

UNCLASSIFIED

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D. C. 20523

HONDURAS

PROJECT PAPER

SMALL FARMER COFFEE IMPROVEMENT

(amendment #2)

AID/LAC/P-286 &
P-069

Loan Number: 522-T-044
Project Number: 522-0176

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AGENCY FOR INTERNATIONAL DEVELOPMENT		1. TRANSACTION CODE		DOCUMENT CODE	
PROJECT DATA SHEET		<input type="checkbox"/> A = Add <input type="checkbox"/> C = Change <input type="checkbox"/> D = Delete		Amendment Number 2	
COUNTRY/ENTITY HONDURAS		3. PROJECT NUMBER 522-0176			
4. BUREAU/OFFICE LAC		5. PROJECT TITLE (maximum 40 characters) Small Farmer Coffee Improvement			
6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY 05 21 90		7. ESTIMATED DATE OF OBLIGATION (Under "B:" below, enter 1, 2, 3, or 4) A. Initial FY 81 B. Quarter 3 C. Final FY 89			

8. COSTS (\$000 OR EQUIVALENT \$1 =)						
A. FUNDING SOURCE	FIRST FY 81			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	(400)	()	(400)	(3,750)	(100)	(4,250)
(Loan)	(300)	(8,700)	(9,000)	(1,200)	(5,800)	(16,000)
Other U.S.	1.					
	2.					
Host Country		60	60		28,942	29,002
Other Donor(s)						
TOTALS	7,000	8,760	9,460	4,950	34,842	49,252

9. SCHEDULE OF AID FUNDING (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) ARDN	120	079	079	1,250	9,000	3,000	7,000	4,250	16,000
(2)									
(3)									
(4)									
TOTALS									

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)						11. SECONDARY PURPOSE CODE			
012	020	044							
12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)									
A. Code									
B. Amount									

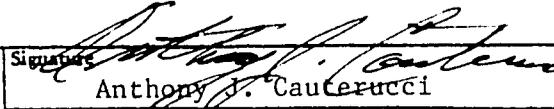
13. PROJECT PURPOSE (maximum 480 characters)

To mitigate the impact of coffee rust on small coffee producers by assisting them to increase yields and raise levels of real income.

14. SCHEDULED EVALUATIONS					15. SOURCE/ORIGIN OF GOODS AND SERVICES				
Interim	MM	YY	MM	YY	Final	MM	YY		
	1	2	8	3		1	2	8	5
						0	2	9	0
					<input checked="" type="checkbox"/> 000 <input checked="" type="checkbox"/> 941 <input checked="" type="checkbox"/> Local <input type="checkbox"/> Other (Specify)				

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP. Amendment)

The amended project will consist of four major components -- two continuing components - extension and credit - and two new components - diversification and quality control improvement.

17. APPROVED BY	Signature  Anthony J. Cauterucci	18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION MM DD YY 06/20/86
	Title Mission Director	

PROJECT AUTHORIZATION

(Amendment No. 2)

Name of Country:	Honduras
Name of Project:	Small Farmer Coffee Improvement
Number of Project:	522-0176
Number of Loan:	522-T-044

1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, the Small Farmer Coffee Improvement Project for the Republic of Honduras was authorized on May 27, 1981. That authorization is hereby further amended as follows:

a. Paragraph 1 of the authorization is deleted in its entirety, and the following substituted therefor:

"1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Small Farmer Coffee Improvement Project for the Republic of Honduras (the "Cooperating Country") involving planned obligations of not to exceed Sixteen Million United States Dollars (\$16,000,000) in Loan Funds ("Loan") and Four Million Two Hundred Fifty Thousand United States Dollars (\$4,250,000) in Grant Funds ("Grant") over a nine-year period from the date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the Project."

b. Paragraph 2 of the authorization is deleted in its entirety, and the following substituted therefor:

"2. The Project will mitigate the impact of coffee rust on small coffee producers by assisting them to increase yields and raise levels of real income, through the improvement and expansion of the Honduran Coffee Institute's (IHCAFE's) coffee extension services for small coffee farmers; and the establishment and operation of a special credit fund for beneficiaries who will participate in the coffee technification program with IHCAFE.

c. Paragraph 3.d., "Conditions Precedent to Disbursement", of the original Authorization is hereby modified by adding the Conditions (4) and (5) as follows:

"(4) Prior to the disbursement of the Assistance, or the issuance by A.I.D. of documentation pursuant to which disbursements will be made to finance the investment credit fund, the Borrower/Grantee shall cause IHCAFE to provide to A.I.D., in form and substance satisfactory to A.I.D., evidence that IHCAFE has successfully negotiated the involvement of the private banks in utilizing their own financial resources to provide annual production credit to their clients who are also beneficiaries of the project.

(5) Prior to the disbursement of Assistance, or the issuance by A.I.D. of documentation pursuant to which disbursements will be made to finance the coffee processing component of the project, the Borrower/Grantee shall cause IHCAFE to provide to A.I.D., in form and substance satisfactory to A.I.D., evidence that a study has been carried out to determine the feasibility of improving the efficiency of coffee processing facilities, and to develop a scheme for the privatization of publically own processing facilities."

2. The authorization cited above remains in force except as hereby amended.

Signature: Anthony J. Cauterucci
Anthony J. Cauterucci, Mission Director
Date: 6/6/86

Draft Project Authorization (Amendment No. 2). Project 522-0176.

Drafted: DF:MJBaltodano

Cleared: DF:WGKaschak	<u>[Signature]</u>	Date: <u>3/19</u>
ORD:JJordan	<u>[Signature]</u>	Date: <u>5/20/86</u>
DP:JMiller	<u>[Signature]</u>	Date: <u>5/24/86</u>
CONT:PAmos	<u>[Signature]</u>	Date: <u>5/26/86</u>
DMD:CHLeonard	<u>[Signature]</u>	Date: <u>5/31/86</u>
RD:RPeters	<u>[Signature]</u>	Date: <u>5/20/86</u>

PROJECT PAPER AMENDMENT FOR
SMALL FARMER COFFEE IMPROVEMENT PROJECT
(522-0176)

I. Project Background

A. Introduction

The Small Farmer Coffee Improvement Project was authorized on May 27, 1981. The Project Paper requested funding of \$9.550 million of which \$7.300 million was approved and obligated on June 5, 1981. Amendment No. 1, dated August 30, 1982, obligated \$2.250 million. Amendment No. 2 to the Loan/Grant Agreement, dated February 8, 1985, was based on an authorization amendment and obligated \$0.700 million in additional funding thereby bringing the current funding total to \$10.250 million.

The purpose of this Project Paper Amendment is to justify the authorization and subsequent obligation of an additional \$10 million and to extend the PACD to May 26, 1990.

B. Goal and Purpose

The goal of this Project is 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 of the Project is to mitigate the impact of coffee rust on small coffee producers by assisting them to increase yields and raise levels of real income.

C. Performance 1981-1986

Over the 1981-1986 implementation period, four separate evaluations have been conducted. These reviews strongly suggest that, to date, the Project has been a resounding success. This success is attributable to a combination of factors, most significant of which are: 1) a need on the part of some 4,600 small coffee farmers for obtaining and adapting technologies to counteract the deleterious effects of coffee rust; 2) availability of an appropriate proven technological package; 3) credit availability in areas and to farmers to whom it was not available before; 4) inclusion of the private banking system as part of the financial lending mechanism; 5) acceptance of IHCAFE extension agents who have been trained in modern coffee production and have experience in working with the smaller producers; and 6) the feasibility of utilizing paratechnicians to reduce the case load of extension agents and serve as village based outreach agents.

As noted in Table I below, the total of direct Project beneficiaries has exceeded, by 50%, the EOP projection of 3,000, and the land area upgraded through technological improvement is nearly equal to the originally projected 6,000 manzanas. Furthermore, the demand for credit exceeded the most optimistic projections. Table II reveals that, to date, the Project has made more than 4,600 subloans. The large majority, 95%, of the subloans were for Model I type renovation which involves total elimination of old plants and replanting with improved varieties. Demand for this model was strong because

of the severity of rust and the advanced average age of existent plantations, which for the most part, could not support partial renovation. The preference of Project beneficiaries for the total renovation solution has resulted in yields which have exceeded anticipated levels; in addition, this upward production curve occurred sooner than expected. The beneficiaries' demand for this complete renovation package under Model I has led to concomitant high demand for credit from Project resources.

The average pre-Project yields were approximately 5 quintales (cwt) per manzana (.698 ha.). In the second year following renovation, average yields rose to nearly 20 quintales per manzana. The original PP anticipated no such production increases so early in Project implementation. In the third year following renovation, average yields have approximated 25 quintales per manzana, and exceptional individual yields in excess of 70 and 80 quintales have been verified. Concomittantly, this has resulted in increases in both family and non-family employment. It is also clear that foreign exchange earnings from coffee produced by Project beneficiaries showed a positive balance in the third year following the start of renovation activities. It is estimated that the Project will have generated nearly \$15 million of additional export earnings by the end of the 1985/86 market year. (See Table D in Annex A.

Finally, as noted in Table 2, below, the private banking system has responded to the Project and now manages nearly 44% of the existing loan portfolio. This ratio is increasing rapidly and at least four other private banks have expressed interest in entering the Project. The financial system is working well and loan delinquency in the portfolio has been maintained at less than four percent.

Four years into Project implementation it is clear that this intervention in the Honduran coffee sector has served to diminish the impact of coffee rust on overall production and maintained coffee earnings as a major contributor to GNP and foreign exchange earnings. IHCAFE is particularly pleased with the implementation of the Project. It has demonstrated its ability to provide viable technical assistance to small coffee farmers in the face of the debilitating effects of roya (rust), which is reducing production on non-technified areas by 15 to 20 percent each year and thereby diminishing Honduras' export production. More importantly, the Project has served as a vehicle to provide financial and technical support to 4,602 small coffee farmer participants, allowing them to vastly improve the quantity of their production and continue their participation in this important sector of the Honduran agricultural economy. Indications are that the real income of participant farmers has increased significantly (e.g., \$300 per manzana pre-Project to \$2,000 and more per manzana in the third year following renovation), and improvements in family living conditions are apparent among beneficiaries. Owing to the Brazilian drought, price increases from the 1985/86 harvest will garner unprecedented profits. While it is fortuitous that the Project was on-line to facilitate the generation of windfall profits, the Project would have had positive results even at 1984/85 prices. Given the success of the Project to date, and the significance of coffee production to the country, USAID believes that a Project expansion is both merited and opportune. This proposed amendment will take advantage of the momentum generated to date to continue to reactivate this important sector of the economy.

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

Table 1

Outputs	Indicators (End-of-Project)	By end of 1985
-IHCAFE's ability to help small farmers increased ^{1/}	3,000 new coffee farmers serviced	4,602 new farmers had been helped
	3,000 new farmers receive training	4,602 have received training informally
-Technology improved ^{1/}	6,000 mz. using improved varieties	5,874 mz. using improved varieties
	6,000 mz. fertilized	5,874 mz. fertilized
	6,000 mz. treated for pests	5,874 mz. treated for pests
-Management by farmers strengthened	6,000 mz. under improved cultivation	5,874 mz. under improved cultivation
	6,000 mz. pruned coffee	First technified areas just now need pruning ('86)
	6,000 mz. fertilized	About 5,874 mz. fertilized
	6,000 mz. under proper shade	About 4,600 mz. under shade program
-Viable, self-sustaining credit system in place	6,000 mz. at optimum plant density	About 5,874 mz. at optimum plant density
	By 1985, reflows begin to finance farmers beyond original participants	Reflows from nursery loans held in reserve against 1986 nursery requirements. Other reflows just beginning

^{1/} Although the original EOP indicators have been exceeded for Project beneficiaries and nearly met for improved technology, it should be noted that the GOH added the Lempira equivalent of \$5,000,000 for credit from ESF funding in 1985. Also, the expected split between total (20%) and (80%) partial renovation was in fact heavily skewed towards total renovation (95%) which explains the reduced areas over original projections.

Table 2

Coffee Renovation as of End CY1985

Area: 5873.5 manzanas
Number subloans: Model I: 4390; Model II 212
Value subloans : Model I Model II
Approved : \$12,200,050 \$251,650
Disbursed : \$ 9,984,200 \$224,050

Nursery Activity

Number of Plants Financed: 17,620,500
Number of Nursery Credits: 446
Value of Nursery Credits : \$2,372,550

Credit Institutions Involved: 4

BANADESA	55.9%	of credit portfolio
BANHCAFE	25.5%	" " "
Banco de Occidente	15.5%	" " "
Banco Sogerin	3.1%	" " "

Cooperatives Involved: 6

Paratécnicos Trained: 150

II. Amendment Description

The proposed 10 million dollar amendment to this Project will enable USAID to continue and to expand the financial and technical assistance currently being provided to the small coffee producer. It is expected that this new assistance will enhance institutionalization within IHCAFE of its capability to address the needs of project beneficiaries. An increase in credit and technification assistance will further serve to spread the benefits of this Project, particularly at a time when indications are that a strong market demand for coffee will continue.

A. Conformance with A.I.D. Policy

This Project amendment will enhance the effect of a development intervention congruent with USAID/H rural development goals and strategy. This strategy consists of a multifaceted program addressing a linked series of sectoral specific problems. The goals for the agricultural sector include increasing the income and improving the living conditions of the rural poor, increasing foreign exchange earnings generated by the agricultural sector, raising the contribution of agriculture to GDP by 4%, and preserving and enhancing the natural resource base. To achieve these objectives USAID is concentrating on: 1) increasing productivity and diversification of the productive base into export crops; 2) securing access to resources to improve productivity; 3) development and diffusion of improved production technologies; and 4) an upgrading of the human resource base. Progress towards obtaining these objectives is being made with the current USAID/Honduras agricultural portfolio.

