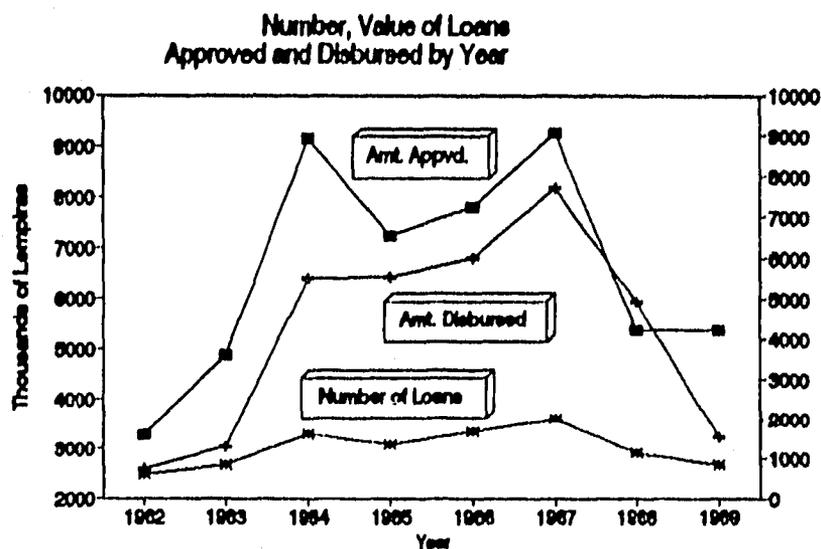


Table 5. Number and Percentage of Borrowers by Gender, December 1989.

Region	Total Borrowers	Women Borrowers	Percentage Women
Sta. Barbara	938	134	14
Copan	1,535	119	8
Yoro	1,234	66	5
El Paraiso	1,404	81	6
Comayagua	1,316	97	7
La Paz	810	84	10
Olancho	1,096	68	6
Cortes	745	41	6
Central	737	34	5
Total	9,815	724	7

SOURCE: Appendix Table E-11.

b. Loan Administration

Problems in loan approval and processing that occurred during the first couple of years of the Project were largely eliminated. Currently the approval process by the banks is functioning relatively well. However, during certain times of the year the processing of loans for basic grains does conflict with coffee loan processing. This problem has been largely resolved by the banks placing temporary employees in the branch offices to help process the loans.

The only other problems identified were those associated with changes of personnel, either in IHCAFE or in the banks. New employees require time to learn the system and may be reluctant to make decisions. When this happens, there are delays in loan processing.

Each of the participating banks has extended Project credit through cooperatives and this appears to have had mixed results. Because of this, good planning and care must be taken if additional cooperatives are brought into the Project. All indications are that the credit is reaching the target group of farmers as specified in the Project Agreement, with only small deviations as discussed previously.

c. Delivery Mechanism

As has been true throughout the life of the Project, BANADESA is the major participant in the credit component. However, its relative share has dropped from about 67 percent in 1983 to the present 49 percent as shown in Figure 2. During the past few years private banks have become more active.

BANHCAFE, a new bank created in 1980, now accounts for more than one-fourth of the lending. Banco de Occidente (BANCOCCI) began extending nursery loans in November 1983. More recently, it has added many individual loans and is now the fastest growing bank in terms of Project loans.

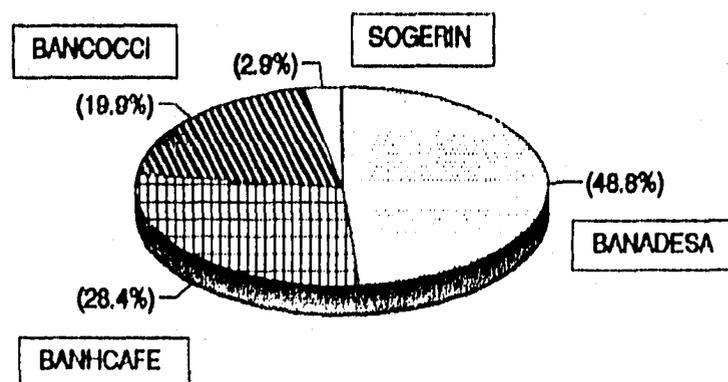
Banco Sogérin started its participation with a large loan to the Triniteca Cooperative, Trinidad, in 1984. It no longer is actively financing groups through the Project because of repayment problems by Triniteca.

As mentioned previously, four new private banks have been approved to participate in the Project and will be starting to extend loans in 1990. These banks are: Banco de los Trabajadores, BANCAHORRO, BANCAHSA, and BANFFAA. The Central American Finance Bank (FICENSA) request to enter is being considered.

The involvement of the credit and extension agents in providing credit along with technical assistance has been fairly effective in Project implementation. Most farmers are selecting the complete renovation model which requires more technical knowledge as well as more credit. There are now 27 rather than the 20 credit agents as originally planned. Remember that the Comayagua region uses an equal number of credit and extension agents under its technology transfer model which explains much of the increase in the number of credit agents.

Although the 1983 Cuevas study suggested that the credit and extension agents were handling essentially the same functions, this does not always seem to be true. At the farm level they may well perform similar functions but the regional credit agent is usually the only person that maintains direct contact with the credit institutions. Normally the extension agents do not work

Figure 2. Bank Shares in Loans Approved



directly with the banks. They are 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 when disbursements are made. When extension agents are on leave or absent for some reason, the credit agent may carry out those duties, and vice versa. In some regions both the credit and extension agents carry out the pre-harvest farm visits, while in other areas the primary responsibility is placed on the credit agent.

A major push for loan repayment is now taking place and involves both the credit and extension agents. The first contact with the farmer reminding him of repayment is by the extension agent. For problem cases or for more specific information the credit agent may make field visits. Normally, the credit agent spends a major part of his time reviewing loan documents, following up on problem cases, and coordinating loan activities with the banks. Each region has formed an interinstitutional credit collection committee composed of the IHCAFE regional director, the credit/extension agent familiar with the loan, and a representative from the affected bank. These committees are identifying problem loans and recommending course of action which should be taken. Action includes: using local authorities to put more pressure on the delinquent borrower to pay; suggesting the loan be considered uncollectible and eliminated from the bank's active portfolio; or working with the borrower to extend or adjust the terms of the loan with the hope that repayment will then be possible. Nevertheless, relatively high and rising delinquency rates threaten an otherwise successful project. This aspect of the Project needs to be monitored more carefully than has been the case. More detailed treatment of the delinquency issue is included in a later section of this report.

To date, the field agents have given little or no assistance to farmers in farm and financial management. Training of agents and farmers in these important subject matter areas was recommended in the first evaluation report. With the expected large cash flows going to participating farmers because of currently high coffee prices, this recommendation needs to be emphasized again. The Project can be even more successful if the expected increases in farm incomes are channeled into other productive investments like alternative crops and fruit or firewood tree plantings, conservation measures, or into housing or other priority needs of farm families.

Farmers normally need annual maintenance loans in addition to their coffee rehabilitation loans to cover weeding, pruning, disease control and other annual production costs. GOH counterpart funds are available through the rediscounting mechanism of the Central Bank for this purpose. The participating financial institutions all indicated they have access to such funds for short-term operating loans. As far as can be determined, there are no problems for those farmers wishing to obtain annual coffee

production loans for maintenance, unless they are delinquent. However, no accurate figures were available concerning the portion of those with complete (Model I) or partial (Model II) renovation loans that had also obtained annual production loans. Extension personnel estimated that around 60 percent of the Project borrowers were receiving maintenance loans. In contrast, the farm sample survey results suggest that about 49 percent of the Project participants were receiving annual production credit. This is certainly a question that needs to be researched further by IHCAFE to assure operating loans are available to support the longer term Project renovation loans and activities.

d. Financial Viability

The USAID/IHCAFE Small Farm Coffee Improvement Project has been operating on a very solid basis, largely due to USAID inputs, both financial and technical. Loan funds are available for borrowers meeting entry requirements; field offices have adequate facilities, materials, and support; agents are able to visit producers and carry out field activities due to availability of vehicles, gas, and per diem; and coffee producers are able to profitably adopt the new technical recommendations.

Projection of funds available for future loan activities from loan repayment flows shows the Project should be able to provide credit through the end of this century. In fact, unless the credit program is expanded to include other non-coffee on-farm investments, there could be a surplus of loan funds if only coffee renovation is emphasized. This is because the number of farmers and amount of land meeting Project requirements may not be sufficient to absorb the available loan funds coming from repayments. This, of course, assumes that the currently rising delinquency rates are controlled and reduced. The interest rate charged and its distribution appears reasonable at current rates of inflation and shared responsibilities. All participating banks appear satisfied with their 6 percent portion to cover operating costs.

The 4.5 percentage points for unrecoverable loans has been adequate to date but will not be so if delinquency continues at present levels. Many of these delinquent loans will likely be classified as unrecoverable, placing more demands on that reserve fund. Some bank managers expressed concern that the BANADESA reserve fund portion will soon not be adequate to cover its problem loans. As of early 1990, 79 percent of the loans written off under the unrecoverable reserve fund were for the 1982-1984 period. But as capital repayment obligations become due for more recent loans, the problem may repeat itself for loans made in later years.

After delinquency, the next most important long-term viability question relates to IHCAFE's ability to continue

supporting salaries and field activities at the same level made possible with current USAID funding. Approximately one-third of the salaries for regional staff associated with field credit/extension activities have been covered by the USAID/IHCAFE Project budget. If USAID gradually phases out such support, IHCAFE will need to increase its share or reduce its expenditures for those activities. The four percentage points allocated to IHCAFE from the interest on loans is one source of funding. We understand most of this income has been held in reserve to cover such costs when needed as foreign assistance to the institution declines. Another recurring, but important, expenditure is related to maintaining adequate transportation support for field personnel. Vehicle maintenance, gasoline, parts, etc. must be covered by annual budgets to continue the very important credit and extension services to the producers. No current estimates of costs associated with these activities were obtained so no accurate projections for the future are possible.

If needed, the Project can reduce expenditures by: working through local informal and formal groups of producers; utilizing motorcycles instead of larger vehicles for field work; providing training of personnel and beneficiaries at the regional and local levels, thereby reducing travel and per diem costs; making more effective use of para-technicians as a direct contact with producers; and evaluating cost categories which could be reduced over time.

e. Credit Life Program

The accumulated interest income from balances in the Central Bank were shifted to a life insurance scheme to cancel loan obligations for any Project borrower who died before the loan was repaid. The life insurance program has been functioning since early 1989 and has been used to cancel 69 Model I renovation loans associated with death of the borrower. Interestingly, 30 percent of these were women (21 borrowers), considerably above the estimated 7 percent involvement of women in the Project. This might be a subject worth studying to explain such a large difference between Project participation by women and their death rates.

The general characteristics of the loans canceled under the credit life insurance program are shown in Table 6. The Yoro and El Paraíso regions appear to be less aggressive in documenting and submitting requests since the number of loans canceled in those regions relative to total loans serviced are less as compared with other regions. Perhaps they have had difficulty in providing the correct documentation within the time limit set when the program began. At the request of the banks, the time allowed to submit papers after death of a borrower has been extended to allow more time to get the documentation in order. The characteristics of the canceled loans appear to be similar to

all loans in terms of average amount of coffee financed and size of loan. The distribution of canceled loans among the banks were: BANADESA, 39 loans; BANHCAFE, 21 loans; and BANCOCCHI, 9 loans.

Table 6. Characteristics of Canceled Loans Under the Credit Live Insurance Program, End of 1989.

Region	No of Loans	Ave. Mzs. Financed	Ave. Size of Loan (Lps.)
Sta. Bárbara	13	1.15	4,979
Copan	14	1.55	5,979
Yoro	6	1.4	5,648
El Paraíso	7	1.33	5,460
Comayagua	9	1.11	4,104
La Paz	6	1.0	4,865
Olancho	4	1.25	5,189
Cortés	6	1.67	4,921
Central	4	1.5	5,892
Total	69	1.19	5,265

SOURCE: IHCAFE, Computer Center

f. Delinquency

Loan delinquency appears to be rising each year but complete summary data are not readily available. The main data problem seems to be related to difficulty in getting the participating banks to submit accurate and timely reports to the national IHCAFE office. Another problem is that banks often report delinquency data in different formats which makes it difficult to develop summaries and comparisons. For example, some reports include interest with principal while others separate interest and principal payments and debt in their reports (the more desirable procedure).