This Project is contributing to the realization of all these objectives through the coffee technification package, the increased access to credit, the emphasis on an export crop, and the training component directed towards improving the human capital resource base. Furthermore, this amendment conforms to the Kissinger Commission/Jackson Plan recommendations on agricultural development and the A.I.D. Policy Determination on Food and Agriculture, Private Sector and Institution Building. As recommended by the Kissinger Commission and the A.I.D. Policy Determination of Food and Agriculture, the Project will continue to increase coffee production and enhance productivity on small farmer plantations affected by rust. In consonance with the A.I.D. Private Enterprise and Institution Building Policies, the Project will concentrate on the small coffee farmer, involve the private sector banking system and strengthen an institution (IHCAFE), which is key to the continued functioning of the coffee sector.

The original design and strategy of the Project was and is viable. As noted earlier, the Mission, IHCAFE and the GOH are satisfied with the results achieved by the Project thus far. There is no intention in this amendment to modify the original goal and purpose, and the key issues (access to credit and technology transfer) identified in the original Project design continue to be important considerations.

IHCAFE will continue to be the executing agency through which Project funds will be channeled for extension and training activities. The Central Bank and participating private banks will continue to administer subloans for nurseries, renovation and production credit to farmers.

B. Amendment Components

1. Extension Activity

The objective of A.I.D. assistance to the IHCAFE extension service has been and will continue to be the development and institutionalization of a methodology which permits effective outreach to small coffee farmers. During implementation of the Project, the necessary adjustments and changes have been made in the role of IHCAFE extension agents. The very nature of the Project has meant that extension agents must be involved in credit considerations for small farmer participants. Therefore, the role of the extension agent has been expanded to include identification of potential participants, and the preparation of farm plans, financial statements and subloan applications. These applications are then referred to the regional credit agent for review and approval. The credit agent submits the subloan documentation to a participating bank for final approval.

A complementary part of this extension activity (a product of the first Project evaluation), has been the establishment of a paratechnician component. The paratechnician is permanently village-based and is available to provide technical advice to the farmers of his area. He furnishes a link between the farmers and the IHCAFE extension agents and also represents a very "hands on" approach to the resolution of problems coffee farmers may be experiencing. This addition to the Project has served well to complement the activities of the IHCAFE agents. Extension services to groups and cooperatives has also been expanded. As the Project progresses through this proposed amendment period, extension methodology will be updated so that even greater

numbers of small farmers can be served. In addition to continuing improvements in the extension system, the Project expansion calls for an increase in staff -- from 77 to 92 extension agents and from 10 to 15 credit agents. The paratécnicos will be doubled from the current level of approximately 100 to 200. Project activities will continue to be coordinated at the national office through the IHCAFE Project Coordination Unit. All extension agents and credit agents at the regional levels will continue to work with both Project and non-Project farmers. Paratécnicos will continue to have a regional and individual extension agent orientation.

a) Staff Training

The continued success of all extension activities is related directly to the quality of technician and paratechnician training. Short courses, seminars, workshops, field days, supervised work activities and training courses in the United States and Central America will be continued and expanded. Although new agents will receive training specific for the Project, the primary thrust of training for the extension corps will be in extension methodology, crop diversification, soils and conservation practices. Credit agents will receive training in a heavily on-the-job oriented mode in the United States, working with the USDA Farmers Home Administration, the Farm Credit Banks' Production Credit Associations and private banks, particularly with relation to small farmer credit. IHCAFE regional managers will receive special management training and the research technicians will be given training in statistics, economics and use of micro-computers for research.

b) Paratécnico Training

The paratécnico (PT) activity came into being following the first Project evaluation which strongly recommended that it be initiated. The recent evaluation of the training activity described it thusly:

"PTs attend training courses at the regional level for one or two days duration, that are related to specific skills such as sprayer calibration, how to lay-out fields for contour planting, insect identification and control, and pruning practices. Most of the PTs have also attended national courses for one week each year to receive training in soil conservation, proper fertilizer application, use of fungicides and pesticides, and oral communication skills. When tested in the field during the on-site visits, the PTs showed a high level of technical skill as well as the ability to communicate their knowledge." With regard to future training the evaluation stated: "The training program that is being used should be continued with the following additions and changes: add training modules for coffee processing, marketing, leading group discussions, agency referral techniques, cooperative organization and working with non-beneficiaries." Based on the foregoing recommendation, IHCAFE will proceed with this paratécnico training through regionally oriented courses provided by regional and national staff.

c) Small Farmer Training

Although small farmers work directly with paratécnicos and extension agents in a "hands-on" mode relative to agronomic aspects of diversification, IHCAFE has utilized the national training center at La Fé near Pena Blanca, to train groups of up to 48 farmers for one-week periods in modern coffee technology. This has included soil conservation and management, use of

fungicides, herbicides and pesticides, pruning techniques, credit, and farm management considerations. Additionally, IHCAFE utilizes daily radio programs and the Campeño newspaper to discuss and promote the technification process. IHCAFE has also developed durable flip charts on soil conservation, fertilizer application, pruning, contour planting and layout, and use of sprayers and spraying techniques. These are used by extension agents in group meetings held in the coffee areas. All of the foregoing will be continued and expanded in the second phase of the Project. IHCAFE will finance the costs of small farmer training for farm management, financial planning, and technified coffee production.

d) Promotion and Farmer Selection

Knowledge of the Project now extends to all coffee farmers in the country. Given the large number of growers who want to participate in the Project, IHCAFE will draw from a highly motivated and enthusiastic group in selecting beneficiaries. The selection criteria established in IHCAFE's operational Credit Manual has proven effective and will continue to be utilized.

e) Development of Credit/Extension Service

Project evaluations have indicated that a separation of credit and farmer instruction as proposed in the original PP was not a viable design scheme in a supervised program such as the one included in this initiative. As a result, extension agents were given credit training in selection criteria, loan application preparation, financial statements and investment plans. When an agent has prepared the foregoing, the data is sent to the regional credit agent for review and approval. The credit agent forwards this documentation to the farmers' choice of participating banks for final approval. It should be noted that credit agents have been selected from among the extension agent cadre and have received intensive credit training, but all are knowledgeable coffee extension agents. This system is working well and no change is contemplated except, as noted previously, to increase the cadre of credit agents by five to provide greater coverage in those regions with the highest number of subloans.

f) Production of New Coffee Plants

No revision in this component is contemplated. Formulation of a system for new coffee plant production has been accomplished. A network of nursery producers is now well established. Experience has demonstrated that 18-month credit was preferable over 1 year credit as originally planned. Similarly, nursery plantings are now programmed to assure that plants are ready for transplanting at the start of the rainy season for the areas served by nurseries. IHCAFE continues to provide technical supervision to nursery producers.

g) Honduran Agricultural Research Foundation (FHIA)
Grant for Soil Characterization, Soil Testing and Adaptive
Research

While thus far the Project has been successful in increasing small farmer coffee production, a general lack of producer and extension agent knowledge relative to fertilizer requirements has resulted, in many cases, in improper fertilizer application with a consequent reduction in production and

farmer income. To correct this deficiency, the Amended Project will include a grant to (FHIA) to permit collaboration with IHCAFE in a program to achieve the goals of reducing production costs and developing alternative crops for coffee producing regions. IHCAFE has a well-established extension service in coffee regions, and as a result of the AID/IHCAFE Project, it has developed a strong relationship of trust and confidence with an audience of over 4,600 farmers who have intensified their coffee production on a portion of their land. FHIA is especially well qualified to assist IHCAFE in developing improved technological recommendations on soils and proper fertilizer applications for these farmers due to FHIA's analytical laboratory, experience in this type of analysis, its experience in regional soil characterization, and its programs in diversification research, agronomy, entomology, pathology, and physiology. Accordingly, in the amended Project FHIA will:

i) Carry out a soil characterization of coffee regions. Regions will be evaluated in terms of soil qualities and fertility, climate, elevation, rainfall, etc. Data will be generated from aerial photography, visual ground level surveillance, existing secondary data, and sampling and analysis of soils and foliar material to identify the characteristics most likely to effect input recommendations and suitability for alternative crops. Specific farms from which soil and foliar samples are drawn would be identified on a map along with analytical results.

ii) Delineate recommendation domains within the regions. Results of analytical work in the lab, which indicate nutritional status, will be correlated to observed productivity in the field to generate location or domain specific fertilization recommendations. Sampling of actual production will be completed with fertility trials carried out at the farm level. Observation and experimentation over a 2-3 year period will allow FHIA scientists to map homogeneous domains and make appropriate fertilization recommendations for each domain. These recommendations will emphasize optimizing plant nutrition while simultaneously considering other important variables such as pruning and shade regulation.

iii) Train IHCAFE staff in sampling and interpretation of results. All of FHIA's activities will be conducted in collaboration with IHCAFE counterparts to assure continued utilization of the research methodologies.

iv) Conduct applied diversification research. Data generated from the regional characterizations will also be used to identify alternative crops appropriate to local conditions. FHIA's program of diversification research will manage on-farm trials of varieties and management practices for these crops. In some regions this research may involve participation of the cacao, cardamom or vegetable research programs as local conditions dictate.

Implementation of these activities will be managed by a team of three FHIA soil scientists financed with funds from this Project. They will be supported by the FHIA analytical lab and research staff as needed. In conducting the research, the FHIA technicians will collaborate closely with IHCAFE extensionists in contacting farmers, collecting specific soil samples, and assisting in the supervision of farm level research trials. This collaboration will both optimize field operations and allow simultaneous training of IHCAFE staff.

It is expected that the FHIA technicians will characterize and delineate domains within a zone in about 6-8 weeks, depending on local conditions and availability of secondary data. Within three years, FHIA anticipates analyzing specific soil and foliar samples from 3,000-6,000 farms as a part of this process. The benefits of the delineation of recommendation domains, of course, will accrue to any farmer within that zone or within a similar zone anywhere in the country whether or not they have had an individual soil analysis.

2. Credit Activity

As highlighted in several Project evaluations, timely availability of credit is a critical factor for the technification program. The initial Project allotments for credit (\$8,000,000 of A.I.D. funding and \$250,000 of counterpart funding) were disbursed in early 1985, more than one year ahead of schedule. An additional lempira equivalent of \$5,000,000 in counterpart from ESF funding was added in 1985 to cover requirements for renovation and production credit in that year. By the end of CY1985, \$12,206,500 had been disbursed in nursery and renovation credits representing 4,602 subloans to beneficiaries for 5,784 manzanas. Further funding under this amendment plus reflows will provide credit requirements for nurseries, renovation and annual production for some 5,800 additional subloans representing approximately 7,266 manzanas. By the end of the Project, it is anticipated that 13,050 manzanas (8.1% of total coffee area) will have been renovated and 10,402 farmers (26.0% of total producers) will have been assisted.

Interest rates to end users, although originally expected to be in the 14-15% range, have been maintained at a near market rate of 17% throughout the Project and no change is planned. The initial interest rate spreads were modified, which resulted in additional private bank participation. These modifications are shown in Table III below.

Table III

Credit Interest Rate Spreads

	<u>Original</u>	<u>Current</u>
Participating Bank for administrative costs	3.0%	6.0%
Participating Bank for reserve for bad loans	6.5%	4.5%
IHCAFE guarantee	2.0%	0.0%
IHCAFE for technical assistance	3.0%	4.0%
Central Bank for administrative costs	0.5%	0.5%
Central Bank reserve to cover A.I.D. loan costs	2.0%	2.0%
	<u>17.0%</u>	<u>17.0%</u>

Originally, only one private bank, BANHCAFE, participated in the Project. Over time private bank involvement has increased to three, with the addition of Banco de Occidente and Banco Sogerin. These private institutions, in conjunction with the efforts of the public bank, BANADESA, are providing excellent coverage in servicing the Project's credit needs.

Following current practice, subloans to beneficiaries from participating banks will be made for up to seven years, with a three-year grace period on total renovation and five years, with two years of grace, on partial renovation. Credit to nursery owners for plant production will be extended for a maximum period of 18 months.

Total renovation implies complete removal of all coffee plants and shade trees, replanting with appropriate varieties at optimum densities, followed by a complete and continuous maintenance program consisting of fertilization, weed control, fungicide and insecticide application and pruning as required. Partial renovation is, as the term suggests, a fractional replacement of coffee plants. An improved variety is interplanted with the salvageable coffee trees to increase plant density to approximately 3,000 plants/manzana. Simultaneously, shade vegetation is reduced, the salvageable plant stock is radically pruned and a complete and continuous maintenance program like Model I is undertaken. The increased spread of coffee rust has reduced the practice of partial renovation to an almost meaningless percentage of the total area addressed by the Project.

Although the Project has demonstrated the viability of lending mechanisms for both complete and partial renovation, the current funding is not adequate, given the degree of coffee rust infestation, to allow a substantial intervention and improvement from current reflows. The nearly 5,000 small farmers, many of whom had never had formal credit, have proven their credit worthiness and participating banks perceive that the technical package can be managed by small farmers and that such borrowers are good credit risks. Even so, the magnitude of rust, with resultant heavy demands for credit exceeds the participating banks' ability to provide adequate credit from their own funds. This expansion will allow a continuation of renovation and will provide adequate financing to sustain a meaningful intervention from credit reflows over the long run.

3. Quality Control Improvement Activity

One of the most significant problems that affects the coffee sector is the lack of medium and large processing facilities (beneficios húmedos) that could provide service to thousands of coffee producers in Honduras. This has resulted in individual producer construction of rudimentary processing facilities that lack uniformity and seriously hinder efforts to establish adequate quality control standards. This lack of quality control and standardization not only negatively affects the foreign exchange earnings and export taxes, but also reduces potential earnings to coffee producers. The international market for coffee is highly competitive with respect to quality. Most countries work to maintain and improve quality for both prestige and to maximize their income. It has been estimated that Honduras loses \$10 million annually from inferior quality coffee sold.

Given the importance of achieving export quality standards for coffee, this amendment will provide funding directed towards reactivating existing coffee processing facilities. Funds will be used to develop a country plan to furnish central administration, professional management and uniform operating procedures for these facilities. This plan will be based on a study of each of the current 14 beneficios to determine the costs of rehabilitation and operation and to identify any current marketing constraints. Furthermore, and because some of these beneficios are now owned by IHCAFE, the study will also determine market value for these beneficios in anticipation of possible divestiture or private sale during Project implementation. In sum, the reactivation of these beneficios will: 1) improve the quality of Honduran coffee by making it more competitive and improve demand for it; 2) raise producer income; and 3) contribute to the increase of foreign exchange earnings and export taxes.

4. Diversification

In late 1985 the GOH added the equivalent of \$750,000 from L1,500,000 of ESF funding to the Project as a revolving credit to be used for diversification credits under the same operational criteria of the coffee rehabilitation credit fund. At the present time, the Tripartite Agreement among the Central Bank, the Ministry of Finance and IHCAFE is in final draft and upon signing will permit the financing of diversified activities in the coffee sector. The Agreement will include: 1) the elimination of old plantations for replanting to other crops; 2) activation of idle lands into productive crops; and 3) possible inclusion of small animal enterprises. These activities will be tied closely to the adaptive research of FHIA to be carried out under the Project as well as ongoing activities within IHCAFE. IHCAFE extension agents will provide technical assistance backstopping to farmers for diversified enterprises which are developed.

III. End of Project Status

During the three-year extension, approximately 5,800 additional small coffee farmers will be included in the Project. This figure, added to the 4,602 small farmers reached in the initial phase, provides a sufficient number of producers to impact in a significant way on overall coffee production levels, the contribution of coffee to a growth in GDP, export taxes and foreign exchange earnings.

The following table reflects the expected annual export earnings through 2,000 from those plots renovated between 1982 and 1989. Data is conservatively based on 11 productive years of renovated plots, per manzana production, actual experience to date and export prices as set forth in the table. The annual earnings are in excess of those which would have been expected had rust existed and no renovation taken place.

HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
 CONTRIBUTION OF PROJECT TO EXPORTABLE COFFEE PRODUCTION
 AND VALUE OF EXPORTS IF 94% OF PRODUCTION IS EXPORTED

Year	Additional Exportable Production (100 lbs.)	Price (US\$/100 lbs.)	Additional Foreign Exchange (1,000 US\$)	Use of F.X.	Net Increase F.X.
1982	(4,564)	121.92	(556)	(82)	(474)
1983	(480)	115.31	(55)	(116)	(6)
1984	22,537	110.55	2,491	12	2,479
1985	64,606	200.00	12,921	390	12,531
1986	129,328	154.0	19,916	1,027	18,889
1987	181,118	147.00	26,624	1,637	24,987
1988	239,457	140.00	33,524	2,318	31,206
1989	267,452	133.00	35,571	2,767	32,804
1990	286,840	126.00	36,142	3,093	33,049
1991	291,293	127.00	36,994	3,312	33,682
1992	268,303	129.00	34,611	3,177	31,434
1993	254,997	131.00	33,405	3,111	30,294
1994	223,898	133.00	29,778	2,811	26,967
1995	195,260	135.00	26,360	2,467	23,893
1996	153,274	135.00	20,692	1,963	18,729
1997	118,597	135.00	16,011	1,537	14,474
1998	76,856	135.00	10,376	1,004	9,372
1999	43,936	135.00	5,931	578	5,353
2000	20,490	135.00	2,766	271	2,495
TOTAL			\$383,512	31,277	352,235

It is anticipated that the following objectives will be achieved by the PACD:

i. Productivity per manzana (.698 hectare) for all Project beneficiaries will have increased from 5.5 quintales (cwt) to a minimum of 20 quintales in the third year following renovation.

ii. The number of small farmer subloans at the end of CY1985 (4,602) will have been increased to 10,402 by the end of CY1990.

iii. Reflows from the credit fund will permit the creation of a self-sustaining credit source that will finance more coffee renovation on additional lands in an ever-expanding program of technification.

In order to reach the end of Project status, as described above, A.I.D. and counterpart resources will be used to finance activities which will result in the following:

i. An expanded and better qualified IHCAFE extension service, including a viable paratécnico component;

ii. Increased and improved use of technologies at farm level;

iii. The application of better farm management techniques at the farm level, including improved utilization of fertilizer based on soil testing;

iv. The establishment and expansion of a viable, self-sustaining credit mechanism for small coffee farmers;

v. The establishment of a viable beneficio (processing) system that upgrades the quality of coffee produced.

Finally, credit mechanisms will be in such condition that reflows from Project beneficiaries will be contributing to an ever expanding number of producers and technified coffee lands. It is therefore expected that this Project will contribute to a self-sustaining institutionalization of a technical and financial capability within the GOH which will serve the interests of the small coffee producers long after the Project is finished.

IV. Financial Plan

With this amendment, the Small Farmer Coffee Improvement Project will represent a total planned investment of the equivalent of \$49.3 million of which AID is contributing \$16.0 million in Loan Funds and \$4.3 million in Grant Funds. The Government of Honduras will have contributed approximately the equivalent of \$29.0 million, both in kind and in cash by the end of the Project.

The first phase of this Project began in 1981 with an initial authorization of \$9.0 million from AID Loan funds and \$1.3 million of AID Grant Funds. The Honduran Government initially contributed the equivalent of \$14.9 million for a total investment in the first phase of \$25.1 million.

In this second phase of the Project, and in accordance with the planned funding, AID will provide a \$7.0 million Loan and a \$3.0 million Grant. The Honduran Government counterpart will be the equivalent of \$14.1 million, making a total project investment in the second phase of \$24.1 million.

The disbursement period of the Project extension will begin in June 1986 and will be for four years.

Tables I, II and III annexed to this financial plan show the total Project costs, the second phase costs and the disbursements by fiscal year, respectively.

A) A.I.D. Loan Funds:

In this second phase of the Project, \$4.8 million (69 percent) of AID Loan Funds will be used for credit activity, thus increasing the existing credit fund already established in the first phase of the Project. The credit procedures agreed upon with the Central Bank, Ministry of Finance, and Private Banks for the authorization and contracting of Sub-loans to small coffee producers will be continued in this phase of the Project. One million (14 percent) of Loan Funds will be used in credits for reactivation and renovation of the "beneficio" facilities in the country for improving the quality of coffee processed.

The remaining 17 percent of AID Loan Funds (\$1.2 million) will be used for the training of personnel, printing publications, the purchase of 20 four-wheel drive vehicles and other equipment, as well as for periodic evaluations and audits.

B) USAID Grant Funds:

Grant funds of \$2.0 million (67 percent) will be for Technical Assistance to be provided by expatriate and host-country personnel. Their services will be needed for various periods, throughout the four year extension of this Project.

Grant funds of \$0.5 million (16.5 percent) will be applied for training personnel on different subjects needed for improving personnel skills. The training will be given by the U.S. Department of Agriculture (USDA) in the United States and in Honduras. The remaining \$0.5 million (16.5%) of Grant Funds will finance an agreement between FHIA and IHCAFE for soil characterization and testing for the first 3 years of the Project. FHIA will also assist IHCAFE in a research program to achieve the goals of reducing production costs and developing alternative crops for coffee producing regions.

C) GOH Counterpart

As mentioned earlier, the GOH counterpart contribution will be \$14.1 million. This consists of the equivalent of \$9.5 million (67.5 percent of the GOH contribution) that will be used for the credit fund that was developed in the first phase of the Project. Of this \$9.5 million, \$2.9 million will be specifically designated for coffee purchase as a revolving credit through the "beneficios". The equivalent of \$0.3 million (2 percent) will be for the purchase of motorcycles and improvement of facilities at the training center.

Finally, provision for the equivalent of \$750 thousand in counterpart (5 percent) is made for the administrative and operating costs of the proposed unit that will supervise the credit fund and for improvement of quality coffee production through reactivation of the "beneficios". In addition, the amount of \$3.3 million (23 percent) will be budgeted for paying administrative and operating costs of IHCAFE.

D) Disbursement Procedures:

A.I.D. will reimburse IHCAFE for authorized expenses as detailed in the Financial Plan for extension activity expenses. With regard to the credit fund, the Central Bank will continue to provide a discount line and advance funds to BANADESA, BANHCAFE, Banco de Occidente and Banco Sogerin. For credit fund drawdowns, AID will directly reimburse the Central Bank which will in turn make the funds available to the administering banks. A.I.D. will reimburse the Central Bank upon receipt of a certified list of sub-borrowers for the amount of the subloans. The Central Bank, Independent Auditors, RIG or A.I.D. Auditors will all periodically audit the portfolio of each bank.

TABLE I
SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL PLAN (COMPLETED PROGRAM)
(US\$.000)

ACTIVITY DESCRIPTION	A. I. D. LOAN FIRST STAGE	FUNDS SECOND STAGE	A. I. D. GRANT FIRST STAGE	FUNDS SECOND STAGE	TOTAL A. I. D. LOAN	FUNDS GRANT	GOH COUNTERPART FIRST STAGE	SECOND STAGE	TOTAL GOH COUNTERPART	GRAN TOTAL PROJECT
I. Extension Activity							7,210.2	1,977.0	9,187.2	9,187.0
a) Personnel										3,240.0
b) Technical Assistance			1,240.0	2,000.0		3,240.0				1,717.3
c) Training	329.8	400.0	10.0	500.0	729.8	510.0	43.5	434.0	477.5	51.7
d) Demonstration Lots	51.7	-	-	-	51.7	-	-	-	-	329.2
e) Publications	79.2	127.5	-	-	206.7	-	-	122.5	122.5	907.9
f) Vehicles and Equipment	307.0	440.0	-	-	747.0	-	54.9	106.0	160.9	1,411.2
g) Operating Costs	7.9	-	-	-	7.9	-	729.3	674.0	1,403.3	172.0
h) Farms Rehabilitation	50.0	50.0	-	-	100.0	-	-	72.0	72.0	250.4
i) Evaluation and Audit	125.4	125.0	-	-	250.4	-	-	-	-	500.0
j) FHIA	-	-	-	500.0	-	500.0	-	-	-	175.0
k) Training Center	-	-	-	-	-	-	-	175.0	175.0	
SUBTOTAL	951.0	1,142.5	1,250.0	3,000.0	2,093.5	4,250.0	8,037.9	3,560.5	11,598.4	17,941.9
II. Credit Activity										
a) Annual Production Credits	-	-	-	-	-	-	2,000.0	4,100.0	6,100.0	6,100.0
b) Renovation and Nurseries Credits	8,000.0	4,797.5	-	-	12,797.5	-	3,250.0	1,964.5	5,214.5	18,012.0
c) Administration	-	-	-	-	-	-	710.0	-	710.0	710.0
d) Diversification	-	-	-	-	-	-	750.0	592.0	1,342.0	1,342.0
e) Beneficios-Coffee Purchase	-	-	-	-	-	-	-	2,854.0	2,854.0	2,854.0
SUBTOTAL	8,000.0	4,797.5	-	-	12,797.5	-	6,710.0	9,510.5	16,220.5	29,018.0
III. Beneficios Activity										
a. Renovation	-	500.0	-	-	500.0	-	-	-	-	500.0
b. Working Capital	-	500.0	-	-	500.0	-	-	-	-	500.0
c. Administrative Support	-	-	-	-	-	-	-	750.0	750.0	750.0
SUBTOTAL	-	1,000.0	-	-	1,000.0	-	-	750.0	750.0	1,750.0
Contingency and Inflation	49.0	60.0	-	-	109.0	-	150.1	283.0	433.1	542.1
IV. SUBTOTAL	49.0	60.0	-	-	109.0	-	150.1	283.0	433.1	542.1
GRAND TOTAL	9,000.0	7,000.0	1,250.0	3,000.0	16,000.0	4,250.0	14,898.0	14,104.0	29,002.0	49,252.0

TABLE II
SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL PLAN (SECOND STAGE)
(US\$.000)

ACTIVITY DESCRIPTION	A. I. D. LOAN	A. I. D. GRANT	TOTAL A. I. D.	TOTAL GOH COUNTERPART	TOTAL PROJECT
<u>Extension Activity</u>					
a. Personnel	-	-	-	1,977.0	1,977.0
b. Technical Assistance	-	2,000.0	2,000.0	-	2,000.0
c. Training	400.0	500.0	900.0	434.0	1,334.0
d. Demonstration Lots	-	-	-	-	-
e. Publications	127.5	-	127.5	122.5	250.0
f. Vehicles and Equipment	440.0	-	440.0	106.0	546.0
g. Operating Costs	-	-	-	674.0	674.0
h. Farms Rehabilitation	50.0	-	50.0	72.0	122.0
i. Livestock and Poultry	125.0	-	125.0	-	125.0
j. Honduras Agriculture Research Foundation (FHIA)	-	500.0	500.0	-	500.0
k. Training Center	-	-	-	175.0	175.0
SUBTOTAL Extension Activity	1,142.5	3,000.0	4,142.5	3,560.5	7,703.0
<u>I. Credit Activity</u>					
a. Annual Production Credits	-	-	-	4,100.0	4,100.0
b. Renovation and Nurserie's Credits	4,797.5	-	4,797.5	1,964.5	6,762.0
c. Administration	-	-	-	-	-
d. Diversification	-	-	-	592.0	592.0
e. Beneficios - Coffee Purchase	-	-	-	2,854.0	2,854.0
SUBTOTAL Credit Activity	4,797.5	-	4,797.5	9,510.5	14,308.0
<u>II. Beneficio Activity</u>					
a. Renovation	500.0	-	500.0	-	500.0
b. Working Capital	500.0	-	500.0	-	500.0
c. Administrative Support	-	-	-	750.0	750.0
SUBTOTAL Beneficio Activity	1,000.0	-	1,000.0	750.0	1,750.0
<u>V. Contingency and Inflation</u>					
SUBTOTAL Contingency and Inflation	60.0	-	60.0	283.0	343.0
GRAND TOTAL	7,000.0	3,000.0	10,000.0	14,104.0	24,104.0

TABLE III
 SMALL FARMER COFFEE IMPROVEMENT (SECOND STAGE)
 DISBURSEMENTS - CALENDAR PROGRAM
 (US\$.000)