However, the absence of summary data at the national level does not mean that such information is lacking. Each regional inter-institutional committee for loan collections maintains detailed listings of problem and delinquent borrowers. That committee then determines the courses of action to be taken to encourage loan repayments. Unfortunately, such data don't get sent to the head office on a timely basis. This definitely must change if those responsible for Project success at the national office are not well informed about delinquency problems at the regional and local offices, so they can monitor and, where

necessary, intervene in collection efforts in the field. Another problem is that banks are reluctant to send people to the field to collect on bad loans when the cost exceeds the returns from collecting the loan. Finally, many borrowers are said to sell their coffee while it is still in blossom when they need cash. If this is common, it could be the major factor affecting loan repayments in the Project.

Summary delinquency data for each of the participating banks in the Project as of June 1989, are shown in Table 7. These data suggest BANADESA had the highest delinquency rate at 24.8 percent, followed by the Sogerin Bank with 22.4 percent and BANHCAFE with 18.1 percent. However, care should be taken in using these figures since the delinquency rate is based on the amount due related to the value of loans outstanding, not on the value of loans outstanding and due at that point in time. Thus, a bank with an expanding portfolio will tend to show a lower delinquency rate (based on this ratio) while a bank which is contracting its portfolio will indicate a higher delinquency rate than likely exists. These rates are good relative indicators of delinquency if all the banks' portfolios are growing or changing at about the same rate.

Table 7. Value of Loans Outstanding and Delinquent by Participating Bank, June 1989.

Bank	Loans Out-standing	Entire Loans in Arrears	Percent in Arrears	Pmts. in Arrears	Total Value in Arrears	Total in Arrears %
(000'S OF LEMPIRAS)						
BANADESA	18,345	1,658	9.0	2,890	4,548	24.8
BANHCAFE	11,236	703	6.3	1,333	2,036	18.1
BANCOCCI	5,938	30	0.5	833	863	14.5
SOGERIN	1,382	0	0.0	310	310	22.4
Total	36,901	2,391	6.5	5,366	7,757	21.0

SOURCE: Mena [].

BANADESA has supplied the most complete and current data on delinquency. Since it is the largest participating bank, its experience does provide some insight into the extent of delinquency. As shown in Appendix Table E-12, the level of delinquency varies considerably from region to region as of June 1988 (data for 1989 are available but are not in adequate summary form to use in this report). Comayagua had the highest delinquency with an estimated 41 percent of the loans outstanding being in arrears in one form or another (including delinquent payments as well as loans completely due and unpaid). This figure does not

bode well for a region that has been experimenting with groups and has many more credit agents as compared with other regions. Banco Occidente also reports higher delinquency for the Comayagua region as compared with other regions under its supervision.

The Central Region reports the lowest rate of loan non-repayment with 5.2 percent. The other regions fall between 13 and 28 percent. The average for all regions for BANADESA loans was 18.8 percent delinquency. Of course, the BANADESA figure of 24 percent for June 1989 (Table 7) suggests this overall delinquency rate is rising. The 1990 sample field survey found an estimated 26 percent of the borrowers indicated that they were behind in their loan payments. These figures suggest the Project delinquency rate is very likely in the 20-25 percent range, a figure which management needs to take very seriously and find ways of bringing it down over time (and not just through writing off bad loans through the bad loan reserve account).

The field personnel have indicated many of the delinquent loans come from the 1982-84 period when personnel were being trained and some poor credit risks were given credit for coffee renovation. The limited data available tend to support this point of view since over 30 percent of the BANADESA delinquency is older than 360 days (Appendix Table E-12). However, 67 percent had been in arrears for 181 to 360 days as of June 1988, suggesting the problem relates to not only those given credit the first few years of the Project, but later borrowers as well.

The regional inter-institutional committees on collection are implementing programs to improve loan repayments. Their actions include farm visits, involving the local mayor or justice of the peace, or direct judicial proceedings. They have also been active in writing off loans through the bad loan reserve fund (4.5 percentage points of the interest charge goes to this fund). By early 1990, a total of 281 loans had been canceled through participation of the banks in the bad loan reserve fund. This totaled approximately Lps. 1,228,782 being written off. The loans that have been classified as unrecoverable did primarily occur in the earlier years. An estimated 79 percent of the loans formally listed as unrecoverable were extended during the 1982-84 period. Of the 281 listed as unrecoverable, 47 (16.7%) were for women borrowers, again a percentage higher than the average female participation in the Project.

Given the high rates of delinquency, it is not likely that the bad loan reserve will be large enough to resolve the delinquency problem. Thus, as indicated previously, a concerted effort needs to focus on reducing the non-repayment of loans by the Project borrowers. All indicators suggest that the new coffee varieties and associated technology do increase coffee yields. Assuming farm incomes increase with production increases (strong coffee prices in recent years would support this conclusion), the IHCAFE extension and credit agents need to work

even harder to encourage Project participants to meet their loan obligations. This is necessary to ensure the long-term financial viability of the Project.

5. Project Acceptability, Technology Adoption and Diffusion

a. Acceptance of Project

When talking with field agents, one would get the impression that all borrowers are completely following their recommendations, with few exceptions. Given the general USAID experience of providing supervised agricultural credit to small farmers in Latin America, one should not be surprised if field studies reduce that optimism somewhat. In many respects, the Seligson study and the more recent survey reports by Nuñez do just that.

The Seligson study reported that Project farmers used higher levels of technology, especially fertilizers and pesticides, as compared with non-technified farmers. For Project participants, technical assistance was four times that received by the others and most of that came from IHCAFE. Credit use was higher among Project farmers as well.

Our 1990 farm survey also showed that most of the key aspects of the improvement program were accepted by the producers with little difficulty. The beneficiaries reported satisfaction with both the requirements for obtaining credit as well as with the cultivation practices recommended by the Project. Over ninety-one percent of the respondents expressed general satisfaction with these requirements.

Regarding credit, 87.6% had little difficulty in meeting the loan requirements. The majority (70.4%), had little difficulty meeting the requirements for paying back the loan. On the other hand, 29.6% did have difficulty and 25.9% of those interviewed said that they were behind in their payments.

Some participants in the Project apparently do take soil samples for laboratory analysis but this practice is not widespread. FHIA is now available for soil testing and its reputation for such work is very good. As explained in a previous section, FHIA has taken soil samples in the Santa Bárbara and Comayagua regions but there is no evidence that the results have been used to make changes in technical recommendations by the extension agents. We were told that the head of the experiment station is in the process of reviewing the results and will hold seminars in the two regions to suggest and discuss changes in fertilizer advice given farmers.

Current coffee prices are relatively good and are expected to remain strong. While the price to the producer per quintal (100 lbs.) was around 150 Lps. in early 1984, by mid-January 1986

the price had jumped to more than 200 Lps. The price paid last year was estimated at 190 Lps. Thus, with current prices, the Project has not had difficulty in attracting participants. Few or no advertising or informational programs are now needed to attract new participants to the Project. Field technicians consistently indicated there is no problem of getting new borrowers. This is in sharp contrast to the considerable effort that had to be made the first couple of years to attract good participants. However, strong current prices in no way guarantees a rosy future for coffee producers. Historically, coffee has been a surplus commodity on the world market. Unless this trend changes, which is very unlikely, prices may not continue at high levels much longer. Lower prices to the producer would likely slow down the adoption of technical recommendations and cause further loan delinquency problems.

If farmers continue to follow the recommended management and production practices, they should see significant benefit over time, especially with the current high coffee prices. Nevertheless, the recommended technical models need to be reviewed regularly and adjusted according to new research findings and current economic conditions. Current recommendations appear to be based on trying to maximize physical production. This approach may be reasonable given current high prices but with lower or falling prices it is especially important to test the returns and cost effectiveness of various levels of technical management. This work can begin in the two regions with extensive soil and production data.

The monetary devaluation that has just gone into effect will have some direct impact on the project. There will be a period of adjustment in loan levels due to rising costs of fertilizer and other inputs. However, it is hard to know just how close coffee prices will follow input price increases.

Crop diversification was one of the original goals of the project but it has been a difficult component to implement. Most of the traditional coffee producers are reluctant to plant other crops in place of coffee when the cultivation practices are less known and the market less advantageous. The early work with cardamom has not been a great success and it is not mentioned at the regional level now as a viable option. Some of the other crops that have been tried or studied are: cacao, sugar cane, pineapple, livestock, and fruit/nut trees.

In summary, the beneficiaries were generally well satisfied with the project and gave specific reasons why. We also tried to identify any problems that they saw in the project. The advantages mentioned and the percentage of farmers that mentioned each one were (we recorded up to three advantages if they mentioned that many):

-Increased Production, 50.1%;

- Opportunity For Credit, 43.5%;
- Better Production Practices, 27.9%;
- Technical Assistance, 27.5%;
- Improved Economic Situation, 19.6%;
- Opportunity For Training, 5.4%;
- No Advantages, 8.0%.

They were asked about disadvantages and up to three were recorded if that many were mentioned. The negative aspects mentioned, and the percentage of farmers that mentioned each one, were:

- No Disadvantages Mentioned, 44.2%;
- High Interest Rate, 42.8%;
- Poor Quality Of Plants, 14.9%;
- Poor Advice, 10.5%;
- Other Credit Problems, 5.1%;
- Other Agronomic Problems, 2.2%.

b. Acceptance of Technology

Most respondents were able to follow the agronomic recommendations without difficulty. They responded that there was little difficulty with field renovation (90.5%); fertilizer use (84.3%); disease control (81.4%); and shade regulation (90.5%). A smaller proportion (53.6%), were able to follow the recommendations for establishing seed beds without difficulty. However, they did express some difficulty in obtaining agricultural inputs (fertilizers, insecticides, etc.). This was mostly due to lack of money but also due to transportation problems. Only a small proportion were able to get these products locally. Most of them (81.4%), obtained their inputs from the larger market centers in the region.

To compare the present level of technification with prior practices, the farmers were asked about conditions before they started in the project. In Table 8, the past and present use of recommended practices are compared.

Table 8. Use of Recommended Coffee Cultivation Practices Among IHCAFE Borrowers

Item	Before Project (%)	Present (%)
Periodic Renovation	59.5	90.5
Fertilizer Use	31.4	84.3
Insect & Disease Control	19.2	81.4
Shade Regulation	75.0	90.5
Seed Bed Establishment	32.0	53.6

NOTE: All differences are statistically significant.

One of the main reasons for the establishment of the Coffee Improvement Project was the crisis caused by coffee rust. This problem was also considered in the interviews and the majority of the farmers (62.7%) indicated that it had been a problem prior to the initiation of the project. The problem has not completely been eliminated but it is being controlled by the use of improved practices. Both farmers and extension agents indicated that it is a constant battle because many of the other farmers in the area that are not part of the program are not adequately treating the disease.

The Project has achieved excellent results so far since most of the producers have selected the complete renovation model which produces dramatic effects in a relatively short period of time for a perennial. Contacts with farmers through field days, formal and informal training sessions, and other methods of transferring technical knowledge to farmers need to continue on a periodic basis.

c. Soil Classification Efforts

Early work with PROMECAFE, primarily in the Comayagua region, resulted in area profile studies which provided superficial information on soil types and characteristics. The area profiles were primarily reconnaissance types of surveys to guide Project activities.

The 1986 Project amendment included funding for more detailed soil studies to help guide fertilizer and other technical recommendations for the Project participants. The first region to be studied was Santa Bárbara. Soil and leaf samples were taken on 616 farms with 10 samples for each area of five manzanas or less. Ten leaf samples were taken for each five

manzana area as well. The final report for Santa Bárbara was released in early 1989 and included detailed soils maps, soil characteristics, and fertilizer/production relationships. A strong production response was found for nitrogen and phosphorus applications but not for potassium. Recommendation domains were suggested depending upon the soil and climatic characteristics. The study also included recommendations on diversification crops appropriate for the region. Stress was placed on the need for combining soil conservation work with other Project activities in the region. Other regions are hoping that they will be able to participate later.

To our knowledge, the detailed soil study has not yet been translated into changes in the technical recommendations for the Project borrowers. This needs to be done as quickly as possible before the results become outdated. We were told that the head of the IHCAFE experiment station was reviewing the FHIA report and that a seminar for the Santa Bárbara regional personnel was being planned to discuss changes in fertilizer and other technical recommendations.

The second region scheduled for detailed soil analysis was Comayagua. The soil sampling has been done and the soils analysis work is in progress. The final report will be prepared once all the mapping and other technical work is completed. No other regions are scheduled for detailed soil studies at this time.

Although relatively expensive, the soils work should provide a scientific basis for the technical recommendations given to the Project participants in the two selected regions. It would be appropriate to carry out a cost/benefit study of the soils work to help make the judgement if other regions should be studied as well.

d. Project Impacts

One of the best measures of the impact of the Coffee Improvement Project is to see what has happened at the beneficiary level. The personal interviews with a randomly selected sample of these beneficiaries has been helpful in providing some answers to some of the key questions posed at the initiation of this evaluation.

The survey included items related to coffee production, acceptance of new technology, participation in instructional meetings and short courses, perception of technological and credit assistance, past coffee experience, overall perception of the present and future economic situation, and personal information on the family and farm operation. This information is summarized in the following paragraphs to help better understand project results.

There has been an increase in coffee yields among the beneficiaries. The farmers reported average coffee yields on the financed plots of 23.0 qq/mz for the harvest year just ending (as of April 1, 1990). The average size of plot was 1.4 mz and the average production was 25.0 qq per plot.

The same farmers were also asked about any other coffee that they had planted and what their total production was for the same period. The overall coffee yields for the same farmers averaged considerably less (11.9 qq/mz). We also asked them about coffee on their farms prior to the initiation of the project and found that yields at that time averaged 8.8 qq/mz.

The selling price of coffee has had an effect on farmer participation in the project. A majority of the beneficiaries (62.4%) indicated that coffee prices did have an effect on their participation. Some expressed the problem in terms of fear that they could not repay the loans; others in terms of continued use of expensive inputs and the risk of not being able to pay for them.

The coffee processing (beneficios) program is a relatively new program to help assist farmers in coffee processing on the farm. Its goal is to increase the value of the coffee sold by the producer as well as to improve the overall quality of the coffee sold. Some of the regions have moved faster than others in this program although all are working on it. It is a flexible approach that allows each producer to add to any existing facilities for processing. The maximum loan is L 15,000 and most are requiring only a portion of this to complete their installation.

On-farm coffee processing was a common practice among the sample of farmers interviewed. Most of them (77.0%) reported that they processed their own coffee in some way. A few (12.0%) reported that it was done by "another person". Only 1.5% reported that it was done through a cooperative. A few remaining farmers processed their coffee in cooperation with brothers or other family members. The loans for improving on-farm coffee processing are relatively new in most regions. Loan terms were well accepted by the beneficiaries and some loans had been paid back in less than two years. From the positive reaction at both the farm and regional office levels, it would seem wise to continue this program. Some regions were cautious to move ahead without having at least one of the extension agents well versed in the technical aspects of small farm coffee processing. There was some reluctance also due to the lack of qualified masons in the area to help with construction. We were unable to get a cost-benefit estimation at the field level.

It is expected that the project will have made an improvement in the levels of living. In the discussion with regional personnel a number of examples of these improvements were

mentioned: The additional income is usually invested to increase and improve the farming operation; improvements in the home are also made; for some it has been possible to purchase a vehicle; and others mentioned farmers increasing the education of their children.

6. Conclusions and Recommendations

a. Summary and Conclusions

All of the original conditions precedent to the disbursement were met, although with some delay. The additional conditions precedent added in the amendment of 1986 included the use of private bank resources for production credit and an attempt to improve the efficiency of the coffee processing facilities. The production credit stipulation was met in August 1986 with commitments by Banco Sogerin, BANHCAFE, BANADESA and Banco de Occidente. The second requirement was deleted after a study determined that efficiency would not be improved by privatization of out-dated public processing facilities.

INCAFE has continued to improve its effectiveness as an institution to coordinate the credit and technical assistance delivery services to Project beneficiaries. Most of the problems evident at the time of the first evaluation have been resolved. The appointment of the Project Coordinator to head the newly formed IHCAFE Planning Division should help further. The computer facilities at the central office and in each of the regional offices has helped in the coordination effort also. There are still some areas of needed improvement in record keeping and the efficient use of this equipment.

IHCAFE's Accounting Department has shown satisfactory capacity to manage project funds and to establish the accounting system needed to control the use of project funds. The problems that have been discovered during the internal and external audits have all been satisfactorily addressed and have been resolved or are in the process of resolution. The procurement and sale of needed agricultural inputs to participating farmers is now being handled by private suppliers or BANADESA rather than through IHCAFE.

The Central Bank has become much more effective in managing loan funds and in making capital available to participating banks according to project needs. The delays that were evident earlier have now been eliminated. Loans for Project borrowers covering operating and maintenance costs are also available through the banks. The turn-around time will likely be reduced even more as computer facilities are improved.

The short and long term foreign technical assistance has been an important element in Project implementation. All of the advisors (except the most recent arrivals) are known in the field and have participated in training courses and seminars. The credit advisors have helped in the creation and staffing of the credit agent positions and in support of the extension activities. They have helped in developing the new loan collection strategy that seems to be working. The agricultural economists have helped in the analytical aspects of present and future

production estimates. An USDA/agricultural statistician has been instrumental in the use of area frame sampling procedures for field surveys that give a more realistic picture of Project accomplishments at the beneficiary level and coffee production for the whole country. All of this has helped strengthen IHCAFE's capacity in economics, statistics and policy/planning.

There is no clearly defined in-service training program for extension agents. The position of Rural Sociologist and Extension advisor is not now occupied. The work that was done by this advisor helped in the development of the para-technician program and in the improvement of administrative and extension work at the regional level through a program of self-evaluation.

Some links have been developed between regional institutions (e.g. IICA and PROMECAFE, CATIE) and IHCAFE, and these links have been helpful in the implementation of the project. Coordination and communication between PROMECAFE and the Project seem to be weak, often resulting in conflicts in program operation. Most of the assistance in the groups model operating in Comayagua, Olancho and the Central regions has come from PROMECAFE. That has been coordinated directly through the extension office rather than the Project office. Support links have been developed with Honduran agencies in the same manner.

The Project, through the help of the credit advisors, has been relatively successful in promoting the participation of additional banks. Presently there are four active banks and five others have been accepted or are in varying stages of implementation.

The Extension Department within IHCAFE has been maintained as a result of project activities. The expansion that was originally planned was not possible due to government budget cuts. The resulting lower number of agents has been compensated for by hiring temporary field extension workers paid through Project funds and by using local farmers as para-technicians.

The in-service training programs which have been instituted to improve the capacity of IHCAFE extension agents to transfer technology to coffee farmers have had an important role in the Project. There have been different kinds of training activities organized including: formal courses, regional managed field training, informal training by foreign advisors, on-the-job training by those more experienced, and centrally managed formal training. There are no women agents so the training has not been organized in that direction.

There is no formal measure of quality for the training received by the extension agents to date. It appears that they are doing an adequate job from the survey responses of the beneficiaries. No records were found of who had or had not attended courses suggesting a hit-or-miss method of selection.

Records of individual training by name subject, and level would help guide future training.

The content of courses, seminars, and workshops organized seems to respond to field requests made by the extensionists. Farm management is at the top of the list for the coming year.

Project promotion was a specific need when it was first initiated but is no longer a high priority. Due to the relative success of the Project, the problem may now be how to service all of the requests. The extension agents have had an important role in promotion in the past as was indicated in the interviews with the farmers.

The extent of Project coverage at this time is estimated at 9,815 beneficiaries that have received technical assistance and credit. This represents approximately 48 percent of the estimated 21,000 coffee producers in the country with less than 21 manzanas of coffee in production or 27 percent of all coffee producers. The coverage varies from region to region. There does appear to be room for Project expansion although further study is needed to select the priority areas.

The system of individual on-farm supervisory visits by the extension agents is being supplemented by a system of farmer education in the three regions that are working with groups. In these regions, the extension agents take on an "educational role" and the credit agents take on a "supervisory role". In part, it is an attempt to translate the technical models into technology transfer messages that can be more easily understood by present and potential Project beneficiaries. It is a gradual approach used to get small coffee farmers involved in the Project after they have had exposure to some of the educational meetings. It seems to work well in Comayagua (except it has made no difference in loan repayment rates) and is being tested in the Olancho and Central regions. The formal instruction is being provided to groups of small coffee producers, some of which may become Project beneficiaries if they meet the criteria.

A number of extension teaching methods are being used in these meetings. A majority of the farmers indicated they attended the educational meetings and gave specific responses as to the topics of major interest. Radio broadcasts are used on a national scale and some mobile training equipment is used to reinforce local training. The traditional model is currently used in the other regions with individualized/intensive assistance. This individual type of assistance is also being utilized as a training follow-up mechanism for Project beneficiaries in the regions where groups are used.

In addition to the talks given in regular farmer meetings, organized short courses have been an important Project activity. More than half of the farmers interviewed said they had partici-

pated in one or more of these events. Most of the courses are held within the region although some had attended courses at the national level as well.

"Multiplier effects" can be observed as the new technology is reported by a majority of the farmers as being used in additional plantings of coffee that were not financed by the Project. Further, more than half the beneficiaries interviewed indicated that their non-beneficiary neighbors were using the improved methods.

The para-technician program continues to function in all of the regions. There is less emphasis now than in the early stages of the Project with variations by time of year and with the extension agent in charge.

It has been difficult to meet the original goals of crop diversification. The early experience with cardamom was a failure and the other crops show little possibility for great success in the near future. Fruit and firewood tree crops and/or livestock may have potential.

The participating banks have become relatively efficient in approving and administering subloans to the small coffee farmers and in providing them with needed banking services. By the end of 1989, 11,652 loans had been approved for Lps. 61,182,700 and 84 percent had actually been disbursed. The disbursement rates anticipated for the initial years of project implementation have been attained. The bank officials also indicate that the project has "opened the credit door" to many small producers who had no previous access to credit.

There appears to be adequate funding available for investment and production loans in the discounting program of the Central Bank. The farm sample survey suggested that about half of the farmers were receiving annual production credit.

To date, the field agents have given little or no assistance to farmers in farm and financial management. This is an area that they have placed as a priority topic for the training courses for the coming year.

The peak in loan activities was in 1987 and has been declining since that time. In some regions, 85 percent of the potential participants have been reached but in other areas it is much lower, leaving potential participants yet to be covered.

The Credit Life Program is now functioning to cancel loans upon death of the borrower. It has been used in 69 cases so far with some variations by region in the efficiency in the operation of this fund.

The delinquency rate is estimated in the 20-25 percent range. Loan delinquency seems to be rising every year and is higher in some regions than in others. It does not appear that the bad loan reserve will be able to resolve the delinquency problem. Regional inter-institutional committees are aggressively working on this problem and with some success.

It is estimated that approximately 7 percent of all borrowers through the end of 1989 were women. Women made up a much higher percentage of those covered by the Credit Life Program and with delinquency. This phenomenon needs further study.

Over 90 percent of the beneficiaries interviewed indicated acceptance of the IHCAFE recommendations; 88 percent had no difficulty with the credit terms designed; 91 percent had no difficulty with the renovation of damaged plantations; and like numbers indicated acceptance of the other technical recommendations.

Over 60 percent of the beneficiaries indicated that they were concerned by world coffee prices and that it affected their decisions on the use of expensive agricultural inputs and their ability to pay back the loans.

The Project participants seem to have little difficulty in following instructions as provided by IHCAFE technicians. The best measure of results is found in the yields on the technified plots averaging 23 quintals per manzana in the latest harvest as compared to less than 9 quintals per manzana prior to the Project. They reported few problems following the recommendations on the key practices of fertilizer use, insect and disease control and shade regulation.

The overall satisfaction with the Project is high among the participants. They most often mentioned increased production, opportunity for credit, technical assistance and opportunity for training as the greatest advantages.

Although a few problems were mentioned, almost half of the beneficiaries interviewed saw no problems in the Project. Those that mentioned problems felt that loan interest was too high, that the quality of plants was not always correct, and that poor advice was given sometimes.

On-farm coffee processing is common among the majority of farmers interviewed. The Project emphasis on improvement in processing facilities is just now being felt. The recent harvest was the first one in which many of the improved facilities were used and with good results.

The benefits from soil characterization efforts have not yet appeared. Soil samples were collected and analyzed for Sta.

Barbara through the efforts of FHIA but the reports have not been translated into technical recommendations. Work has also been initiated in Comayagua. This should be helpful in the near future.

The data collected by the Project's monitoring and evaluation system was compared to that collected in the farm interviews conducted as part of this evaluation. We found close correlation for most questions. There were some discrepancies in production figures due to the fact that one study was based on pre-harvest estimates and the other on post-harvest reports.

The production increases do have a general effect on income and profitability for small producers but it is difficult to document statistically. More than half of the beneficiaries interviewed said their situation is better today than it was five years ago. Even a higher proportion felt that it would improve next year. From observation and discussion in the field, the additional incomes are being used to improve the farming operation first, and then for home improvements and educational opportunities for the children. There is also concern among the extension agents that not all of the additional incomes are being used wisely and thus the need for training in resource management and farm administration.

b. Recommendations

Institutional Development

-The functions of the Credit Department still are not well defined. Combining the current departments of credit, accounting, and finance into a Finance Department, as recommended by DAI, appears to have merit.