DESCRIPTION	1986	1987	1988	1989	TOTAL
A. <u>A.I.D. Loan Funds</u>					
I. <u>Extension Activity</u>					
a. Training	100.0	100.0	100.0	100.0	400.0
b. Demonstration Lots	-	-	-	-	-
c. Publications	37.5	30.0	30.0	30.0	127.5
d. Vehicles and Equipment	440.0	-	-	-	440.0
e. Operating Costs	-	-	-	-	-
f. Farms Rehabilitation	-	20	20	10	50
g. Evaluation and Audit	25	25	50	25	125
II. <u>Credit Activity</u>					
a. For Rehabilitation and Nurseries	2,000.0	1,500.0	1,297.5	-	4,797.5
b. For Beneficios Renovation	-	500.0	-	-	500.0
c. For Working Capital	-	500.0	-	-	500.0
III. Contingency and Inflation	-	20.0	20.0	20.0	60.0
SUBTOTAL AID LOAN FUNDS	2,602.50	2,695.0	1,517.5	185.0	7,000.0
B. <u>AID Grant Funds</u>					
Technical Assistance	443.0	682.0	625.0	250.0	2,000.0
Training	125.0	200.0	125.0	50.0	500.0
Honduras Agriculture Research Foundation (FHIA)	125.0	250.0	125.0	-	500.0
SUBTOTAL AID GRANT FUNDS	693.0	1,132.0	875.0	300.0	3,000.0
C. <u>Total AID Funds</u>	3,295.5	3,827.0	2,392.5	485.0	10,000.0
D. <u>GOH Counterpart</u>					
I. <u>Extension Activity</u>					
a. Personnel	348.0	543.0	543.0	543.0	1,977.0
b. Technical Assistance	-	-	-	-	-

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TABLE III
SMALL FARMER COFFEE IMPROVEMENT (SECOND STAGE)
DISBURSEMENTS - CALENDAR PROGRAM
(US\$.000)

DESCRIPTION	1986	1987	1988	1989	TOTAL
c. Training and Capacitation	284.0	50.0	50.0	50.0	434.0
d. Demonstration Lots	-	-	-	-	-
e. Publications	62.5	20.0	20.0	20.0	122.5
f. Vehicles and Equipment	53.0	-	26.5	26.5	106.0
g. Operating Costs	154.0	183.0	171.0	166.0	674.0
h. Farms Rehabilitation	42.0	10.0	10.0	10.0	72.0
i. Evaluation and Audit	-	-	-	-	-
j. Honduras Agriculture Foundation	-	-	-	-	-
k. Training Center	108.0	37.0	15.0	15.0	175.0
SUBTOTAL Extension Activity	1,051.5	843.0	835.5	830.5	3,560.5
<u>II. Credit Activity</u>					
a. Annual Production Credits	3,100.0	1,000.0	-	-	4,100.0
b. Renovation and Nurseries	-	1,964.5	-	-	1,964.5
c. Diversification	-	-	592.0	-	592.0
e. Beneficios	-	2,854.0	-	-	2,854.0
SUBTOTAL Credit Activity	3,100.0	5,818.5	592.0	-	9,510.5
<u>III. Beneficios Activity</u>					
a. Administrative Support	-	375.0	375.0	-	750.0
SUBTOTAL Beneficios Activity	-	375.0	375.0	-	750.0
<u>IV. Contingency and Inflation</u>					
	53.0	95.0	68.0	67.0	283.0
E. <u>Total GOH Counterpart</u>	4,204.5	7,131.5	1,870.5	897.5	14,104.0
GRAND TOTAL	7,500.0	10,958.5	4,263.0	1,382.5	24,104.0

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V. Project Analysis

A. Economic and Financial Analysis

The original Economic and Financial Analyses stated that the Project, from both a financial and economic perspective, is viable. Under a number of different scenarios, (partial renovation, full renovation, high incidence of rust, no incidence of rust) the project demonstrated an internal rate of return indicating financial feasibility. The total renovation schemes, for instance indicated an internal rate of return (IRR) of 27% while the lower cost partial renovation scheme showed an IRR of 47%. In both of these cases, the economic rate of return, which includes benefits attributable to the avoidance of rust losses was calculated at 36% for total renovation and 64% for partial renovation. This analysis also took into account the particular market structure of coffee and concluded that no significant market inequities exist which would diminish the project's feasibility. In short, the Project was judged economically sound. A similarly positive conclusion has been reached from an analysis of the proposed inputs for this amendment.

B. Financial Feasibility

1) Internal Rate of Return to the Farmer

The principal measure of feasibility adopted in this analysis is the internal rate of return. This is the measure of the rate of discount at which the total stream of benefits would be exactly equal to the total stream of costs to produce those benefits. An activity is feasible when the internal rate of return exceeds the opportunity cost of capital. This is considered to be an appropriate and descriptive gauge of feasibility for a Project whose benefits are the value of agricultural production and costs are directly associated with that production.

Tables 1.3 and 1.4 taken from Annex A, demonstrate the internal rate of return to the farmers under models of total and partial renovation. Both calculations assume the farmer bears all the costs of renovation and production and the figures refer to a one manzana farm. Each table includes a calculation of IRR with farm gate prices of \$70.00 per quintal (Case 1) and a low of \$50.00 per quintal (Case 2) as a sensitivity analysis of either a price or a yield drop. The total renovation scheme presents a 32.6% IRR when prices and yields reflect a price of \$70.00 per quintal (Case 1). With a drop in prices/yields (Case 2), the IRR falls to 10.6% for the total renovation, still a very acceptable rate. For partial renovation where costs are not as high as they are for total renovation, the IRR is over two times higher. For Case 1, the IRR is 80.4%, and for the more pessimistic Case 2, a 13.8% IRR prevails.

A. I. D. PROJECT NO. 522-0176
 SMALL FARMER COFFEE IMPROVEMENT PROJECT
 METHODS OF IMPLEMENTATION AND FINANCING
 (\$ 000)

<u>METHOD OF IMPLEMENTATION</u>	<u>METHOD OF PAYMENT</u>	<u>APPROXIMATE AMOUNT</u>
<u>Technical Assistance</u>		
PASAS or Direct Personal Services, Contractor A. I. D.	Direct Payment	\$ 2,000.00
HC Non-Profit Contractor Direct Non-Profit or Direct Profit Making	Direct Reimbursement	500.00
Contractor	Direct Payment	125.00
<u>Training</u>		
Non-Profit or HC Contract	Direct Payment or Direct Reimbursement	910.00
<u>Commodities</u>		
Purchase Order or Direct Profit Making Contractor		440.00
<u>Other</u>		
Local Support Costs	Direct Reimbursement	227.00
<u>Credit</u>		
Operating Credit funds	Direct Reimbursement	4,798.00
Working Capital funds	Direct Reimbursement	<u>1,000.00</u>
	TOTAL PROJECT US FUNDS	\$ <u>10,000.00</u> =====

TABLE 1.3
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL RATE OF RETURN TO FARMER - TOTAL RENOVATION
(U.S. DOLLARS)

Year	Cost			Add. Work. Cap. (US\$)	Production			Price		Additional Income		Additional Net Benefits	
	Bef. (US\$)	After (US\$)	Net		Bef	Aft	Net	(1)	(2)	(1)	(2)	(1)	(2)
1	200	1,926	1,726					70	50	(490)	(350)	(2,216)	(2,076)
2	180	741	561		6	12	6	70	50	399	285	(162)	(276)
3	162	1,637	1,475	1,328	6	50	44	70	50	3,103	2,217	301	(586)
4	146	1,509	1,363	(101)	5	45	40	70	50	2,793	1,995	1,530	732
5	131	1,583	1,452	80	5	50	45	70	50	3,179	2,270	1,647	739
6	118	1,342	1,224	(205)	4	40	36	70	50	2,511	1,793	1,492	775
7	106	1,088	982	(218)	4	30	26	70	50	1,840	1,314	1,076	550
8	96	1,088	992	10	3	30	27	70	50	1,866	1,333	864	331
9	86	1,088	1,002	9	3	30	27	70	50	1,889	1,349	879	339
10	77	1,088	1,011	8	3	30	27	70	50	1,910	1,364	892	346
11	70	1,088	1,018	7	2	30	28	70	50	1,929	1,378	904	353
12	63	1,088	1,025	(916)	2	30	28	70	50	1,946	1,390	1,837	1,281
IRR											32.6%	10.6%	

Source: Table 1.1.

Note: Yields are expressed in "Pergamino Seco"

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TABLE 1.4
 HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
 FINANCIAL RATE OF RETURN TO FARMER - PARTIAL RENOVATION
 (U.S. DOLLARS)

Year	Cost			Add. Work. Cap. (US\$)	Production			Price		Additional Income		Additional Net Benefits	
	Bef.	After	Net		Bef	Aft	Net	(1)	(2)	(1)	(2)	(1)	(2)
	(US\$)				(qq)								
1	200	1,054	854		7	7	0	70	50	0	0	(854)	(854)
2	180	1,117	937		6	30	24	70	50	1,680	1,200	743	263
3	162	1,414	1,252	1,127	6	40	34	70	50	2,401	1,715	22	(664)
4	146	1,567	1,421	294	5	50	45	70	50	3,150	2,250	1,434	534
5	131	1,397	1,266	(155)	5	40	35	70	50	2,450	1,750	1,340	640
6	118	1,397	1,279	13	4	30	26	70	50	1,820	1,300	528	8
7	106	1,397	1,291	12	4	30	26	70	50	1,820	1,300	517	(3)
8	96	1,397	1,301	11	3	30	27	70	50	1,890	1,350	578	38
9	86	1,397	1,311	10	3	30	27	70	50	1,890	1,350	570	30
10	77	1,397	1,320	9	3	30	27	70	50	1,890	1,350	562	22
11	70	1,397	1,327	8	2	30	28	70	50	1,960	1,400	625	65
12	63	1,397	1,334	(1,327)	2	30	28	70	50	1,960	1,400	1,953	1,393
IRR												80.4%	13.8%

Source: Table 1.2.

Note: Yields are expressed in "Pergamino Seco".

According to these data, both total and partial renovation are attractive for the coffee farmer. In the case of a drop in prices/yields, partial renovation is still attractive to the farmer. Total renovation, when considered in the context of a price/yield depression scenario also demonstrates diminished profitability although it still appears to provide sufficient economic incentive for the small coffee farmer to enter the Project.

Although the foregoing analysis provides sufficient rationale for increased funding for this Project, it was also considered appropriate to look at the potential attractiveness of the proposed diversification scheme under this amendment. Accordingly, two scenarios were considered. The first scenario assumes a farmer planting one manzana in cacao (Table 2.2) from Annex A and the second assumes a farmer planting one manzana in cardamom (Table 3.2) from Annex A. A financial IRR was calculated for both of these scenarios. These calculations include data based on average prices of past years (Case 1) and also on an assumed 30% drop in these prices (Case 2). Case 2 can be considered a sensitivity analysis for a combined drop in prices and yields. The IRR's obtained for the farmer, assuming he bears all investment costs, are 25.0% for cocoa and 50.5% for cardamom, for Case 1. For the more pessimistic Case 2, which assumes a drop in prices and yields, the IRR's obtained are 14.9% for cocoa, and 32.4% for cardamom.

Finally, an analysis was conducted to determine the attractiveness of investing in a typical coffee mill. Table 4.3 taken from Annex A, presents the financial IRR. For what is assumed to be a reasonably expected export price (Case 1), the IRR is 18.2%. If export prices were to drop by 30%, Case 2 indicates an IRR of 10.8%. Although not as high as IRR's obtained in coffee renovation or in diversification, these rates are still attractive and will be even more so if the investment can be financed largely by banking credit, whose real rate of interest should not be over 8% to 10% a year. In any case, this analysis will be refined through a feasibility study of investing in coffee mills or "beneficios" prior to a determination regarding the viability of this aspect of the Project.

TABLE 4.3
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL INTERNAL RATE OF RETURN OF A TYPICAL COFFEE MILL
(U. S. DOLLARS)

Year	Investment	Net Benefits (1)	(2)	Depreciation	Net Cash Flow (1)	Flow (2)
0	275,832				(275,832)	(275,832)
1		22,171	8,941	3,600	25,771	12,541
2		34,049	17,039	3,600	37,649	20,639
3		45,926	25,136	3,600	49,526	28,736
4		57,804	33,234	3,600	61,404	36,834
5		63,743	37,283	3,600	67,343	40,883
6		63,743	37,283	3,600	67,343	40,883
7		63,743	37,283	3,600	67,343	40,883
8		63,743	37,283	3,600	67,343	40,883
9		63,743	37,283	3,600	67,343	40,883
10	(239,832)	63,743	37,282	3,600	307,175	280,715
IRR					18.2%	10.8%

Note: (1) Assumes an export price of US\$133.00/qq.
(2) Assumes an export price of US\$ 93.00/qq.

2) Project Internal Rate of Return

To estimate the economic benefits of the Project it is necessary to adjust certain costs and benefits to reflect the economic costs and benefits to the economy. In this particular case two factors were adjusted, labor and the cost of foreign exchange. The reason for this adjustment is because most of the beneficiaries of the Project are unskilled labor, living in a rural setting with very little opportunity to work. It is difficult to determine what the economic cost of this labor would be with the limited available data, and though it is believed to be lower, an adjustment factor of 0.6 was used. Similarly, owing to Central Bank restrictions, foreign exchange for the purchase of imported commodities, is not easily obtainable. This indicates that the real cost of the dollar to the economy is higher than L2.00. To adjust this cost, a factor of 1.3 was used. Both of these adjustments were done in order to reflect the true opportunity cost of these factors to the economy as a whole.

Besides the costs incurred by the farmer there are other costs incurred by IHCAFE, AID, and the Government of Honduras to supervise and provide assistance to the coffee growers serviced by the project. These costs were US \$24,644 in 1981, US \$699,022 in 1982, US \$1,210,743 in 1983, US \$1,335,929 in 1984. They are estimated at US \$3,500,414 for 1985, and are budgeted at US \$5,676,602 for 1986, US \$3,740,825 for 1987, US \$2,373,728 for 1988 and US \$1,382,976 for 1989 (Table A) from Annex A.