-Policy analysis and planning within IHCAFE needs to be strengthened further so that clear guidance is provided the action programs like the USAID Project and the diversification activities. The newly formed Planning Division is a step in the right direction.

-The functions of the USAID-funded advisors in credit, agricultural economics, and statistics need to be further integrated into the operational units of IHCAFE so the work can continue when outside assistance ends. The on-the-job training of regular IHCAFE employees working in those areas should continue to allow for this shift to take place over time.

-Data collection and analysis utilizing the computer center should be continued. Regional offices and participating banks must provide timely reports to this centralized unit for it to be effective. This office should be the primary source of data so that all information is the same and as accurate as possible.

Extension

-Para-technician program should continue to help reduce costs of the outreach program. Efforts should be made to reach more of the very small coffee farmers since they make up a large portion of those producers not yet reached.

-Training of extension agents and para-technicians still is needed in the areas of farm and financial management, production economics, and group techniques.

-Training of participating farmers and their families (wives and children) in farm and financial management and in technical coffee production still continues to be needed, especially since significant cash flows are coming from use of the technology.

-Further effort is needed in working with groups, using para-technicians and in utilizing test plots on farmers fields. Great caution should be followed in extending credit through groups given IHCAFE's bad experience with this approach in the past.

-Diversification activities have not been effective and need to be seriously evaluated and modified to increase future success. Possible future activities might include fruit and tree crops (firewood), livestock, and crops identified by detailed soil studies.

-The technology transfer strategy using groups needs to be studied further. There are indications the approach may have longer-run benefits for overall rural development but the approach has not improved loan repayment rates in the regions where implemented.

Credit

-Training workshops and seminars on credit need to continue at all levels in the Project. The importance of loan repayment must be stressed at all levels.

-Participating banks need to establish a systematic procedure for running spot checks on disbursements to farmers to assure the system is running well.

-Participating banks must take a greater responsibility in loan collections. Information on delinquent borrowers should be kept current and shared with IHCAFE workers.

-The Project should continue to work with the target group and, rather than be tempted to work with medium sized or larger farms, find ways to more effectively work with the large numbers

of small farmers that still have not been reached but are reasonably good credit risks.

-Private participating banks should be encouraged to assume more and more of the technical and credit supervision as they are able to hire their own specialists.

-Detailed study of delinquent borrowers is required to help guide future credit activities. This includes study of loans canceled under the reserve loan fund for uncollectables.

-A policy needs to be established concerning use of funds paid back by borrowers who previously were considered in default and their loans written off through the reserve fund.

Technology and Diffusion

-Current technical recommendations need to be analyzed from an economic point of view and adjusted accordingly. Results of such an analysis will be especially important when coffee prices are lower. IHCAFE should plan on developing that capability internally as budget permits.

-Fertilizer recommendations should be based on soil sample testing as much as possible. Investment plans currently cover such costs and farmers should be encouraged to use the money for that purpose. Recommendations in the Santa Bárbara and Comayagua regions should be based on FHIA soil studies as soon as possible.

-IHCAFE should look into methods of standardizing the weights and measures used in the coffee marketing system to ensure farmers receive equitable payment for their marketed coffee, especially for improved quality likely to come from the on-farm processing activities funded by the Project.

c. Lessons Learned

The major lessons learned in the Project would be: (1) the importance of profitable technical recommendations to accompany credit, (2) the necessity of continually improving intra- and extra-institutional communication and coordination, (3) the feasibility of incorporating private financial institutions into a small farm credit system, (4) the feasibility of using para-technicians for direct farmer contact, and (5) no apparently successful project can afford to ignore the signals and underlying reasons for loan delinquency that seem to always appear over time.

The first lesson may well be the most critical in making this Project more successful than past supervised agricultural credit programs. IHCAFE is a case study in this regard.

Previous to the initiation of this Project, it had extended large amounts of credit through farmer groups for coffee but there were very high rates of loan delinquency. The current emphasis on improved technology, especially where new, improved plants replace old, diseased ones, has been the difference. The second lesson is not new but needs to be repeated. Often poor management and coordination are the downfall of many projects.

The USAID/IHCAFE Project has been relatively successful in getting private banks to join. Four private banks have handled almost all the value of loans disbursed through the end of 1989. An additional five private sector banks are in the process of participating in the Project.

The para-technician system has only been operating a couple of years and the evidence is that it is generally contributing well to help reach Project goals, but its effect depends greatly upon the attitudes of the extension personnel. In some regions the para-technicians are nothing more than messengers. In others, they check on technical recommendations being implemented by farmers and truly serve as an outreach of the extension agents. Most of the para-technicians are coffee growers themselves and the majority have been participants in the Project. Their assistance should be helping the limited number of extension agents reach a larger number of borrowers. This approach still has not been operating long enough to be able to identify major problems or weaknesses and the definition of the para-technicians primary function is still in process. One problem that has surfaced is that the para-technicians are pressuring IHCAFE to become regular employees of the institution in order to obtain the standard retirement and other benefits. This attitude, of course, is contrary to the basis premise of using para-technicians as an outreach mechanism for the extension and credit activities of the institution.

It also is evident that the poorest farmers are the most difficult to reach successfully in projects such as this; that felt needs (such as the presence of coffee rust) are important incentives for change; that programs such as this open up credit doors for small farmers without previous experience; that the training opportunities afforded at all levels will have a lasting impact beyond project goals; and that on-going and on-site research and experimentation are necessary for project success and continuation.

The final lesson is that, even though a credit project may be progressing well, loan delinquency usually appears in the latter stages of the project and must be dealt with effectively. Even though the USAID/IHCAFE Project has been very successful in introducing productive technology, the resulting increases in producer incomes may not be reflected in high loan repayment rates. Instilling borrower financial discipline to meet loan obligations must be a continuing focus for all Project personnel.

3. To review the data collected to determine project impact and evaluate the validity and adequacy of the data.

Results of this evaluation will also be used for planning in regard to proposed new project in coffee.

Article III. Statement of Work

A. Methodology

Within IHCAFE, Jaime Villatoro, Chief, Planning Division, will be the primary contact. IHCAFE will coordinate field visits with regional offices to assure maximum exposure to activities and problems. Field work should approximate one third of total work days requested. In addition to visits to IHCAFE regional offices, contractors should contact maximum numbers of participants possible. IHCAFE will provide contractors with all pertinent reports. 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?
- 2.2 How effective has the Central Bank been in managing loan funds and in making capital available to participating banks 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 development and implementation of media programs designed to train coffee farmers in IHCAFE's technification models; and
 - (d) the implementation of credit activities for groups; and
 - (e) the strengthening of IHCAFE capacity (including training of personnel) in economics, statistics and policy/planning.
- 2.4 What support links have been developed between regional institutions (e.g. IICA and PROMECAFE, CATIE) and IHCAFE, and to what extent these links have facilitated the implementation of the project? What support links have been developed in Honduras (e.g. CODEHFOR, DGEC, etc.)?
- 2.5 How effective has been IHCAFE in promoting the participation of additional banks in the project?

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? Has this training reached women? In what percentage?
 - (b) what has been the quality of training received up to date?
 - (c) to what extent the content of courses, semi-

nars, and workshops organized is relevant to field activities planned for extensionists?

- 3.3 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? Has promotion been effective in reaching women beneficiaries? Are there women extension agents? Would women extension agents be more effective in promoting the participation of women in the project?
- 3.4 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?
- 3.5 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?
- 3.6 What is the current extensionist/beneficiaries ratio? Is this ratio adequate to provide needed technical assistance?
- 3.7 To what extent is the system of on-farm supervisory visits being replaced by a system of farmer education? That is, has IHCAFE 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;
 - (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?

- 3.8 What has been the overall effect of the para-technician corps?
- (a) What are levels of para-technician (PT) involvement?
 - (b) What is the cost of PT program and perceived benefits?
- 3.9 What has been the overall experience of diversification activities?
What are recommendations for the future?

4. Credit Activities

- 4.1 What arrangements have been made by IHCAFE to adequately organize and staff its Credit Division?
- 4.2 How effective have participating banks been 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 programs?
- 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 Are production loans in addition to investment loans being made available to participating farmers by participating banks?
- 4.6 What are the project's long-term financial projections? What credit disbursement levels can be anticipated for the period given current credit demand and implementation capacity by

participating institutions?

- 4.7 Has the project demonstrated sustainability/self sufficiency? The contractor should look at the interest rate structure and recapitalization policies to see if these are adequate in light of expected rates of inflation over the next ten years. Additionally the contractor should comment on IHCAFE's ability to fund the salaries of extension agents and purchase vehicles to support these agents after the life of the Project. If IHCAFE cannot fund the salaries of extension agents and/or purchase the needed vehicles, what alternatives are there to reduce costs in these areas.
- 4.8 Is the Credit Life Program adequate and/or cost effective?
- 4.9 Is the delinquency being maintained at a reasonable/acceptable rate for this type of lending?
- 4.10 Did the delivery mechanism for credit reach women? What is the average size of loan given to female beneficiaries? Male beneficiaries?
5. Project Acceptability, Technological Adoption and Diffusion
- 5.1 Have target farmers, male and female, 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?
- 5.2 Has any previous interest in the project among beneficiaries been affected by the current drop in world coffee prices?
- 5.3 Are (persistent) 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?

- 5.4 Are project participants, male and female, 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?
- 5.5 To what extent has IHCAFE acquired the capacity and is involved in promoting the advantages of on-farm processing (beneficios) through its technical assistance and credit activities? Have farmers shown receptivity to such promotion?
- 5.6 To what extent should IHCAFE promote continued programs of quality enhancement, such as on-farm beneficios?
- 5.7 What benefits, if any, are resultant from soil characterization efforts carried out by the project?

The contractors shall also review the data collected by the Projects monitoring and evaluation system to answer the following questions and determine the validity and adequacy of the data:

- 5.8 What are the production increases, if any, resultant from Project participation?
- 5.9 How do production increases, if existent, effect income and profitability to small producers. Are there differences between male and female beneficiaries in this area? Compare pre-project income patterns with post-project income patterns in the third, fourth, fifth and sixth year following renovation.
- 5.10 Provide an overview of farmer perceptions with regard to enhancement of living conditions and the more general impact on the social aspects deriving from the Project with respect to primary and secondary employment generation, outmigration from coffee areas, and general living conditions of participants. What differences are there between male and female beneficiaries here?

Article IV. Reports

The contractor(s) are expected to present a final

evaluation report and the Evaluation Abstract and Section I of the Evaluation Summary (Format and instructions attached) by April 25, 1990. This report should follow the Evaluation Summary (ES) format and it should have the following sections:

- Executive Summary: Containing development objectives of the project or program to be evaluated, purpose of the evaluation, study method, findings, conclusions, recommendations, lessons learned, and comments on development impact. The Executive Summary must be a self-contained document;
- Project Identification Data Sheet (sample attached);
- Table of Contents;
- Body of the report (approximately 30-40 pages) must include the purpose and study questions of the evaluation; the economic, political, and social context of the project or program; team composition, field of expertise and role it played in the evaluation, and study methods (one page maximum); findings of the study concerning the evaluation questions (any deviation from the scope of work must be explained); conclusions; recommendations, in a separate action of the report; lessons learned and comments on development impact; and,
- Appendixes: Which should contain the scope of work, the most current Logical Framework, and lists of individuals and agencies contacted, and documents consulted.

Article V. Relationships and Responsibilities

The contractor(s) will receive technical direction from John Jordan of the Rural Development Office in USAID/Honduras and direction regarding the preparation of the ES from the USAID/Honduras Evaluation Specialist.

Article VI. Term of Performance

Beginning on/about March 9, 1990 and ending on/about April 10, 1990.

APPENDIX B - PROJECT LOGICAL FRAMEWORK

PROJECT PURPOSE:

	Indicators (End-of-Life)	Status By end of 1989
1.	To mitigate the impact of coffee rust and <u>broca</u> on small and medium coffee producers through the proper use of credit and technical inputs thereby leading to increased real income and a strengthened National Coffee Institute (IHCAFE) and marketing system.	
1.1	Productivity per <u>manzana</u> increased from 6 to minimum of 20 <u>quintals</u> by the third year following transplanting with commensurate income increases for producers of coffee.	Yield per Mz. estimated at 28 qq. in third year for those starting during 1982-85 period.
1.2	By 1991, a total of 13,000 <u>manzanas</u> will realize increased production based upon year of entry into the coffee renovation program.	Goal reached by end of 1989 with estimated 13,003 Mz. renovated.
1.3	By 1987, reflows of subloans will permit increased loan coverage for the coffee renovation program.	Reflows totaled over 20 million Lempiras by end of 1989. Credit should continue to be available from reflows.
1.4	11,000 <u>manzanas</u> of coffee will have been eliminated and planted to diversified crops over the life of the program.	Diversification to substitute for coffee unsuccessful. Complementary wood and fruit trees, soil conservation measures started.
1.5	Significant administrative reform and decentralization of IHCAFE accomplished by 1988.	Some decentralization accomplished but more still needed. Micro computers in regions will help this effort.

OUTPUTS:

		Indicators (End-of-Project)	Status End of 1989
1. IHCAPE's ability to respond to small farmer needs strengthened.	1.1	Small and medium farms being serviced by IHCAPE and credit institutions increased to 10,400 and continues to increase by approximately 1,000 annually.	9,815 assisted by end of 1989. Annual increase 700-800 beneficiaries.
	1.2	Number of small and medium farmers who have received training from IHCAPE increased by 10,400 over LOP.	14,639 training events with 119,764 participants reported.
	1.3	Public information outreach capability improved and expanded.	Materials prepared to accompany all training events and for radio programs.
	1.4	Administrative reorganization of IHCAPE at central and regional levels.	Reorganization in 1987. Planning/policy office started.
2. Technology practices improved at farm level.	2.1	Number of <u>manzanas</u> using more productive varieties increased to 13,000 over LOP.	13,110 Mz. estimated using new varieties by end of 1989.
	2.2	Number of <u>manzanas</u> utilizing insect and disease control practices increased to 13,000 over LOP.	13,047 Mzs. estimated and 89% of beneficiaries using with "no difficulty."
	2.3	Number of <u>manzanas</u> characterized by crop diversification and improved livestock use practices increased to 500 over LOP.	Little progress reported on this goal.

<p>3. Management capabilities of small and medium farmers strengthened.</p>	<p>3.1</p>	<p>Amount of small and medium farmers employing improved cultural practices such as adequate shade, proper pruning and adequate plant densities increased to 10,400 over LOP.</p>	<p>All beneficiaries using and 89% with no difficulty; also, 55% reported neighbors using improved technology.</p>
	<p>3.2</p>	<p>Number of small and medium farmers participating in diversified crop systems, whereby coffee is taken out of production, increased to 500 over LOP.</p>	<p>Little progress reported on this goal; very difficult to find equally beneficial alternatives.</p>
<p>4. Viable system of quality control of post harvest coffee is initiated.</p>	<p>4.1</p>	<p>Approximately fourteen wet <u>beneficios</u> of IHCAPE are rehabilitated and made operational over LOP.</p>	<p>Shift to on-farm beneficiaries made. Large facilities old and inefficient.</p>
	<p>4.2</p>	<p>2,000 farmers will utilize the rehabilitated <u>beneficios</u>.</p>	<p>300 <u>beneficio</u> loans by end of 1989.</p>
<p>5. Viable, self-sustaining credit system for small and medium farmers for program.</p>	<p>5.1</p>	<p>By 1989, adequate capital reflows will permit a continuation of renovation and diversification credits beyond original participants.</p>	<p>Credit reflows should permit continuation of credit activities providing technical support available.</p>
<p>6. Applied research and soil testing capabilities expanded.</p>	<p>6.1</p>	<p>36 applied research plots in the nine coffee regions relative to diversified crops will have been carried out by the end of the Project.</p>	<p>Only limited progress observed for this goal.</p>

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| | 6.2 3,000 individual farmers soil tests will be analyzed and interpreted over LOP. | Soil samples on 616 farms in one region analyzed. Second region in process. |
| | 6.3 85 INCAFE extensionists will have been trained in interpreting of soil analysis for coffee and diversified crops. | Limited general training reported. Training on soil analyses completed in one region planned. |
| 7. Training of extensionists, para-technicians, farmers and IHCAFE regional administrative staff will be expanded. | 7.1 107 extensionists and credit agents, 200 para-technicians, 10,000 farmers and 9 regional administrative chiefs will benefit from training courses over the LOP. | 14,639 courses with 119,764 farmer participants; 274 courses with 1,370 extension participants; and 90 courses with 800 para-technicians reported. |

INPUTS:

1. Technical assistance for training, research, administration, credit and Project monitoring.	1.1	AID	\$3,690,000
	1.2	GOH	-0-
2. Credit fund.	2.1	AID	\$12,797,500
	2.2	GOH	\$15,502,700
3. Commodities	3.1	AID	\$1,332,000
	3.2	GOH	\$160,923
4. Training provided to extension agents, credit agents, para-technicians, administrative staff, and farmers.	4.1	AID	\$1,239,800
	4.2	GOH	\$1,195,461
5. Publicity	5.1	AID	\$206,700
	5.2	GOH	\$122,500
6. Extension Activity	6.1	AID*	\$819,000
	6.2	GOH	\$10,837,136
7. Evaluation and Audit	7.1	AID	\$250,000
	7.2	GOH	-0-
8. <u>Beneficio</u> Activity	8.1	AID	\$415,000
	8.2	GOH	\$750,000
9. Contingency and Inflation	9.1	AID	-0-
	9.2	GOH	\$432,963
		AID Total*	\$20,750,000
		GOH Total	\$29,001,683

* \$500,000 more added for PHIA in Project Amendment #5, December 26, 1989.

APPENDIX C - LIST OF PRINCIPAL CONTACTS

IHCAPE:

Jaime Villatoro	Coordinator, USAID/IHCAPE Project Unit
Ana Carolina Mena	Credit Advisor, " " "
Gilberto Franco	Technical Asst., " " "
Margarita Ramirez L.	Statistics, " " "
Jorge Nery Chinchilla	Computer center, " " "
Amparo Canales Cruz	Assistant, " " "
Rubén de Jesús Guevara	Chief, Agricultural Division
Julio Gonzalez	Chief, Extension Department
Andres Rubio Castillo	Chief, Comayagua Region
Raul Antonio Amador S.	Deputy Chief, " "
Carlos Fuentes	Regional Credit Agent, Comayagua
Raymundo Martínez Ramos	Chief, Cortes Region
Desiderio Aguilar Villalvir	Credit Agent, Cortes Region
Jose Silvestre Gaytan	Extension Agent, " "
Hernando Máximo Serrano	" " " "
Waldemar Rivera Martínez	Deputy Chief, Santa Bárbara Region
Alfredo Guillen Bueso	Credit Agent, " "
Victor Danilo Amador Ramos	Credit Agent, " "
Juan Antonio Martínez	Extension Agent, " "
Juan Sagastume Bejarano	" " " "
Osmar Giron Castillo	Chief, Santa Rosa de Copan Region
Juan Orestes Villatoro	Deputy Chief, " "
Ricardo A. Rivera G.	Credit Agent, " "
German D. Gonzáles	Extension Agent, " "
Carlos O. Musillo	Deputy Chief, Yoro Region
Ricardo A. Machado	Credit Agent, " "
Raul Bueso	Chief, El Paraíso Region
Jorge Escobar	Credit Agent, " "
Carlos Aguilar	Chief, La Paz Region
Angel Alonzo L.	Credit Agent, " "
Manuel Soto V.	Chief, Olancho Region
Jose R. Acosta M.	Deputy Chief, " "
Simeon Rivera P.	Credit Agent, " "
Jose P. Medina	Credit Agent, " "
Carlos I Martínez	Extension Agent, " "
German F. Irias E.	Deputy Chief, Central Region
Guillermo Zaldivar L.	Credit Agent, " "
Jose H. Urbina M.	Extension Agent, " "

USAID:

John Jordon

Rural Development, Credit

BANCO CENTRAL:

Ramón A. Narváez O.	Agricultural Credit Project Unit
Fernando Neda Brito	" " "
Julio César Ordoñez C.	" " "

BANADESA:

Hernán Velásquez	Finance & Operations, Tegucigalpa
Jesús Ponce	Coordinator with Central Bank Discounts
Raul Herrera	Credit Manager, San Pedro Sula
Raquel Imboden	Credit Assistant, " "
Raul Bueso	Manager, Santa Bárbara
Saul Dubon	Manager, Santa Rosa de Copan
P.M. Gilton Pineda	Credit Official, Yoro
Rosa Luz Lopez	Manager, La Paz

BANHCAFE:

Guillermo A. Ayestas	Credit Official, San Pedro Sula
Gustavo Edmundo Pereira	" " , Santa Bárbara
Julio Cruz	Manager, Santa Rosa de Copan
Wilfredo Medina	Manager, Catacamas

BANCO DE OCCIDENTE:

Darlan H. Madrid	USAID/IHCAFE Project Coordinator
Quirio Arellana Tabora	Santa Rosa de Copan
	Manager, Comayagua

APPENDIX D - PARTIAL LIST OF REFERENCES AND MATERIALS USED

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APPENDIX E - PROJECT DATA

Table E-1. Number and Amount of Loans by Region and Year - Model I.

Region	1982			1983			1984			1985			Sub-Total		
	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed
(Amounts in 000's of Lempiras)															
1. Sta. Barbara	83	439.8	391.8	148	963.4	544.7	208	1,245.5	924.4	237	1,361.3	1,223.6	676	4,010.0	3,084.5
2. Copan	82	483.4	305.7	183	1,129.8	705.9	290	1,772.6	1,132.2	201	1,114.6	994.6	756	4,500.4	3,138.4
3. Yoro	62	331.9	211.0	25	125.3	142.4	256	1,497.4	910.9	266	1,412.6	1,199.8	609	3,367.2	2,464.1
4. El Paraiso	60	374.9	328.6	49	271.6	153.0	117	584.8	461.2	167	839.7	648.4	393	2,071.0	1,591.2
5. Comayagua	101	493.7	432.6	170	899.4	547.8	303	1,550.1	1,172.6	108	524.2	590.6	682	3,467.4	2,743.6
6. Marcala	51	308.3	184.9	7	43.0	101.1	118	677.7	431.7	160	982.1	722.4	336	2,011.1	1,440.1
7. Olancho	70	358.4	296.4	127	708.2	425.7	100	614.6	542.1	70	358.4	372.4	367	2,039.6	1,636.6
8. Cortes	83	457.0	407.0	106	588.1	322.5	144	699.3	487.5	76	388.3	398.9	409	2,132.7	1,615.9
9. Central	3	23.2	21.4	28	155.4	93.2	90	508.9	352.2	62	264.2	282.4	183	951.7	749.2
Total	595	3,270.6	2,579.4	843	4,884.2	3036.3	1,626	9,150.9	6,414.8	1,347	7,245.4	6,433.1	4,411	24,551.1	18,463.6

Region	1986			1987			1988			1989			Accumulated Total		
	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed
(Amounts in 000's of Lempiras)															
1. Sta. Barbara	120	714.4	615.1	93	558.9	671.5	49	287.0	214.2	143	542.9	308.5	1,061	6,113.2	4,893.8
2. Copan	309	1,553.1	1,264.9	314	1,594.2	1,156.4	79	354.0	673.6	213	917.1	688.8	1,671	8,918.8	6,922.1
3. Yoro	260	1,233.5	1,122.8	270	1,272.0	1,038.2	104	568.4	774.1	17	72.0	196.6	1,260	6,513.1	5,595.8
4. El Paraiso	203	950.4	786.9	302	1,358.8	1,177.7	460	2,216.0	1,959.2	89	501.2	811.8	1,447	7,097.4	6,326.8
5. Comayagua	164	688.0	700.0	218	910.2	783.6	73	304.0	443.1	183	646.5	426.2	1,320	6,016.1	5,096.5
6. Marcala	138	707.8	655.6	206	942.5	842.1	143	626.7	569.6	37	154.7	208.3	860	4,442.8	3,715.7
7. Olancho	182	729.8	664.4	165	741.2	985.5	88	416.7	568.6	47	242.9	235.0	849	4,170.2	4,090.1
8. Cortes	150	680.8	564.1	156	683.8	564.4	75	300.4	310.3	37	132.4	148.9	827	3,930.1	3,203.6
9. Central	136	531.5	427.4	286	1,175.1	944.0	81	305.8	431.5	60	152.9	217.8	746	3,117.0	2,769.9
Total	1,662	7,789.3	6,801.2	2,010	9,236.7	8,163.4	1,152	5,379.0	5,944.2	826	3,362.6	3,241.9	10,061	50,318.7	42,614.3

* Official exchange rate 2 Lps. = \$1 for period.