SMALL FARMER COFFEE IMPROVEMENT
Calendar of Disbursements
(US Dollars)

TABLE A

DESCRIPTION	1981	1982	1983	1984	1985	1986	1987	1988	1989	TOTAL
A. I. D. LOAN FUNDS										
Training	-	5,485	17,589	84,596	186,100	136,000	100,000	100,000	100,000	729,770
Demonstration Lots	-	-	13,683	9,974	20,000	8,000	-	-	-	51,657
Publications	-	-	3,807	18,050	31,000	63,884	30,000	30,000	30,000	206,741
Vehicles and Equipment	-	152,082	92,848	2,028	60,000	440,000	-	-	-	746,958
Evaluation and Audit	-	-	209	25,203	25,000	100,000	25,000	50,000	25,000	250,412
Operational Costs	-	5,827	-	72	2,000	-	-	-	-	7,899
Rehabilitation of Damaged Lots	-	-	-	-	50,000	-	20,000	20,000	10,000	100,000
Credit: Rehabilitation and Nurseries	-	1,406,909	2,396,426	3,566,091	630,574	2,000,000	1,500,000	1,297,500	-	12,797,500
Credit: Repairing Beneficios	-	-	-	-	-	-	500,000	-	-	500,000
Credit: Working Capital Beneficios	-	-	-	-	-	-	500,000	-	-	500,000
Contingency and Inflation	-	-	-	-	-	49,063	20,000	20,000	20,000	109,063
SUBTOTAL	-	1,570,303	2,524,562	3,706,014	1,004,674	2,796,947	2,695,000	1,517,500	185,000	16,000,000
A. I. D. GRANT FUNDS										
Technical Assistance	-	100,839	207,732	188,115	461,314	700,000	707,000	625,000	250,000	3,240,000
Training	-	-	-	-	10,000	125,000	200,000	125,000	50,000	510,000
FHIA	-	-	-	-	-	125,000	250,000	125,000	-	500,000
SUBTOTAL	-	100,839	207,732	188,115	471,314	950,000	1,157,000	875,000	300,000	4,250,000
GOH COUNTERPART FUNDS										
Personnel	22,971	419,726	801,197	950,319	2,030,000	2,487,300	1,389,075	543,075	543,075	9,186,738
Training	-	2,124	1,362	-	15,000	299,375	60,000	50,000	50,000	477,861
Vehicles and Equipment	-	1,333	31,072	22,518	-	53,000	-	26,500	26,500	160,923
Operational Costs	1,673	11,606	41,115	34,904	250,000	433,625	292,425	171,275	166,275	1,402,898
Credit Administration	-	-	-	-	300,000	330,000	80,000	-	-	710,000
Publications	-	-	-	-	-	62,500	20,000	20,000	20,000	122,500
Rehabilitation of Damaged Lots	-	-	-	-	-	42,500	10,000	10,000	10,000	72,500
Training Center	-	-	-	-	-	107,500	37,500	15,000	15,000	175,000
Credit: Crop Production	-	-	-	-	2,000,000	3,100,000	1,000,000	-	-	6,100,000
Credit: Renovation and Nurseries	-	-	-	250,000	3,000,000	-	1,964,253	-	-	5,214,253
Credit: Diversification	-	-	-	-	750,000	-	-	592,563	-	1,342,563
Beneficios: Coffee Purchase	-	-	-	-	-	-	2,853,655	-	-	2,853,655
Beneficios: Administrative Support	-	-	-	-	-	-	375,000	375,000	-	750,000
Contingency and Inflation	-	-	129	150	60,000	112,855	124,825	67,878	67,126	432,963
SUBTOTAL	24,644	434,789	874,875	1,257,891	8,405,000	7,028,655	8,206,733	1,871,291	897,976	29,001,854
TOTAL PROJECT	24,644	2,105,931	3,607,169	5,152,020	9,880,988	10,775,602	12,058,733	4,263,791	1,382,976	49,251,854
TOTAL CREDIT	-	1,406,909	2,396,426	3,816,091	6,380,574	5,100,000	8,317,908	1,890,063	-	29,307,971
TOTAL COSTS	24,644	699,022	1,210,745	1,335,929	3,500,414	5,675,602	3,740,825	2,373,728	1,382,976	19,943,883

Taking into consideration the above mentioned costs which involve training, technical assistance, and extension, plus investment for coffee renovation, diversification, and the renovation of 14 coffee mills, Table B calculates the economic IRR of the entire project. As before, two situations have been considered: expected prices based on an average of past years, (Case 1) and a more pessimistic alternative (Case 2). The IRR's obtained are 53.3% for Case 1 and 26.8% for Case 2. These figures provide a strong endorsement for the implementation of the investment.

3) Complementary Benefits

Although the benefit of creating employment has already been considered in the economic analysis by applying a 0.6 shadow price for unskilled labor, and the benefit of providing foreign exchange has been taken into account through a 1.3 shadow price of foreign exchange, it will be useful to indicate what these Project benefits translate into with respect to tangible outcomes.

4) Employment Generation

Table C from Annex A, shows that the implementation of the Project will create 9,500 additional jobs when the Project reaches full development, by year 1991.

5) Foreign Exchange Generation

The analysis done for this amendment indicates that the Project became a net earner of foreign exchange in the third year of implementation and will provide Honduras with approximately \$35 million a year in foreign exchange by 1991. (Table D from Annex A.

TABLE D
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
CONTRIBUTION OF PROJECT TO GENERATION OF
FOREIGN EXCHANGE

Year	COFFEE				COCOA				CARDAMOM			COFFE MILL	TOTAL	
	Add Prod. (qq)	Price (US\$/ qq)	F. X. Gen. (1000 US\$)	Use (82)	Add. Prod. (qq)	Price (US\$/ qq)	F. X. Gen. (1000 US\$)	Use	Add. Prod. (qq)	Price (US\$/ qq)	F. X. (1000 US\$)	Add. F.X.		
1982	(4,564)	121.92	(556)	(82)									(474)	
1983	(480)	115.31	(55)	(116)									60	
1984	22,537	110.55	2,491	12									2,479	
1985	64,606	200.00	12,921	390									12,531	
1986	129,328	154.00	19,916	1,027									18,889	
1987	181,118	147.00	26,624	1,637			105				20	276	25,139	
1988	239,457	140.00	33,524	2,318			133				25	355	31,403	
1989	267,452	133.00	35,571	2,767	1,925	91	175	147	158	600	95	22	434	33,339
1990	286,840	126.00	36,142	3,093	5,400	91	491	192	368	600	221	26	513	34,057
1991	291,293	127.00	36,994	3,312	8,492	91	773	192	543	600	326	27	553	35,115
1992	268,303	129.00	34,611	3,177	10,506	91	956	194	613	600	368	27	553	33,090
1993	254,997	131.00	33,405	3,111	14,203	91	1,292	197	613	600	368	27	553	32,282
1994	223,898	133.00	29,778	2,811	16,688	91	1,519	199	613	600	368	27	553	29,181
1995	195,260	135.00	26,360	2,467	16,688	91	1,519	199	613	600	368	27	553	26,106
1996	153,274	135.00	20,692	1,963	16,688	91	1,519	199	613	600	368	27	553	20,942
1997	118,597	135.00	16,011	1,537	16,688	91	1,519	199	613	600	368	27		16,133
1998	76,856	135.00	10,376	1,004	16,688	91	1,519	199	613	600	368	27		11,032
1999	43,936	135.00	5,931	578	16,688	91	1,519	199	613	600	368	27		7,014
2000	20,490	135.00	2,766	271	16,688	91	1,519	199	613	600	368	27		4,155
2001					16,688	91	1,519	199	245	600	147	11		1,456
2002					16,688	91	1,519	199						1,320
2003					16,688	91	1,519	199						1,320
2004					16,688	91	1,519	199						1,320
2005					16,688	91	1,519	199						1,320
2006					16,688	91	1,519	199						1,320
2007					7,458	91	679	89						590

Source: Tables 1.12, 1.14, 2.3, 2.5, 3.3 and 3.5

Note: Assumes 904 Mzs. of Cocoa, and 125 Mzs. of Cardamom.

6) Export Taxes

In 1991, coffee production will be such that the GOH will be in a position to realize approximately 11.5 million Lempiras in tax collections from exporters. (Table E from Annex A).

TABLE E
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
CONTRIBUTION OF PROJECT TO GOVERNMENT EXPORT TAX
ASSUMING 66% OF THE PRODUCTION PAID TAXES FROM
1982 TO 1984, AND 94% OF THE PRODUCTION AFTER 1985.

Year	Taxable Export (100 lbs.)	COFFEE Price (US\$/ 100 lbs.)	Government Exp. Tax	COFFEE MILL Government Exp. Tax (L 1,000)	TOTAL
1982	(3,204)	121.92	(118)		(118)
1983	(337)	115.31	(12)		(12)
1984	15,824	110.55	513		513
1985	64,606	200.00	4,406		4,406
1986	129,328	127.00	5,044		5,044
1987	181,118	127.00	7,064	55	7,119
1988	239,457	127.00	9,339	71	9,410
1989	267,452	127.00	10,431	87	10,518
1990	286,840	127.00	11,187	103	11,289
1991	291,293	127.00	11,360	111	11,471
1992	268,303	127.00	10,464	111	10,574
1993	254,997	127.00	9,945	111	10,055
1994	223,898	127.00	8,732	111	8,843
1995	195,260	127.00	7,615	111	7,726
1996	153,274	127.00	5,978	111	6,088
1997	118,597	127.00	4,625		4,625
1998	76,856	127.00	2,997		2,997
1999	43,936	127.00	1,714		1,714
2000	20,490	127.00	799		799

C. Social Analysis

The original social analysis is based on the premise that the socio-cultural characteristics of coffee farmers are an outcome of the interaction between techno-economic factors and personal farmer behavior. Coffee farmers are both a product of the techno-economic environment and agents in the transformation of that environment. In the specific Honduran context, small coffee farmers are a self-selected category of growers with a

strong entrepreneurial orientation, who are inclined to take production risks provided they are reasonably assured that the renovation will result in significant benefit. This view of risk taking is a direct result of the particular historical context of Honduran coffee production. Prior to the early 1970's, coffee was only marginally important in the country's economy. The dramatic rise in coffee prices after the Brazil freeze in 1974 created the motivation for most of the existing coffee farmers to go into coffee production in a significant manner. The artificially high world prices between 1976 and 1979 created a climate which induced thousands of peasant farmers to take the risk of devoting substantial amounts of land to coffee production in anticipation of a significant return.

The original social feasibility analysis examined several related hypotheses in order to assess the validity of the Project design strategy. The principal hypotheses examined in that analysis were:

1. Regardless of the size of area in coffee, technical assistance and credit will result in an increased use of improved coffee production technologies.
2. Regardless of the size of area in coffee, the value received per quintal of coffee will rise as a result of the adoption of coffee production technologies.
3. Regardless of the size of area in coffee, the marketing system for coffee is structured so as to result in a cost/beneficial return to the farmer.

It was determined in the original social soundness analysis that the first two hypotheses were correct. The confirmation of these hypotheses indicates the viability of the Project design to effect the adoption of appropriate production technologies on small and medium-small coffee farms through the provision of technical assistance and investment credit; and through the adoption of technology to effect an increase in both the absolute and relative incomes of the target population. These hypotheses have been supported by subsequent analysis although firm data on increased yields has been difficult to acquire in a systematic manner mainly because of the fact that many new coffee plantings are only now beginning to produce. Nevertheless, and with respect to the second hypothesis, a study concluded in late 1985 by Mitchell Seligson of the University of Illinois presents a description and analysis of the coffee farms which have benefited from the Project. The study indicates that: (1) project beneficiaries are planting new seedlings at a rate far higher than that of the non-technified coffee farmers; (2) project beneficiaries have greatly accelerated their rate of planting seedlings from one year to the next; (3) fertilizer use among the Project beneficiaries is a prerequisite to participation and as a result 100% are using fertilizer. This compares with fertilizer use by only 29% of those interviewed who are not using a technification package; and (4) technified coffee farms were more likely to be using seedbeds and related technology than

non-technified farms. These findings confirm the beneficiary acceptance of new technology and indicate that peasant farmers are risk takers, willing to accept new technologies.

Regarding the second hypothesis, the Seligson study indicates that coffee farms which were already technified before the beginning of the Project show yields higher than those of Project beneficiaries and notably higher than non-technified growers. Moreover, the relatively low yields in early stages of the Project among some Project beneficiaries can only reasonably be explained by the immediate impact of the renovation programs which involves destruction of old plantings and introduction of new plantings. In other words, not all the Project's cafetales have come into production. This is borne out by a negative association found between new plantings of coffee and yields which indicates that the greater the extension of cafetal renovation over the past two years, the lower the current yields.

Seligson does point out however, that among coffee farms using a technified package previous to the beginning of the Project, significant increases in production have been realized. As noted in Section C, "Performance 1981-1986", average yields on some farms rose from an average of 5 quintales per manzana to 20 quintales per manzana. Preliminary information from Rubén NÚñez's study of December 1985 also supported this. Consequently, it is a relatively safe assumption that technification under the Project will result in significantly increased yields and, assuming a stable or slightly rising price, increases in income by the third year following renovation.

It should be noted here, and with respect to the third hypothesis, that both the absolute and relative income gains to the producer appear to be slightly constrained by the structure of the marketing system. The income and income share received by the farmer appears to be somewhat dependent on the state of the crop at the time of sale and on to whom the crop is sold. Based on analysis of these factors, it was found that absolute and proportional income to the producer can be increased by increasing the crop processing capacity of the farm. Likewise, both absolute and relative income are increased when the crop is sold to cooperatives rather than to middlemen. It seems reasonable to conclude that a coffee producer able to sell the crop to a cooperative would tend to receive the best price, and realize a greater share of the profits from his production than other producers selling in other combinations. The Project design incorporates these concerns at this point by programming funds for rehabilitation of a number of "beneficios" which will provide the farmer with a higher quality product much closer to the production area. This will eliminate at least partially, the reliance on middlemen and cut down on transportation problems and distance, thereby reporting to any structural constraints in the marketing systems.