Table E-2. Number and Amount of Loans by Region and Year - Model II.

Region	1982		1983			1984			1985		Sub-Total				
	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed
(Amounts in 000's of Lempiras)															
1. Sta. Barbara	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
2. Copan	0	0.0	0.0	1	2.5	2.3	0	0.0	0.0	0	0.0	0.0	1	2.5	2.3
3. Yoro	0	0.0	0.0	0	0.0	0.0	3	7.6	7.0	0	0.0	0.0	3	7.6	7.0
4. El Paraiso	6	22.5	17.3	0	0.0	0.0	12	23.4	21.1	20	41.9	32.1	38	87.8	70.5
5. Comayagua	46	108.4	96.5	31	79.3	50.4	5	8.5	9.4	1	0.9	0.8	83	197.1	157.1
6. Marcala	0	0.0	0.0	2	6.6	3.9	1	1.9	4.0	2	4.9	1.9	5	13.4	9.8
7. Olancho	27	73.9	67.6	11	35.6	28.6	13	48.8	28.9	10	28.9	36.9	61	187.2	162.0
8. Cortes	1	1.8	1.1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	1	1.8	1.1
9. Central	2	5.9	5.5	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	2	5.9	5.5
Total	82	212.5	188.0	45	124.0	85.2	34	90.2	70.4	33	76.6	71.7	194	503.3	415.3

Region	1986		1987			1988			1989		Accumulated Total				
	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed
(Amounts in 000's of Lempiras)															
1. Sta. Barbara	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
2. Copan	0	0.0	0.0	1	2.5	0.9	0	0.0	0.0	0	0.0	0.0	2	5.0	3.2
3. Yoro	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	3	7.6	7.0
4. El Paraiso	67	156.0	154.9	22	62.4	37.1	0	0.0	2.4	0	0.0	0.0	127	306.2	264.9
5. Comayagua	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	83	197.1	157.1
6. Marcala	0	0.0	2.9	1	4.0	4.1	0	0.0	0.2	6	0.0	0.0	12	17.4	17.0
7. Olancho	7	23.7	14.4	9	24.5	27.5	12	37.9	26.2	11	38.0	34.4	100	311.3	264.5
8. Cortes	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	1	1.8	1.1
9. Central	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	2	5.9	5.5
Total	74	179.7	172.2	33	93.4	69.6	12	37.9	28.8	17	38.0	34.4	330	852.3	720.3

Table E-3. Number and Amount of Loans by Region and Year - Nurseries

Region	1982			1983			1984			1985			Sub-Total		
	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed
(Amounts in 000's of Lempiras)															
1. Sta. Barbara	12	147.6	78.1	64	393.9	141.1	14	231.4	187.3	8	23.1	51.3	98	796.0	457.8
2. Copan	12	150.1	82.7	21	217.1	149.8	23	306.1	199.8	4	158.8	83.2	60	832.1	515.5
3. Yoro	0	0.0	0.0	33	243.0	166.2	38	311.8	212.9	6	45.6	62.2	77	600.4	447.3
4. El Paraiso	3	35.4	14.3	16	147.2	77.9	13	145.9	98.5	1	7.9	17.4	33	336.4	208.1
5. Comayagua	8	44.8	27.7	11	195.2	148.1	18	295.6	214.5	12	91.9	64.5	49	627.5	454.8
6. Marcala	0	0.0	0.0	22	319.2	145.6	11	124.4	95.5	10	88.4	59.4	43	532.0	300.5
7. Olancho	9	135.0	91.2	6	105.0	54.5	12	133.5	86.3	0	0.0	0.0	27	373.5	232.0
8. Cortes	10	129.0	64.7	0	0.0	0.0	17	205.3	112.9	10	105.9	43.1	37	440.2	220.7
9. Central	2	15.2	0.7	5	56.2	29.4	7	54.1	55.5	8	48.7	28.7	22	174.2	114.3
Total	56	657.1	359.4	178	1,676.8	912.6	153	1,808.1	1,263.2	59	570.3	415.8	446	4,712.3	2,951.0

Region	1986			1987			1988			1989			Accumulated Total		
	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed	No. of Loans	Amount Approved	Amount Disbursed
(Amounts in 000's of Lempiras)															
1. Sta. Barbara	15	148.4	108.0	8	73.2	64.4	1	7.6	8.1	5	13.4	10.2	127	1,038.6	648.5
2. Copan	17	265.7	219.1	16	191.4	223.9	5	33.5	23.7	9	40.9	30.0	107	1,362.7	1,012.2
3. Yoro	28	228.3	216.1	38	316.9	289.2	3	18.6	30.0	0	0.0	0.0	146	1,164.2	982.6
4. El Paraiso	14	156.4	142.4	19	142.9	127.0	15	98.3	96.6	0	0.0	0.0	81	734.0	574.1
5. Comayagua	14	96.8	93.9	23	216.5	196.5	0	0.0	0.0	0	0.0	0.0	86	940.3	745.2
6. Marcala	11	177.9	161.7	16	107.0	89.3	2	15.0	21.2	0	0.0	0.0	72	831.9	572.7
7. Olancho	15	140.9	132.7	20	162.4	158.3	6	33.5	32.3	0	0.0	0.0	68	710.3	555.3
8. Cortes	15	92.5	82.1	21	154.4	138.0	18	94.8	57.7	1	5.0	4.3	92	786.9	502.8
9. Central	17	113.2	96.1	24	181.3	179.6	5	22.5	22.9	0	0.0	0.0	68	491.2	412.9
Total	146	1,420.1	1,252.1	185	1,546.0	1,466.2	55	323.8	292.5	15	58.4	44.5	847	8,060.6	6,006.3

Table E-4. Manzanas* Financed by Purpose, Region and Year

		MODEL I								
		1982	1983	1984	1985	1986	1987	1988	1989	Total
1. Sta. Barbara		105.0	199.0	260.0	298.0	233.5	122.0	59.0	176.0	1,452.5
2. Copan		109.5	251.5	409.5	271.0	398.0	399.0	92.0	266.0	2,196.5
3. Yoro		72.0	27.0	318.0	319.0	322.0	325.0	128.0	22.0	1,533.0
4. El Paraiso		83.0	64.0	131.0	208.0	253.0	361.0	591.0	153.0	1,844.0
5. Comayagua		110.5	191.0	365.5	124.0	182.0	249.0	93.0	239.0	1,555.0
6. Marcala		67.5	8.0	137.0	203.0	169.0	235.0	168.0	48.0	1,035.5
7. Olancho		79.5	157.5	132.0	83.5	218.0	235.0	106.0	71.0	1,082.5
8. Cortes		104.5	142.0	164.0	95.5	177.0	178.0	83.0	43.0	987.0
9. Central		5.0	39.0	110.0	63.0	139.0	302.0	87.0	56.0	801.0
Total		736.5	1,079.0	2,028.0	1,665.0	2,091.5	2,406.0	1,407.0	1,074.0	12,487.0

		MODEL II								
		1982	1983	1984	1985	1986	1987	1988	1989	Total
1. Sta. Barbara		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Copan		0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	2.0
3. Yoro		0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	4.0
4. El Paraiso		12.0	0.0	23.0	33.0	110.0	41.0	0.0	0.0	219.0
5. Comayagua		74.0	35.0	7.0	1.0	0.0	0.0	0.0	0.0	117.0
6. Marcala		0.0	3.0	1.0	2.0	0.0	2.0	0.0	0.0	8.0
7. Olancho		42.0	16.0	24.0	15.0	12.0	13.0	21.0	20.0	163.0
8. Cortes		1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
9. Central		2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Total		131.0	55.0	59.0	51.0	122.0	57.0	21.0	20.0	516.0

* 1 Manzana = .698 Has. = 1.726 acres

Table E-5. Nursery Plants Financed by Region and Year

	NURSERIES								
	1982	1983	1984	1985	1986	1987	1988	1989	Total
	(Thousands of Plants)								
1. Sta. Barbara	535	1,655	890	83	646	310	30	111	4,260
2. Copan	417	935	1,139	570	980	720	135	261	5,157
3. Yoro	0	1,180	1,131	173	878	1,289	90	0	4,741
4. El Paraiso	120	596	596	30	618	679	433	0	3,072
5. Comayagua	165	778	1,100	350	370	835	0	0	3,598
6. Marcala	0	1,183	455	330	498	405	60	0	2,931
7. Olancho	596	265	590	0	540	687	160	0	2,838
8. Cortes	435	0	745	373	332	562	369	21	2,837
9. Central	65	195	180	183	375	757	93	0	1,848
Total	2,333	6,786	6,826	2,092	5,237	6,244	1,370	393	31,281

Table E-6. Trends of Loans and Manzanas Financed by Year - Model I

	1982	1983	1984	1985	1986	1987	1988	1989	Total
Number of Loans	795	843	1,626	1,347	1,662	2,010	1,152	826	10,061.0
Amt. Approved Lps. (000 Total)	3,270.6	4,884.2	9,150.9	7,245.4	7,789.3	9,236.7	5,379.0	3,363.0	50,319.1
Amt. Disbursed Lps. (000 Total)	2,579.4	3,036.3	6,414.8	6,433.1	6,801.2	8,163.4	5,944.2	3,241.9	42,614.3
Lps. Appvd/loan	549.68	579.38	562.79	537.89	468.67	459.54	466.93	407.14	500.14
Lps. Disbursed/loan	433.51	360.18	394.51	477.59	409.22	406.14	515.99	392.48	423.56
% Apprvd. Disbursed	78.87%	62.17%	70.10%	88.79%	87.31%	88.38%	110.51%	96.40%	0.85
Manzanas Financed	736.5	1,079.0	2,028.0	1,665.0	2,091.0	2,406.0	1,407.0	1,074.0	12,486.5
Mzs. Financed/Loan	1.24	1.28	1.25	1.24	1.26	1.20	1.22	1.30	1.24

Table E-7. Accumulated Number of Loans by Type and Region - December 31, 1989.

Region	No. of Model I Loans	No. of Model II Loans	No. of Nursery Loans	No. of Diversified Loans	No. of Processing Loans	Total	Percent of Total
Sta. Barbara	1,081	0	127	2	59	1,269	10.9%
Copan	1,671	2	107	4	155	1,939	16.6%
Yoro	1,260	3	146	11	18	1,438	12.3%
El Paraiso	1,447	127	81	1	10	1,666	14.3%
Comayagua	1,320	83	86	3	30	1,522	13.1%
Marcala	860	12	72	2	26	972	8.3%
Olancho	849	100	68	0	3	1,020	8.8%
Cortes	827	1	92	17	35	972	8.3%
Central	746	2	68	0	38	854	7.3%
Total	10,061	330	847	40	374	11,652	

Table E-8. Accumulated Number of Manzanas Financed by Type and Region - December 31, 1989.

Region	Total Mzs. Model I Loans	Total Mzs. Model II Loans	Total Mzs. Diversified Loans	Total Manzanas	Percent of Total
Sta. Barbara	1,452.5	0.0	3.5	1,456.0	11.2%
Copan	2,196.5	2.0	4.0	2,202.5	16.9%
Yoro	1,533.0	4.0	8.0	1,545.0	11.8%
El Paraiso	1,844.0	219.0	5.0	2,068.0	15.8%
Comayagua	1,555.0	117.0	9.0	1,681.0	12.9%
Marcala	1,035.5	8.0	0.0	1,043.5	8.0%
Olancho	1,082.5	163.0	0.0	1,245.5	9.5%
Cortes	987.0	1.0	15.0	1,003.0	7.7%
Central	801.0	2.0	0.0	803.0	6.2%
Total	12,487.0	516.0	44.5	13,047.5	

1 Manzana = .698 has. = 1.726 acres

Table E-9. Accumulated Value of Loans Approved by Type and Region - December 31, 1989.

Region	Value of Model I Loans	Value of Model II Loans	Value of Nursery Loans	Value of Diversified Loans	Value of Processing Loans	Total	Percent of Total
	(000's of Lempiras)						
Sta. Barbara	6,113.2	0.0	1,038.6	12.3	310.1	7,474.2	12.2%
Copan	8,918.8	5.0	1,362.7	10.3	790.2	11,087.0	18.1%
Yoro	6,513.1	7.6	1,164.2	25.4	30.0	7,740.3	12.7%
El Paraiso	7,097.4	306.2	734.0	10.0	53.3	8,200.9	13.4%
Comayagua	6,016.1	197.1	940.8	10.4	213.7	7,378.1	12.1%
Marcala	4,442.8	17.4	831.9	21.0	146.3	5,459.4	8.9%
Olancho	4,170.2	311.3	710.3	0.0	11.0	5,202.8	8.5%
Cortes	3,930.1	1.8	786.9	58.4	138.5	4,915.7	8.0%
Central	3,117.0	5.9	491.2	0.0	110.2	3,724.3	6.1%
Total	50,318.7	852.3	8,060.6	147.8	1,803.3	61,182.7	

Table E-10. Accumulated Value of Loans Disbursed by Type and Region - December 31, 1989.

Region	Value of Model I Loans	Value of Model II Loans	Value of Nursery Loans	Value of Diversified Loans	Value of Processing Loans	Total	Percent of Total
	(000's of Lempiras)						
Sta. Barbara	4,893.8	0.0	648.5	4.9	249.8	5,797.0	11.3%
Copan	6,922.1	3.2	1,012.2	8.5	703.3	8,649.3	16.9%
Yoro	5,595.8	7.0	982.6	7.4	26.5	6,619.3	13.0%
El Paraiso	6,326.8	264.9	574.1	6.0	49.6	7,221.4	14.1%
Comayagua	5,096.5	157.1	745.2	7.1	314.2	6,320.1	12.4%
Marcala	3,715.7	17.0	572.7	13.0	134.7	4,453.1	8.7%
Olancho	4,090.1	264.5	555.3	0.0	9.8	4,919.7	9.6%
Cortes	3,203.6	1.1	502.8	9.1	121.9	3,838.5	7.5%
Central	2,769.9	5.5	412.9	0.0	104.3	3,292.6	6.4%
Total	42,614.3	720.3	6,006.3	56.0	1,714.1	51,111.0	

Table E-11. Project Beneficiaries and Area Financed Through 1989.

Description	Regionals									Total
	I Santa Barb.	II Copan	III Yoro	IV El Paraiso	V Coma gua	VI La Paz	VII Olan cho	VIII Cortes	IX Central	
CENSUS DATA										
Number of Producers (No.)	5,523	8,134	2,392	3,778	3,539	3,240	3,415	5,327	2,933	38,279
No. of Producers 2-20 Hzs. (No.)	3,257	3,508	1,591	2,359	2,130	994	2,419	3,262	1,495	21,014
Total Area in Coffee (Hzs.)	27,431	20,287	11,654	20,904	17,245	9,170	15,574	25,926	10,929	159,120
Area Coffee Prod. 2-20 Hzs. (Hzs.)	16,641	13,971	7,381	12,012	10,653	4,144	11,406	16,415	6,429	99,052
PROJECT DATA										
1982										
Number of Beneficiaries Total (No.)	79	66	59	63	116	52	85	88	3	611
Area Renovated Total (Hzs.)	93	91	66	89	139	64	120	107	5	774
1983										
Number of Beneficiaries Total (No.)	133	135	23	58	181	8	128	93	27	786
Area Renovated Total (Hzs.)	183	202	26	81	222	9	181	126	40	1,070
1984										
Number of Beneficiaries Total (No.)	211	253	241	133	288	119	107	145	89	1,586
Area Renovated Total (Hzs.)	266	394	321	158	363	137	153	179	101	2,072
1985										
Number of Beneficiaries Total (No.)	137	176	223	176	122	161	73	66	59	1,193
Area Renovated Total (Hzs.)	171	252	268	230	152	191	99	91	63	1,517
1986										
Number of Beneficiaries Total (No.)	128	288	269	236	153	134	223	112	133	1,676
Area Renovated Total (Hzs.)	163	384	318	340	181	159	290	153	137	2,125
1987										
Number of Beneficiaries Total (No.)	61	308	295	284	215	168	274	141	281	2,027
Area Renovated Total (Hzs.)	74	418	371	359	269	205	376	178	291	2,541
1988										
Number of Beneficiaries Total (No.)	46	66	107	365	58	152	123	63	85	1,065
Area Renovated Total (Hzs.)	54	87	139	436	87	192	172	73	89	1,329
1989										
Number of Beneficiaries Total (No.)	143	243	17	89	183	16	83	37	60	871
Area Renovated Total (Hzs.)	176	311	22	157	239	50	134	43	56	1,188
ACCUMULATED										
Number of Beneficiaries Total (No.)	938	1,535	1,234	1,404	1,316	810	1,096	745	737	9,815
Number of Women Benefic. Total (No.)	134	119	66	81	97	84	68	41	34	724
Area Renovated Total (Hzs.)	1,180	2,139	1,531	1,850	1,652	1,007	1,525	950	782	12,616
PERCENTAGE OF CENSUS TOTAL										
Percent of Producers Attended	20.8%	43.8%	77.6%	59.5%	61.8%	81.5%	45.3%	22.8%	49.3%	46.7%
Women as Percentage of Total	14.3%	7.8%	5.3%	5.8%	7.4%	10.4%	6.2%	5.5%	4.6%	7.4%
Percent of Total Area Renovated	7.1%	15.3%	20.7%	15.4%	15.5%	24.3%	13.4%	5.8%	12.2%	12.7%
Potential Beneficiaries (Not yet reached)	2,319	1,973	357	955	814	184	1,323	2,517	758	11,199
Potential Area not Renovated (Hzs.)	15,461	11,832	5,850	10,162	9,001	3,137	9,881	15,465	5,647	86,436

SOURCE: Departamentos de Estadística y Computación, IHCAFE.

NOTE: These are estimates from area frame sample and should not be compared with direct IHCAFE figures.

Table E-12. BANADESA Delinquency by Type and Region - June 1988.

Region	Value of Loans Outstanding	Value Totally in Arrears	Value Partially in Arrears	Total Value Arrears	Percent in Arrears
Sta. Barbara	2,065,250	41,326	485,900	527,226	25.5%
Copan	2,980,160	129,932	346,400	476,332	16.0%
Yoro	5,275,570	159,530	533,400	692,930	13.2%
El Paraiso	814,933	101,603	134,200	235,803	28.9%
Comayagua	1,693,085	244,179	450,600	694,779	41.0%
Marcala	1,263,880	170,009	29,700	199,709	15.8%
Olancho	990,615	43,119	202,700	245,819	24.8%
Cortes	836,041	3,141	195,600	198,741	23.8%
Central	2,097,903	2,162	106,800	108,962	5.2%
Total	18,017,437	895,001	2,485,300	3,385,301	18.8%

Number of Days in Arrears	Number of Loans	Value Totally in Arrears	Number of Pmts.	Value Partially in Arrears	Total Value Arrears	Percent of Total
1 - 30			1	2,500	2,500	0.1%
31 - 60					0	0.0%
61 - 90	1	4,030	1	1,253	5,283	0.2%
91 - 120	8	51,621	2	2,362	53,983	1.7%
121 - 150	1	5,720	6	6,707	12,427	0.4%
151 - 180	2	1,613	1	3,806	5,419	0.2%
181 - 360	144	540,492	944	1,647,962	2,188,454	67.1%
>360	75	209,080	507	785,472	994,552	30.5%
Total	231	812,556	1,462	2,450,062	3,262,618	100.0%

Table E-13. Characteristics of Beneficiaries as Found in 1990 Sample Survey

FARM CHARACTERISTICS:*

-Average size of farm.....	23.0 Mzs
-Farms from 0.1 To 4.9 Mzs.....	21.2%
-Farms from 5 to 9.9 Mzs.....	22.6%
-Farms from 10 to 49.9 Mzs.....	43.1%
-Farms from 50 to 99.9 Mzs.....	8.8%
-Farms 100 mzs and over.....	4.4%
-Average area planted to coffee.....	6.7 Mzs
-Average area in coffee production (1989/90)	5.5 Mzs
-Total coffee production (1989/90).....	78 Qq
-Average area financed by project.....	1.4 Mzs
-Average production on project areas.....	25.9 Qq
(mature coffee only)	
-Project plots with ina title.....	25.9%

Common crops grown:

-Corn, 31.5%;	-Garden crops, 7.2%
-Beans, 24.3%;	-Sugar cane, 5.8%
-Bananas and plantains, 26.4%;	-Cacao 1.4%
-Pasture, 14.1%;	-Cardamom, 1.8%
-Oranges, 8.0%;	-Other field crops, 4.3%
-Other fruits, 4.7%;	

Personal and family characteristics:

-Sex of beneficiary: male, 90.5%; Female, 9.5%;
-Age, 42.0 Years;
-Length of local residence, 28.4 Years;
-Marital state: legally married 69.0%; Single 15.3%;
Free union, 12.8%; Divorced, widowed, etc.. 3.0%;
-Size of household, 7.5 Persons;
-Schooling completed, 3.7 Years;
-Literacy rate, 78.1%;
-Distance from house to all-weather road, 2.6 Kms;
-Distance from farm to all-weather road, 3.9 Kms;
-Distance to medical assistance, 17.4 Kms;
-Distance to school, 1.1 Kms;
-Home lighting: traditional, 72.6%; Improved, 7.7%;
Electric, 19.7%;
-Cooking facilities: traditional, 89.8%; Improved, 8.8%;
Gas or electric, 1.5%;
-Water source: open river or stream, 12.4%; Improved
87.6%;
-Toilet facilities: none, 33.9%; Latrine, 48.5%;
Flush, 17.5%;
-Radio, 78.8%;
-Television, 19.3%;
-Sewing machine, 28.5%;

*NOTE: ALL CALCULATIONS BASED ON N=276 UNLESS OTHERWISE STATED

Table E-14. Number of IHCAFE Field Agents by Region and Selected Years

Region	Number of Field Agents					
	1982	1983	1990			
	Ext.	Ext.	Ext.	Credit	Adm.	Total
Sta. Bárbara	18	10	15	2	2	19
Copan	11	7	14	1	1	16
Yoro	10	7	10	1	2	13
El Paraíso	8	7	13	1	1	15
Comayagua	10	8	8	8	2	18
La Paz	7	6	12	2	1	15
Olancho	9	8	9	6	2	17
Cortés	11	7	12	1	1	14
Central	11	8	6	5	1	12
Total	95	68	99	27	13	139

SOURCE: Extension Department, IHCAFE.

APPENDIX P - SURVEY QUESTIONNAIRE

INSTITUTO HONDUREÑO DE CAFE
EVALUACION PROYECTO USAID/IHCAFE
MARZO 1990

SECCION A

FECHA DE ENTREVISTA			IDENTIFICACION
-----			-----
1. REGION IHCAFE			
DIA	MES	ANO	7. PRODUCTOR
-----	-----	-----	8. NUEVO
-----			-----

NOMBRE DEL PRODUCTOR _____

DIRECCION DEL PRODUCTOR _____

DIRECCION DE LA EXPLOTACION _____

1. ¿ES PRODUCTOR DE CAFE? SI 97.9 NO ___

2. ¿ES BENEFICIARIO DE AID-IHCAFE? SI 97.9 NO ___

2A. ¿CUANTAS MANZANAS SON FINANCIADAS POR EL PROYECTO AID-IHCAFE?
1.43 MANZANAS

2.B ¿CUAL ES LA PRODUCCION ACTUAL DE ESTE LOTE? (SEPT '89 - ABRIL '90)
(QUINTALES DE PERGAMINO SECO) 25.1 QQ
6

(CANTIDAD ___/UNIDAD DE MEDIDA ___/ESTADO ___)

3. CONSIDERANDO TODAS SUS TIERRAS INCLUYENDO LAS PROPIAS, ALQUILADAS, OCUPADAS, ETC. ¿QUE EXTENSION TIENE LA EXPLOTACION TOTAL?
(34.2 Mzs. 1989 sample) 22.6 MANZANAS

4. ¿DE ESTA EXPLOTACION CUANTO ES EL AREA TOTAL PLANTADA CON CAFE?
(10.3 Mzs 1989 sample) 6.7 MANZANAS

5. ¿EN ESTE AÑO CUANTAS MANZANAS DE CAFE HA COSECHADO O COSECHARA?
(SEP.1989 - ABRIL 1990) (9.2 Mzs. 1989 sample) 5.5 MANZANAS

6. ¿CUAL ES LA PRODUCCION QUE HA TENIDO O ESPERA OBTENER EN ESTE AÑO?
(QUINTALES DE PERGAMINO SECO) 91.8 QQ (78.4 qq. 1989 sample)

(CANTIDAD ___/UNIDAD DE MEDIDA ___/ESTADO ___)

7. ¿EL TERRENO SEMBRADO CON EL PROYECTO TIENE TITULO DE INA?
SI 25.3% NO 72.6%

¿ADEMAS DEL CAFE, QUE OTROS CULTIVOS TIENE EN LA FINCA?: 8. _____,
9. _____, 10. _____, 11. _____, 12. _____

*The "1989 sample" is data from same producers interviewed by ext. in Dec. 1989.