This Project was based on and continues to be based on the premise that coffee technification activities will result in an increase in farmer income sufficient to finance rust control measures and to increase or maintain the farmer's disposable income. The Project strategy is for small and medium-small coffee farmers to adopt production technologies made

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available through the credit and technical assistance activities of the Project, thereby increasing productivity and consequently increasing farmer income.

Nevertheless and in spite of the positive social impact and acceptance which the Project has had, this amendment does contain two elements which, because of their characteristics, could prove to be constraints to a successful expansion of activities. These are a credit and a social distance factor, represented by the interaction (or lack thereof) between the beneficiaries and the IHCAFE extension agents.

Development experience has indicated that providing credit to potential beneficiaries at rates much below the true market rate not only distorts the capital market and results in an inefficient allocation of resources, but indicates to the beneficiary a type of paternalism on the part of the financial institution. Often lacking in the provision of credit at these subsidized rates is a management element which seeks to emphasize to the recipient the importance of and the need for consistency in loan payback. The result is often a very casual attitude on the part of the recipient about the loan and a consequent delinquency rate which prevents the Project from ultimately becoming self-financing and successful.

In anticipation of this, the Project will continue to provide training and assistance for IHCAFE extension agents in financial management. During the first phase of this Project, delinquency rates on loan repayments were extremely low, less than 4%. This is due in large part to efforts by extension agents to inculcate in the recipients, many of whom were receiving credit for the first time, a rudimentary sense of the nature of a loan and a schedule for repayment. This emphasis on the credit element of the Project will continue throughout this expansion.

In a similar vein, USAID experience and development experience has also indicated that subsistence farmers in particular and small farmers in general are notably independent and often times suspicious of outside technical assistance. Differences in background, dress and speech between farmers and extension agents have contributed not only to a lack of interaction between these two players in the development process, but also to a "social distance" which diminishes a Project's chances for success.

Recognizing this, and based on evidence from a recent evaluation (E. Nesman, 11/85), this Project amendment will continue to support and train paratécnicos who will provide, wherever necessary, a village based link between the farmers and the IHCAFE extension agents. The necessity of maintaining and reinforcing this activity was also corroborated in Tinnermeir's report (1-'86) in which he argues for a continuation of the paratécnico program as an integral element of the Project.

There are three main sources of spread effects anticipated within the Project design. The first is within the target farm itself. As the benefits of the Project become evident to the original participants, it is expected that these farmers will gradually technify more of their existing

coffee land. Second, the demonstration effects can be expected to influence neighboring farmers to attempt a technification program on their own lands. Third, as IHCAFE develops, tests, and refines its technical assistance delivery capability, it will be able to include increasing numbers of the target population within a permanent on-going technification program.

Evidence of this happening is already apparent. The original Project design estimated that during the life of the Project approximately 3,100 to 3,200 small and medium-small coffee producers will be aided. At the end of 1985, 4,602 producers had already been reached. It was assumed at the beginning of the Project that approximately 6,000 manzanas in coffee will be reached by the Project. This area has already been covered too. This represents 12% of coffee producers and 4% of the area in coffee, respectively. The expressed willingness of the Government of Honduras to continue providing credit to these same farmers and to gradually expand the Project to include additional small and medium-small producers augurs well for substantial and long-term spread effects within the target population.

D. Administrative Analysis

The Project involves IHCAFE, BANADESA, BANHCAFE, Banco de Occidente, Banco Sogerin and the Central Bank. IHCAFE will continue to provide major administrative and technical responsibilities for the program, while the Central Bank will act as trustee of credit funds and the four currently approved banks will continue to provide credit administration, including processing applications, making disbursements, receiving payments and maintaining accounting records. Recent evaluations have pointed out that all of the foregoing entities are operating well in their respective areas of administration of Project activities.

Since the overall administrative structure of IHCAFE, BANADESA and the Central Bank remains unchanged no update is provided in this amendment to the Project Paper. However, as BANHCAFE has experienced significant growth over the life of the Project and since two additional banks have been authorized to participate in the Project, a brief sketch of each is provided herewith:

(1) BANHCAFE

a) Background

BANHCAFE was created by Decree No. 931 on May 7, 1980. The banks' main objectives are to provide financial services to the coffee sector, specifically providing credit for production, industrialization, commercialization and the promotion of agricultural diversifications by coffee producers. BANHCAFE has grown very rapidly over the past six years and total assets are in excess of \$80,000,000. They provide a considerable portfolio outside of the coffee sector and have a full service bank.

Initial paid-in capital was approximately \$3 million. Currently the paid-in capital, reserves and retained earnings are in excess of \$16.5 million. Authorized capital is \$25 million.

The main offices is in Tegucigalpa with one branch in San Pedro Sula, two agencies and six representative agencies dispersed throughout the coffee producing regions. Currently there are approximately 120 employees.

b) Conclusion

BANHCAFE has clearly demonstrated their ability to provide credit services to the Project and its beneficiaries. They can be expected to continue and expand participation in the Project.

(2) Banco de Occidente

a) Background:

Banco de Occidente was founded on September 1, 1951 with an initial capital of \$50,000. As of December 1984 the authorized capital was \$4,500,000 and as of December 1985 paid-in capital was \$4,000,000.

The Board of Directors of this private bank consists of nine persons and at present there are 369 stockholders. From the modest start in Santa Rosa de Copán, the head office, the bank has expanded coverage to most regions of Honduras through six additional branches and fourteen agencies. One new agency is planned for the near future which will mean that only the El Paraíso coffee region is not served by Banco de Occidente.

Approximately 30% of their total portfolio is dedicated to agriculture and they are considered to be the best agricultural bank in Honduras. Since the bank entered into Project activity lending in early 1984 their Project portfolio has grown to nearly \$2 million or some 15% of the total Project portfolio with a reported delinquency of less than one percent. They have been the most aggressive lender over the past two years and are currently adding a credit/agronomist to their staff for each increase in lending to the Project of \$250,000. Their supervision of Project beneficiaries is considered the best of all the participating banks.

Banco de Occidente is presently servicing the Project through 16 of its offices. Each office has assigned one person to cover Project activities and additionally has credit/agronomists working full-time on the Project in the bank offices of highest lending as follows: San Pedro Sula, 2; Tegucigalpa, 2; Comayagua, 1; La Esperanza, 1; and Santa Rosa de Copán, 4. Subloans are approved at branch level and separate accounting is maintained at that level. The main office consolidates all branch lending for reimbursement from the Central Bank.

b) Conclusion:

Banco de Occidente has clearly demonstrated their ability to be an effective participant in Project credit activities and can be expected to continue and expand their participation.

(3) Banco Sogerin

a) Background:

Banco Sogerin was founded on September 15, 1969 in San Pedro Sula. Initially their loan portfolio was directed toward the construction sector. This has since changed to general banking. Authorized capital is now \$4,500,000 with paid-in capital of \$3,850,000.

The main office is located in San Pedro Sula with a branch office in Tegucigalpa and 22 agency offices located throughout Honduras. There are seven voting members of the board of directors and a non-voting secretary. Total employees are approximately 350.

Banco Sogerin began Project operations in late 1984 with a single cooperative loan which provided credit to more than 125 small farmers. They have added an additional cooperative customer for 1986 and have indicated they will continue to expand cooperative lending to permit cooperatives to on-lend to small producers for renovation. They have also indicated they will not actively pursue subloans to individuals through the Project.

These two loans are supervised by the Chief of the Agricultural Division of the bank. The involved cooperatives provide credit and extension agents who receive technical assistance from IHCAFE. Both cooperatives are regular costumers of the bank and Project lending represents only one additional operation for the full-service banking provided to the cooperatives by Banco Sogerin. The Chief of the Agricultural Division provides regular supervision and inspections to the cooperatives with respect to Project operations. Cooperative assets guarantee these loans and in effect these loans are handled as regular commercial customers. All transactions are handled through the main office in San Pedro Sula.

b) Conclusion:

Although Banco Sogerin does not represent a significant percentage of the Project portfolio, they have made a valuable contribution through cooperative lending and have provided a model in cooperative lending for other banks to follow.

E. Environmental Concerns

To increase productivity certain specific agronomic practices have to be implemented and these could present adverse environmental impact. For example, removal of and/or pruning of the shade trees. In doing so, the land

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is left unprotected and soil erosion could take place during the rainy season. Coffee densities and patterns of planting will be varied from the traditional 1700 trees per hectare to more modern densities of up to 5,000 and more trees per hectare. In so doing, the interwinning of the root systems is such that soil erosion is totally impeded, thus producing a beneficial effect. Similarly, coffee rust, as well as the most common other diseases such as Cercospora, Coffee Berry Disease, Phyllosticta, and Corticium, are all controlled, not only by the application of fungicides, (particularly copper based fungicides) but by aeration, sunlight and proper pruning. In the case of a copper control program, it is certain that yearly applications will not exceed 4 to 6 kilograms per hectare per year. These amounts are so small as to be judged inconsequential. In the case of copper it has been shown, in Africa and Brazil, that this mineral has a productivity enhancing impact which is believed to arise from a synergistic effect with other natural soil nutrients. Copper is also fixed by soil microorganisms. Therefore, it would have little if any effect on the contamination of the watershed.

Application of pesticides, to control the deleterious impact of insects on production levels, also presents a potential environment hazard. In response to this possibility, the Project will use only low-toxicity, highly degradable products that will be in complete compliance with the regulations of Handbook 3, Appendix 48, Section 216.3(b). In addition, IHCAFE is linked with the IICA/PROMECAFE project of ROCAP, which has as its purpose the development of an integrated system employing the combined efforts of regional and national institutions to help develop control coffee rust and other coffee pests, particularly as they affect small producers. This linkage will be used to undertake pesticide use training for AID/IHCAFE Project personnel. This training will involve extensionists, paratechnicians and small farmers in integrated pest management, sprayer calibration and use, as well ecological management

The benefits of these programs will increase soil fertility, reduce erosion, provide organic matter for the soil, promote efficient fertilizer usage as well as expand root systems which will increase water retention capacity.

VI. Project Implementation Arrangements

A. Administrative Arrangements

1. Role and Responsibilities of USAID

The Project will be managed by the designated Project Manager in the Office of Rural Development of USAID/Honduras who will be responsible for monitoring the progress of inputs. The A.I.D. Project Manager, aided by contract personnel, will work closely with the Project Coordination Unit of IHCAFE and the participating intermediary organizations. The Project Manager will assure compliance with the terms and conditions of the Project Agreement, will verify that proper procedures are followed for all procurement, contracting and management, and will help solve implementation problems and Project issues that arise.

The Office of Development Finance will be responsible for preparing the Project Agreement and will assist the Project Manager in the preparation of subsequent PIL's, as well as other official project correspondence. The Office of Controller will review all disbursement requests for conformity with A.I.D. regulations and ensure that proper accounting procedures are followed by the GOH and other participating organizations. The Office of Development Programs will coordinate all evaluations in conjunction with the Project Manager and will advise on data base requirements for the Project.

2. Role of IHCAFE

IHCAFE will continue as the official cooperating country host entity for the Project. IHCAFE involvement will center on monitoring overall progress, administering operational funding, coordinating the training and technical assistance initiatives, coordinating involvement of other GOH entities and participating banks, selecting small farmer participants and providing technical assistance to Project beneficiaries.

B. Implementation Period

A four-year implementation period is proposed for A.I.D. participation in this Project. The Project Authorization will increase funding for A.I.D. activities for the Project life.

C. Implementation Plan

<u>Date</u>	<u>Activity</u>
April 86	<ul style="list-style-type: none"> - Scopes of work prepared for Credit Advisor, Extension and Management Advisor, and Project Manager. - PASA agreements documentation prepared. - PSC for Credit Advisor completed. - PSC for Extension and Management Advisor completed. - PIO/P and other documentation prepared for short term US training through USDA. - Terms of reference for study of <u>beneficios</u> prepared. - Documentation for commodity procurement prepared.
May 86	<ul style="list-style-type: none"> - Project Agreement signed. - PASA agreements finalized with AID/USDA. - Conditions Precedent met. - Grant agreement with FHIA signed and work begins. - USDA training contract finalized. - Contract for <u>beneficio</u> study signed.

- June 86
 - Initial credit fund reimbursements begin.
 - Commodity procurement IFB reviewed and supplier selected.
 - Short term US training begins.
 - Scope of work prepared for short-term Computer Specialist.

- July 86
 - Extension of contracts for Agricultural Economist and Rural Sociologist negotiated.
 - Beneficio study completed and Mission review held. If approved, work on the renovation begins.

- September 86
 - Commodities begin to arrive.

- October 86
 - Contract for short-term Computer Specialist finalized and work begins.
 - Balance of commodities arrive.

- October 86 - August 89
 - Technical assistance continues with IHCAFE. Final evaluation completed.

D. Procurement Plan

The Project will finance the procurement of technical assistance and commodities. All technical assistance will be contracted directly by A.I.D. using appropriate institutional, PSC and PASA modes. At this time, (March 1986) there are two institutional contract employees and one PASA Project Manager. The two institutional contract employees are contracted through mid-1986, through Servicios Técnicos del Caribe (STC), an A.I.D. 8a firm. It is anticipated that this contract will be extended to permit the Agricultural Economist to be extended for two additional years and the Rural Sociologist for one additional year beyond their current respective contracts with STC. The current PASA arrangement for the Project Manager will be extended until mid-1989. A USDA PASA arrangement will also be used for for the Extension and Management Advisor position to be established. The Credit Advisor position will be filled through a local hire PSC. Specific job descriptions will be found in Annex B. Short-term assistance in areas of computer systems and programming, administration and the agronomic aspects of coffee production will utilize IQC and PSC mechanisms as applicable.

Commodities purchased under the Project will involve both international and local procurements. The international procurements will be carried out by A.I.D. through the formal IFB process. Twenty (4X4) utility vehicles, with necessary spare parts as well as spare parts for existent vehicles will be purchased. Ten IBM PC-XT micro-computers and related hardware and software will be purchased. One Polaroid ID camera system will be purchased. Local purchase will be effected by the counterpart agency. Worksheet PIO/Cs may be found in Annex D for A.I.D. funded commodities.

E. Evaluation Plan

The evaluation plan is designated to measure advances toward realization of projected outputs and achievement of the overall Project purpose. One evaluation will be carried out during the four year funding period. In combination with normal monitoring activities, the evaluation will measure implementation progress. A preliminary draft of the terms of reference is attached as Annex C.

The USAID/Honduras Evaluation Officer assigned to the Office of Development Programs, in concert with the Project Manager, will assist in developing the final scopes of work, and in identifying and procuring the technical expertise to conduct the reviews.

LOG FRAME: INPUTS/OUTPUTS

PROJECT PURPOSE:

- | | | | |
|---|--|--|--|
| 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>quintales</u> by the third year following transplanting with commensurate income increases for producers of coffee. | Project evaluation.

IHCAFE records and reports. | No major natural or man made disasters other than rust or <u>broca</u> adversely affect coffee production. |
| | 1.2 By 1991, a total of 13,000 <u>manzanas</u> will realize increased of production based upon year of entry into the coffee renovation program. | | |
| | 1.3 By 1987, reflows of subloans will permit increased loan coverage for the coffee renovation program. | | |
| | 1.4 11,000 <u>manzanas</u> of coffee will have been eliminated and planted to diversified crops over the life of the Project. | | |
| | 1.5 Significant administrative reform and decentralization of IHCAFE accomplished by 1988. | | |

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OUTPUTS:

- | | | | |
|--|--|---|--|
| 1. IHCAFE's ability to respond to small farmer needs strengthened. | 1.1 Small and medium farms being serviced by IHCAFE and credit institutions increased to 10,400 and continues to increase by approximately 1,000 annually. | Project reports and evaluations.

IHCAFE records. | COH/IHCAFE commitments to small disasters other than rust or broca adversely affect coffee production. |
| | 1.2 Number of small and medium farmers who have received training from IHCAFE increased by 10,400 over LOP. | | Relative market prices for technical production inputs do not change substantially. |
| | 1.3 Public information outreach capability improved and expanded. | | Project inputs are provided on a timely basis. |
| | 1.4 Administrative reorganization of IHCAFE at central and regional levels. | | |

F
5

2. Technology practices improved at farm level.

2.1 Number of manzanas using more productive varieties increased to 13,000 over LOP.

2.2 Number of manzanas utilizing insect and disease control practices increased to 13,000 over LOP.

2.3 Number of manzanas characterized by crop diversification and improved livestock use practices increased to 500 over LOP.

3. Management capabilities of small and medium farmers strengthened.

3.1 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.

3.2 Number of small and medium farmers participating in diversified crop systems, whereby coffee is taken out of production, increased to 500 over LOP.

-
4. Viable system of quality control of post harvest coffee is initiated.
- 4.1 Approximately fourteen wet beneficios of IHCAFE are rehabilitated and made operational over LOP.
- 4.2 2,000 farmers will utilize the rehabilitated beneficios.
5. Viable, self-sustaining credit system for small and medium farmers for rehabilitation of coffee and diversification activities.
- 5.1 By 1989, adequate capital reflows will permit a continuation of renovation and diversification credits beyond original participants.
6. Applied research and soil testing capabilities expanded.
- 6.1 36 applied research plots in the nine coffee regions relative to diversified crops will have been carried out by the end of the Project.
- 6.2 3,000 individual farmers soil tests will be analyzed and interpreted over LOP.
- 6.3 85 IHCAFE extensionists will have been trained in interpreting of soil analysis for coffee and diversified crops.
7. Training of extensionists, paratécnicos, farmers and IHCAFE regional administrative staff will be expanded.
- 7.1 107 extensionists and credit agents, 200 paratécnicos, 10,000 farmers and 9 regional administrative chiefs will benefit from training courses over the LOP.

INPUTS:

1.	Technical assistance for training, research, administration, credit and Project monitorship.	1.1 A. I. D.	\$3,240,000
		G. O. H.	-0-
2.	Credit fund.	2.1 A. I. D.	\$12,797,500
		2.2 GOH	\$15,970,471
3.	Commodities.	3.1 A. I. D.	\$746,958
		3.2 GOH	\$160,923
4.	Training provided to extension agents, credit agents, <u>paratécnicos</u> , administrative staff, and farmers.	4.1 A. I. D.	\$1,239,770
		4.2 GOH	\$477,861
5.	Publicity outreach.	5.1 A. I. D.	\$206,741
		5.2 GOH	\$122,500
6.	Extension Activity.	6.1 A. I. D.	\$659,556
		6.2 GOH	\$10,837,136
7.	Evaluation and Audit	7.1 A. I. D.	\$250,412
		7.2 GOH	-0-
8.	<u>Beneficio</u> Activity	8.1 A. I. D.	\$1,000,000
		8.2 GOH	\$750,000
9.	Contingency and Inflation	9.1 A. I. D.	\$109,063
		9.2 GOH	\$432,963

ANNEX A

FINANCIAL AND ECONOMIC ANALYSIS

FINANCIAL AND ECONOMIC ANALYSIS OF PROJECT EXPANSION

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I. INTRODUCTION

The original project has 1986 as completion date; however, due to its success, AID decided to expand the project to continue its support through 1989.

The project expansion, besides continuing the efforts in coffee production to mitigate the negative effects of the roya in Hondura small coffee growers, two additional components have been incorporated. These are a diversification program to reduce the risk of small coffee growers, and improve his income, and a program to rehabilitate fourteen coffee mills that IHCAFE sponsored a few years ago and are not in operation for a variety of reasons.

The objective of the coffee mills rehabilitation program is to increase the income of small farmers, as their participation in total coffee income is increased, and by obtaining a better price for Honduran coffee as its quality is improved.

The precise programs for diversification and coffee mill rehabilitation have not been planned and studied; thus, their financial and economic analysis were based on preliminary data.

The diversification program will include the planting of a variety of crops in farms of small coffee growers. These crops are not totally identified yet, and their feasibility studies have not been conducted. However, for the purpose of analysis, it was assumed that all of the available money would be lent for growing cocoa and cardamom, with the expectations that other crops will have similar returns.

For the analysis of the coffee mill rehabilitation program, data of a successful mill operating in Choluteca was used to

determine the input-output parameters. This information was used to extrapolate the results in the 14 mills.

It is understood that prior to implementation, a detailed analysis of each coffee mill will be conducted.

II. FINANCIAL ANALYSIS.

The financial analysis was based on the net benefits received by coffee growers, taking into account their costs and the farm gate prices for the coffee renovation and diversification programs. For the coffee mills program, the feasibility of the coffee mill as an enterprise was examined.

2.1. Coffee Renovation.

Data for coffee renovation was obtained from investment plans developed by IHCAFE extension agents based on the actual experience gained by the program since its beginning in 1982.

Both schemes, partial and total renovation, were studied. Data for total renovation appears on Table 1.1, and for partial renovation on Table 1.2.

A financial analysis for the renovation of one manzana was conducted, assuming an expected price to the farmer of US\$70.00 per quintal of dry coffee at 12% humidity, and a low price of US\$50.00. The financial internal rate of return resulted in 41% and 15.7% for the high and low price, respectively, in the case of total renovation, and 108% and 33% in the case of partial renovation. (Tables 1.3 and 1.4). In both cases the production loss due to substitution of the old coffee was deducted.

Using the data for one manzana, the analysis was extrapolated to the manzanas renewed during the life of the project, including the projection for 1986 through 1989. The financial internal rate of return resulted in 47.4% and 22.7% for the high and low prices, respectively (Table 1.9). For the years

1982 through 1984 the average price received by Honduras's coffee growers was used, for 1985 a price of US\$110 was assumed, and for 1986 and on, expected prices of US\$70.00 and US\$50.00 per quintal were assumed for the high and low cases.

2.2. Diversification.

Two crops were analysed as a sample of the kind of crop that will be used. These were cocoa and cardamom.

2.2.1. Cocoa.

Budgets for cocoa production were obtained from the Diversification Department of IHCAFE (Table 2.1).

A financial internal rate of return was calculated for the growing of one manzana of cocoa, taking as benefits the income received by the farmer. Prices of US\$75.00 and \$53.00 per quintal were assumed at the farm gate, resulting in an internal rate of return of 27.9% and 17.2% (Table 2.2)

The costs and benefits of one manzana were extrapolated to the total manzanas to be planted in 1987 and 1988, resulting in a financial internal rate of return of 27.9% and 17.2% for the high and low price assumptions, respectively. (Table 2.3)

2.2.2. Cardamom.

Cost data for the production of cardamom were also obtained from the Diversification Department of IHCAFE (Table 3.1).

As in the previous analysis, net income to the farmer was estimated as the benefit, and the financial internal rate of return of planting one manzana resulted in 56.6% and 37.7% for the high and low price assumptions. The high price at the farm gate was assumed at US\$600.00 per quintal and the low at

US\$400.00. (Table 3.2)

Assuming that 75 manzanas would be planted in 1987 and 50 manzanas in 1988, the benefits of one manzana were expanded to the aggregate, resulting in a financial internal rate of return of 56.6% and 37.7%, for the high and low price assumptions (Table 3.3).

2.3. Coffee Mills.

The study contemplates the rehabilitation of 14 coffee mills. At this moment there is no detail information of any one of these mills available. Thus, to do the analysis an average mill of 7,000 quintales capacity was assumed.

The input output parameters and costs were obtained from a coffee mill operated by a cooperative in Choluteca (Table 4.1). With this information an operating budget was developed, assuming an initial processing of 3,500 quintales the first year, 4,500 qq. the second, 5,500 the third, 6,500 the fourth, and 7,000 qq from the fifth year on. Also the relationship of prices between farmgate and export operating at the moment for the estimate of the price idea given by IHCAFE, was assumed throughout the period.

The financial internal rate of return of the additional investment required to operate one of these mills was estimated at 18.2% and 10.8%, for average export prices of US\$133.00 per quintal and US\$93.00. (Table 4.3)

III. ECONOMIC ANALYSIS.

The parameters measured in the economic analysis were the economic internal rate of return, the generation of employment, the additional foreign exchange due to the project, and the export taxes received by the Government of Honduras.

3.1. Economic Internal Rate of Return.

To estimate the economic benefits it is necessary to adjust certain costs and benefits of the project to reflect the economic costs and benefits to the economy. In this particular case two factors were adjusted, the labor cost and the cost of foreign exchange.

Most of the workers of the project are unskilled labor, living in a rural setting with very little opportunity to work. It is difficult to determine what the economic cost of this labor would be with the limited available data, and though it is believed to be lower, an adjustment factor of 0.6 was used.

Foreign exchange is not freely obtained by individuals to buy foreign goods, and at present there are many goods for which the Central Bank will not provide dollars. This indicates that the cost of the dollar to the economy is higher than L.2.00. To adjust this cost, a factor of 1.3 was used.

Besides the costs incurred by the farmer there are other costs incurred by IHCAFE, AID, and the Government of Honduras to supervise and provide assistance to the coffee growers serviced by the project. These costs were US\$24,644 in 1981, US\$699,022 in 1982, US\$1,210,743 in 1983, US\$1,335,929 in 1984. They are estimated in US\$3,500,414 for 1985, and are budgeted at

US\$5,676,602 for 1986, US\$3,740,825 for 1987, US\$2,373,728 for 1988, and US\$1,382,976 for 1989 (Table A).

With these project costs and the net economic benefits of each activity, the economic internal rate of return was estimated at 57.3% and 30.9% for the expected and low price assumptions (Table B).

3.2. Generation of Employment.

Although there will be no new area planted with coffee, the renovation requires a greater use of labor than the levels used by traditional coffee substituted.

On the other hand diversification assumes use of fallow land, which implies a net increase in employment.

The program of coffee mills will not imply the use of additional labor, because this activity would be performed anyhow by the farmers themselves, and the traditional exporters.

The net addition of labor was estimated for each case, and aggregated in Table C. Additional employment was estimated at 232 person year in 1982, it increases to 14,137 in 1991, and reduces gradually to 73 in 2007.

3.3. Generation of Foreign Exchange.

All of the crops considered are export crops, and the coffee mill program will increase the price of the exported coffee, thus generating more foreign exchange.

In the case of coffee, it was assumed that 94% of the production would be exported at the average prices obtained in 1982, 1983 and 1984. For the year of 1985 an export price of US\$200.00 was assumed, and for 1986 on a price of US\$127.00

All of the cocoa and cardamom production was assumed would

be exported. Cocoa at a price of US\$91.00 per quintal and cardamom at US\$600.00 per quintal. Coffee mills were assumed to increase the export price by 5%.

The net generation of foreign exchange was estimated in Table D. These estimates show a loss of over five hundred thousand dollars in 1982 to a gain of 38 million dollars in 1991.

3.4. Export Taxes.

Coffee exports have an advalorem tax, which is charged to coffee exported under quota. The tax operates for prices above US\$50.00. To calculate the tax, the Government deducts US\$12.00 from the export price, charges 10% for the first US\$50.00/qq., 15% for the next increment of US\$10.00 in the price, and 20% for any portion above US\$60.00.

With the project the government did not get additional export taxes until 1984/85 under the situation of quotas; however, the quota was lifted on February 18.

Now all the coffee exported will pay taxes, and the project will have a net contribution to increase the government export tax receipt.

For the present analysis, it was assumed that 66% of the coffee was exported under quota and pay taxes from 1982 to 1984, and 94 % of the coffee would be exported and pay taxes after 1985. The estimates appear on Table E.