SECCION B

"RELACIONADO CON EL PROYECTO AID-IHCAPE-----"

1. ¿ESTA SATISFECHO CON LOS REQUISITOS ESTABLECIDOS PARA OBTENER ASISTENCIA TECNICA Y CREDITICIA DEL PROYECTO AID-IHCAPE?

SI 90.4% NO 7.8%

¿LE HA SIDO DIFICIL CUMPLIR CON LOS SIGUIENTES REQUERIMIENTOS?

2. OBTENCION DEL PRESTAMO SI 12.1% NO 86.1%
 3. MANTENER AL DIA LOS PAGOS SI 29.2% NO 69.0%

3A. ¿TIENE AL DIA SUS PAGOS? SI 72.6% NO 25.6%

¿LE HA SIDO DIFICIL SEGUIR LAS RECOMENDACIONES TECNICAS PARA?:

4. LA RENOVACION SI 9.6% NO 88.6%
 5. FERTILIZACION SI 15.7% NO 82.6%
 6. CONTROL DE PLAGAS SI 18.5% NO 79.7%
 7. REGULACION DE SOMBRA SI 9.6% NO 88.6%
 8. ESTABLECIMIENTO DE VIVEROS SI 45.2% NO 52.7%

8.1 ¿LE HA SIDO DIFICIL CONSIGUIR LOS INSUMOS? SI 32.4% NO 52.7%
 ¿CUALES/PORQUE? Costo 20.6% Transporte 2.1%

8.2 ¿DONDE OBTIENE LOS INSUMOS? Local 2.5% Region 79.4% Other 15%

9. ¿ESTA SATISFECHO CON LA ASISTENCIA CREDITICIA QUE LE PROPORCIONA EL BANCO PARTICIPANTE? SI 88.6% NO 8.5%
 ¿PORQUE NO? _____

10 ¿DE QUE AÑOS TIENE LOTES RENOVADOS CON FINANCIAMIENTO DEL PROYECTO AID-IHCAPE?

1982 4.6%, 1983 7.6%, 1984 16.4%, 1985 13.6%,
 1986 17.1%, 1987 25.6%, 1988 15.3%, 1989 8.6%.

¿EN QUE CONDICIONES SE ENCUENTRAN EN ESTE MOMENTO LOS LOTES RENOVADOS CON FINANCIAMIENTO DEL PROYECTO AID-IHCAPE?

	AÑO	EXCELENTE	BUENO	REGULAR	MALO	PERDIDO
11.	1982	_____	_____	_____	_____	_____
12.	1983	_____	_____	_____	_____	_____
13.	1984	_____	_____	_____	_____	_____
14.	etc.	_____	_____	_____	_____	_____
15.	Ave.	<u>3.5%</u>	<u>58.0%</u>	<u>35.2%</u>	<u>9.3%</u>	<u>2.2%</u>
16.						
17.	(<u>15.4%</u>	<u>41.3%</u>	<u>29.9</u>	<u>5.2%</u>	<u>3.2%</u>
18.			<u>1989 sample</u>)

19. ¿HA OBTENIDO CREDITO PARA MANTENER SU LOTE? SI 48.7% NO 49.1%

20. ¿BENEFICIA USTED SU CAFE? SI 90.4% NO 7.5%

21. ¿ DONDE BENEFICIA SU CAFE?
 1. FINCA 75.8%; 2. OTRO PARTICULAR 11.7%;
 3. COOPERATIVA 1.4%; 4. OTRO 5.0%

SECCION C

"ANTES DE PARTICIPAR EN EL PROYECTO AID-IHCAPE-----"

1. ¿QUANTAS MANZANAS TENIA SEMBRADO DE CAFE? 8.8 MZS
2. ¿CUAL FUE LA PRODUCCION ANUAL PROMEDIO QUE SACABA? 82. QQS
(EN QUINTALES DE PERGAMINO SECO)
3. ¿TENIA ACCESO AL CREDITO? SI 32.4% NO 61.9%
- ¿QUE TECNICAS USABA?
- | | |
|-------------------------------|--------------------------|
| 4. LA RENOVACION PERIODICA | <u>SI 55.9% NO 38.4%</u> |
| 5. FERTILIZACION | <u>SI 29.5% NO 64.8%</u> |
| 6. CONTROL DE PLAGAS | <u>SI 18.9% NO 75.4%</u> |
| 7. REGULACION DE SOMBRA | <u>SI 73.7% NO 20.7%</u> |
| 8. ESTABLECIMIENTO DE VIVEROS | <u>SI 50.2% NO 32.4%</u> |
9. ¿TENIA PROBLEMAS CON LA ROYA? SI 61.6% NO 32.4%

¿CUALES SON LAS VENTAJAS QUE UD VE EN EL PROYECTO DE AID-IHCAPE?

10. VENTAJA 1: Credit 52.0%
11. VENTAJA 2: More prod. 49.4%
12. VENTAJA 3: Tech. assistance 26.7%

¿CUALES SON LAS DESVENTAJAS QUE UD VE EN EL PROYECTO DE AID-IHCAPE?

13. DESVENTAJA 1: High Interest 35.6%
14. DESVENTAJA 2: Bad plants 15.0%
15. DESVENTAJA 3: Poor advice 10.4%

16. ¿ADEMAS DEL LOTE FINANCIADO CON AID-IHCAPE, HA PUESTO EN PRACTICA ALGUNAS TECNICAS NUEVAS EN OTROS LOTES? SI 68.0% NO 27.8%

- ¿CUALES TECNICAS?
17. TECNICA #1 Fert. 29.2%
18. TECNICA #2 Pruning 23.5%

19. ¿HA VISTO QUE SUS VECINOS, NO SIENDO BENEFICIARIOS DEL PROYECTO, PONEN EN PRACTICA ALGUNAS DE ESTAS TECNICAS? SI 54.8% NO 40.2%

- ¿CUALES TECNICAS?
20. TECNICA #1 Disease Control 13.5%
21. TECNICA #2 Pruning 11.5%

SECCION D (EXTENSION)

1. ¿COMO CONOCIO EL PROYECTO DE AID-IHCAPE? Ext. 88.1%, Otros 14%
2. ¿CON QUE FRECUENCIA HA TENIDO CONTACTO CON ALGUN REPRESENTANTE DEL PROYECTO AID-IHCAPE? SEMANALMENTE: 10.7%, MENSUALMENTE: 40.6%, VARIOS VECES AL AÑO: 37%, UNA VEZ AL AÑO: 5.7%; YA NO TIENE CONTACTO CON ELLOS: 2.8%, NUNCA HE TENIDO CONTACTO CON ELLOS: 0.7%

3. ¿CON QUIEN HA TENIDO MAS CONTACTO?

4. ¿MAYORMENTE, EL CONTACTO HA SIDO EN GRUPO O CON VISITA A LA FINCA?

(3. SOLO)	(4. GRUPO)	
<u>75.1% AGENTE DE EXTENSION</u>	<u>11.0%</u>	Total = 86.1%
<u>10.3% AGENTE DE CREDITO</u>	<u>1.1%</u>	Total = 11.4%
<u>18.9% PARATECNICO</u>	<u>2.5%</u>	Total = 21.4%

5. ¿HA PARTICIPADO EN ALGUNAS DE LAS CHARLAS DE LOS EXTENSIONISTAS?
SI 76.2% NO 21.4%

¿CUALES TEMAS TRATADAS EN LAS CHARLAS LE HAN SIDO DE MAS UTILIDAD?

6. TEMA 1: Disease Control 37.4%
7. TEMA 2: Fertilizers 24.5%
8. TEMA 3: Nurseries 14.2%

5. ¿HA PARTICIPADO EN ALGUN CURSILLO DEL PROYECTO AID-IHCAPE?
SI 54.8% NO 42.3%

¿CUALES TEMAS TRATADAS EN EL CURSILLO LE HAN SIDO DE MAS UTILIDAD?

9. TEMA 1: Disease Control 16.8%
10. TEMA 2: Fertilizers 10.0%
11. TEMA 3: General 11.1%

12. ¿DONDE FUE CELEBRADO EL CURSILLO?

12. CURSILLO #1: Local 23.5%
13. CURSILLO #2: Regional 44.4%
14. CURSILLO #3: National 14.5%, Int'l 3.6%

15. ¿EL PRECIO DE LA VENTA DEL CAPE LE HA AFECTADO EN SU PARTICIPACION EN EL PROYECTO DE AID-IHCAPE? (¿COMO?)

Yes (60.9%) No (36.7%)

SECCION E
(DATOS PERSONALES Y DE LA CASA)

1. ¿SEXO DEL BENEFICIARIO? HOMBRE 88.3% MUJER 36.7%
2. ¿CUANTOS AÑOS HA VIVIDO EN ESTE LUGAR? 28.7 yrs.
3. ¿CUANTOS AÑOS TIENE? 42.2 (1989 sample 41.5 yrs.)
4. ¿CUAL ES SU ESTADO CIVIL? Single 14.9%; Common Law 12.5%, Married 67.3%
5. ¿CUANTOS PERSONAS VIVEN EN SU CASA? 7.8
6. ¿HASTA QUE GRADO LLEGO EN LA ESCUELA? 4.1 yrs.
7. ¿SABE LEER Y ESCRIBIR? SI 76.2% NO 21.4%
8. ¿A QUE DISTANCIA SE ENCUENTRA EL CAMINO MAS CERCANO A SU VIVIENDA QUE ES TRANSITABLE POR VEHICULO? 2.9 KMS
9. EN EL VERANO? 1.4 KMS
10. ¿A QUE DISTANCIA SE ENCUENTRA EL CAMINO MAS CERCANO A SU FINCA QUE ES TRANSITABLE POR VEHICULO? 4.2 KMS (1989 3.4 Kms.)
11. EN EL VERANO? 2.4 KMS
12. ¿A QUE DISTANCIA SE ENCUENTRA ASISTENCIA MEDICA? 18.0 KMS
13. ¿A QUE DISTANCIA SE ENCUENTRA LA ESCUELA? 1.4 KMS
- ¿EN LA CASA:
 14. -CON QUE SE ALUMBRA? None 70.8%; lantern 7.5%; elec. 19.2%
 15. -CON QUE COCINA? Simple 87.5%; Improved stove 8.5%; elec. 1.4%
 16. -COMO CONSIGUE EL AGUA? River 12.1%; well 85.4%
 17. -TIENE LETRINA? No 33.1%; Outhouse 47.3%; Flush 17.1%
 18. -TIENE RADIO? Yes 76.9% No 20.6%
 19. -TIENE TELEVISOR? Yes 18.9% No 78.6%
 20. -TIENE MAQUINA DE COSER? Yes 27.8% No 68.7%
21. ¿CREA UD. QUE SU SITUACION ECONOMICA ACTUAL ES MEJOR, IGUAL O PEOR QUE LA DE HACE CINCO AÑOS? 1. MEJOR 56.6%; 2. IGUAL 17.8%; 3. PEOR 23.1%
22. ¿CREA UD., QUE DENTRO DE UN AÑO SU SITUACION ECONOMICA SERA MEJOR, IGUAL O PEOR QUE AHORA? 1. MEJOR 63.7%; 2. IGUAL 6.0%; 3. PEOR 4.3%; 4. NO SE 23.1%.

NOMBRE DEL ENTREVISTADOR

APPENDIX G - COMPARATIVE SURVEY DATA

In order to compare the data gathered during this evaluation study (1990) with that gathered earlier by the Evaluation and Monitoring office, our sample included 227 of the same farmers that have been studied earlier. A series of identical questions were used for comparative purposes. Some of the identical items from the earlier interviews were also coded into this data set so that they could be compared. The following table gives comparative findings for this group of 227 farmers.

COMPARISON OF BENEFICIARIES OF COFFEE IMPROVEMENT PROJECT IN TWO STUDIES.

	1989	1990
Average coffee area planted (mzs)	6.1	6.3
Average coffee area in production (mzs)	5.0	5.2
Average age of farmer (yrs)	41.8	41.0
Household size (persons)	7.6	7.5
Expected* and actual** coffee harvest	81.2*	68.9**

(NOTE: ESTIMATED SAMPLING ERROR = 6.5%)

As can be noted, the information from the two separate sources are similar for most of the items. The correlation when the items were compared case by case was also high and statistically significant. Information on expected coffee production was gathered before the harvest in 1989 and was more optimistic than that actually harvested as reported in March of 1990. We did find some discrepancies between the year that the plot was initiated in the two studies. The earlier data was collected by the extension agents and they had direct access to the official records while the farmers were using recall when they were interviewed in the recent study.