SMALL FARMER COFFEE IMPROVEMENT
Calendar of Disbursements
(US Dollars)

TABLE A

DESCRIPTION	1981	1982	1983	1984	1985	1986	1987	1988	1989	TOTAL
A.I.D. LOAN FUNDS										
Training	-	5,485	17,589	84,596	186,100	136,000	100,000	100,000	100,000	729,770
Demonstration Lots	-	-	13,683	9,974	20,000	8,000	-	-	-	51,657
Publications	-	-	3,807	18,050	31,000	63,884	30,000	30,000	30,000	206,741
Vehicles and Equipment	-	152,082	92,848	2,028	60,000	440,000	-	-	-	746,958
Evaluation and Audit	-	-	209	25,203	25,000	100,000	25,000	50,000	25,000	250,412
Operational Costs	-	5,827	-	72	2,000	-	-	-	-	7,899
Rehabilitation of Damaged Lots	-	-	-	-	50,000	-	20,000	20,000	10,000	100,000
Credit: Rehabilitation and Nurseries	-	1,406,909	2,396,426	3,566,091	630,574	2,000,000	1,500,000	1,297,500	-	12,797,500
Credit: Repairing Beneficios	-	-	-	-	-	-	500,000	-	-	500,000
Credit: Working Capital Beneficios	-	-	-	-	-	-	500,000	-	-	500,000
Contingency and Inflation	-	-	-	-	-	49,063	20,000	20,000	20,000	109,063
SUBTOTAL	-	1,570,303	2,524,562	3,706,014	1,004,674	2,796,947	2,695,000	1,517,500	185,000	16,000,000
A.I.D. GRANT FUNDS										
Technical Assistance	-	100,839	207,732	188,115	461,314	700,000	707,000	625,000	250,000	3,240,000
Training	-	-	-	-	10,000	125,000	200,000	125,000	50,000	510,000
FHIA	-	-	-	-	-	125,000	250,000	125,000	-	500,000
SUBTOTAL	-	100,839	207,732	188,115	471,314	950,000	1,157,000	875,000	300,000	4,250,000
GOH COUNTERPART FUNDS										
Personnel	22,971	419,726	801,197	950,319	2,030,000	2,487,300	1,389,075	543,075	543,075	9,186,738
Training and In-Service Training	-	2,124	1,362	-	15,000	299,375	60,000	50,000	50,000	477,861
Vehicles and Equipment	-	1,333	31,072	22,518	-	53,000	-	26,500	26,500	160,923
Operational Costs	1,673	11,606	41,115	34,904	250,000	433,625	292,425	171,275	166,275	1,402,898
Credit Administration	-	-	-	-	300,000	330,000	80,000	-	-	710,000
Publications	-	-	-	-	-	62,500	20,000	20,000	20,000	122,500
Rehabilitation of Damaged Lots	-	-	-	-	-	42,500	10,000	10,000	10,000	72,500
Training Center	-	-	-	-	-	107,500	37,500	15,000	15,000	175,000
Credit: Crop Production	-	-	-	-	2,000,000	3,100,000	1,000,000	-	-	6,100,000
Credit: Renovation and Nurseries	-	-	-	250,000	3,000,000	-	1,964,253	-	-	5,214,253
Credit: Diversification	-	-	-	-	750,000	-	-	592,563	-	1,342,563
Beneficios: Coffee Purchase	-	-	-	-	-	-	2,853,655	-	-	2,853,655
Beneficios: Administrative Support	-	-	-	-	-	-	375,000	375,000	-	750,000
Contingency and Inflation	-	-	129	150	60,000	112,855	124,825	67,878	67,126	432,963
SUBTOTAL	24,644	434,789	874,875	1,257,891	8,405,000	7,028,655	8,206,733	1,871,291	897,976	29,001,854
TOTAL PROJECT	24,644	2,105,931	3,607,169	5,152,020	9,880,988	10,775,602	12,058,733	4,263,791	1,382,976	49,251,854
TOTAL CREDIT	-	1,406,909	2,396,426	3,816,091	6,380,574	5,100,000	8,317,908	1,890,063	-	29,307,971
TOTAL COSTS	24,644	699,022	1,210,745	1,335,929	3,500,414	5,675,602	3,740,825	2,373,728	1,382,976	19,943,883

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TABLE B
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
ECONOMIC INTERNAL RATE OF RETURN
(1000 U.S. DOLLARS)

Year	Project Cost	Net Benefits To Farmers								Total		Net Project Benefits	
		Coffee		Cocoa		Cardamom		Coffee Mil		(1)	(2)	(1)	(2)
		(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1981	25											(25)	(25)
1982	699	(1,990)	(1,990)							(1,990)	(1,990)	(2,689)	(2,689)
1983	1,211	(2,443)	(2,443)							(2,443)	(2,443)	(3,654)	(3,654)
1984	1,336	(2,684)	(2,684)							(2,684)	(2,684)	(4,020)	(4,020)
1985	3,500	8,658	8,658							8,658	8,658	5,158	5,158
1986	5,676	7,917	1,121							7,917	1,121	2,241	(4,555)
1987	3,741	13,441	3,923	(465)	(465)	(83)	(83)	359	240	13,253	3,615	9,512	(126)
1988	2,374	20,050	7,466	(499)	(499)	(87)	(87)	462	308	19,926	7,188	17,552	4,814
1989	1,383	22,972	8,917	(109)	(174)	59	22	565	376	23,487	9,141	22,104	7,758
1990		26,566	11,492	214	32	207	121	667	445	27,655	12,090	27,655	12,090
1991		27,214	11,906	575	288	338	211	719	479	28,846	12,884	28,846	12,884
1992		24,817	10,716	806	450	392	249	719	479	26,733	11,895	26,733	11,895
1993		23,482	10,081	1,229	749	392	249	719	479	25,822	11,558	25,822	11,558
1994		20,517	8,751	1,513	949	392	249	719	479	23,141	10,428	23,141	10,428
1995		17,874	7,613	1,513	949	392	249	719	479	20,498	9,290	20,498	9,290
1996		14,054	5,999	1,513	949	392	249	719	479	16,678	7,676	16,678	7,676
1997		10,895	4,662	1,513	949	392	249			12,800	5,860	12,800	5,860
1998		7,050	3,011	1,513	949	392	249			8,955	4,209	8,955	4,209
1999		2,415	106	1,513	949	392	249			4,321	1,304	4,321	1,304
2000		1,892	815	1,513	949	392	249			3,797	2,013	3,797	2,013
2001				1,513	949	157	100			1,670	1,049	1,670	1,049
2002				1,513	949					1,513	949	1,513	949
2003				1,513	949					1,513	949	1,513	949
2004				1,513	949					1,513	949	1,513	949
2005				1,513	949					1,513	949	1,513	949
2006				1,513	949					1,513	949	1,513	949
2007				676	424					676	424	676	424
IRR												57.3%	30.9%

Source: Tables A, 1.12, 2.4, y 3.4, 4.4

Note: (1) Expected price assumption
(2) Low price assumption

TABLE C
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
PROJECT EMPLOYMENT GENERATION
(PERSON YEARS)

Year	Net Additional Employment			TOTAL
	Coffee	Cocoa	Cardamom	
1982	232			232
1983	454			454
1984	1,934			1,934
1985	3,543			3,543
1986	6,673			6,673
1987	8,865	128	62	9,055
1988	11,404	175	69	11,649
1989	12,805	142	46	12,993
1990	13,390	156	48	13,594
1991	13,928	159	49	14,137
1992	13,182	161	49	13,393
1993	12,854	163	49	13,065
1994	11,505	163	49	11,717
1995	10,204	163	49	10,416
1996	8,085	163	49	8,297
1997	6,319	163	49	6,530
1998	4,134	163	49	4,346
1999	2,368	163	49	2,580
2000	1,113	163	49	1,325
2001		163	20	182
2002		163		163
2003		163		163
2004		163		163
2005		163		163
2006		163		163
2007		73		73

Source: Tables No. 1.13, 2.1, and 3.1

TABLE D
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
CONTRIBUTION OF PROJECT TO GENERATION OF
FOREIGN EXCHANGE

Year	COFFEE		COCOA			CARDAMOM		COFFE MILL		TOTAL	
	Add Prod. (qq)	Price (US\$/ qq)	Add. F. X. (1000 US\$)	Add. Prod. (qq)	Price (US\$/ qq)	Add. F.X. (1000 US\$)	Add. Prod. (qq)	Price (US\$/ F.X. qq)	Add. F.X. (1,000 US\$)		
1982	(4,564)	121.92	(556)							(556)	
1983	(480)	115.31	(55)							(55)	
1984	22,537	110.55	2,491							2,491	
1985	64,606	200.00	12,921							12,921	
1986	129,328	127.00	16,425							16,425	
1987	181,118	127.00	23,002						276	23,278	
1988	239,457	127.00	30,411						355	30,766	
1989	267,452	127.00	33,966	1,925	91	175	158	600	95	434	34,670
1990	286,840	127.00	36,429	5,400	91	491	368	600	221	513	37,654
1991	291,293	127.00	36,994	8,492	91	773	543	600	326	553	38,645
1992	268,303	127.00	34,074	10,506	91	956	613	600	368	553	35,951
1993	254,997	127.00	32,385	14,203	91	1,292	613	600	368	553	34,597
1994	223,898	127.00	28,435	16,688	91	1,519	613	600	368	553	30,874
1995	195,260	127.00	24,798	16,688	91	1,519	613	600	368	553	27,237
1996	153,274	127.00	19,466	16,688	91	1,519	613	600	368	553	21,905
1997	118,597	127.00	15,062	16,688	91	1,519	613	600	368		16,948
1998	76,856	127.00	9,761	16,688	91	1,519	613	600	368		11,647
1999	43,936	127.00	5,580	16,688	91	1,519	613	600	368		7,466
2000	20,490	127.00	2,602	16,688	91	1,519	613	600	368		4,488
2001				16,688	91	1,519	245	600	147		1,666
2002				16,688	91	1,519					1,519
2003				16,688	91	1,519					1,519
2004				16,688	91	1,519					1,519
2005				16,688	91	1,519					1,519
2006				16,688	91	1,519					1,519
2007				7,458	91	679					679

Source: Tables 1.12, 2.3, and 3.3.

Note: Assumes 904 Mzs. of Cocoa, and 125 Mzs. of Cardamom.

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TABLE E
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
CONTRIBUTION OF PROJECT TO GOVERNMENT EXPORT TAX
ASSUMING 66 % OF THE PRODUCTION PAID TAXES FROM
1982 TO 1984, AND 94% OF THE PRODUCTION AFTER 1985.

Year	Taxable Export (100 Lbs.)	COFFE Price (US\$/ 100 Lbs.)	Govnmt. Exp. Tax	COFFEE MILL Govnmt. Exp. Tax (L.1,000)	TOTAL
1982	(3,204)	121.92	(118)		(118)
1983	(337)	115.31	(12)		(12)
1984	15,824	110.55	513		513
1985	64,606	200.00	4,406		4,406
1986	129,328	127.00	5,044		5,044
1987	181,118	127.00	7,064	55	7,119
1988	239,457	127.00	9,339	71	9,410
1989	267,452	127.00	10,431	87	10,518
1990	286,840	127.00	11,187	103	11,289
1991	291,293	127.00	11,360	111	11,471
1992	268,303	127.00	10,464	111	10,574
1993	254,997	127.00	9,945	111	10,055
1994	223,898	127.00	8,732	111	8,843
1995	195,260	127.00	7,615	111	7,726
1996	153,274	127.00	5,978	111	6,088
1997	118,597	127.00	4,625		4,625
1998	76,856	127.00	2,997		2,997
1999	43,936	127.00	1,714		1,714
2000	20,490	127.00	799		799

Source: Tables 1.12 and 4.4

TABLE 1.1
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
INVESTMENT PLAN - TOTAL RENDVATION
(U.S. DOLLARS)

ACTIVITY	UNIT	YEAR						
		1	2	3	4	5	6	7
Aranque cafe y sombra	Jorn.	100.00						
Limpieza de terreno	Jorn.	100.00						
Muestreo y analisis suelo	Determi.	1.50						
Practicas Conserv. suelos	Jorn.	100.00						
Corte de estacas	Jorn.	10.00						
Trazo de siembra	Jorn.	50.00						
Ahoyado	mil/plan	150.00						
Compra plantas en vivero	Plantas	645.00						
Transportacion de plantas	Viaje	150.00						
Acarreo de plantas	Jorn.	25.00						
Compra equipo deposicion	Bomba	100.00						
Siembra	Jorn.	62.50						
Sub Total		1,494.00						
LABORES CULTURALES								
Regulacion de Sombra	Jorn.				25.00		20.00	
Poda de la Plantacion	Jorn.							50.00
Sub Total		0.00	0.00	0.00	25.00	0.00	20.00	50.00
CONTROL DE MALEZAS								
Primera Limpieza	Jorn.	30.00	30.00	30.00	30.00	30.00	25.00	25.00
Segunda Limpieza	Jorn.	30.00	30.00	30.00	30.00	30.00	25.00	25.00
Tercera Limpieza	Jorn.	30.00	30.00	30.00	30.00	30.00	25.00	25.00
Cuarta Limpieza	Jorn.	30.00	30.00	30.00				
Quinta Limpieza	Jorn.	30.00	30.00					
Sub Total		150.00	150.00	120.00	90.00	90.00	75.00	75.00
FERTILIZACION								
Muestreo y Ana. Suelo	Determ.					1.50		
Formula 1er	qq.	32.00	64.00	148.00	148.00	148.00	148.00	92.50
Mano de Obra 1er Fertiliz.	Jorn.	15.00	20.00	25.00	25.00	25.00	25.00	17.50
Formula 2da	qq.	30.00	45.00	75.00	75.00	75.00	75.00	45.00
Mano de Obra 2da Fertiliz.	Jorn.	15.00	15.00	17.50	17.50	17.50	17.50	10.00
Formula 3ra	qq.	30.00	45.00	75.00	75.00	75.00	75.00	45.00
Mano de Obra 3ra Fertiliz.	Jorn.	15.00	15.00	17.50	17.50	17.50	17.50	10.00
Sub Total		137.00	204.00	358.00	358.00	359.50	358.00	220.00
CONTROL FITOSANITARIO								
Fungicidas	Lbs.	20.00	40.00	48.00	48.00	48.00	48.00	32.00
Insecticidas	Lts.	20.00	20.00	15.00	15.00	15.00	15.00	15.00
Adherentes	Lts.	5.00	5.00	5.00	5.00	5.00	5.00	5.00
1er Control Fitosanitario	Jorn.	5.00	7.50	10.00	10.00	10.00	10.00	7.50
2do Control Fitosanitario	Jorn.	5.00	10.00	10.00	10.00	10.00	10.00	7.50
3ro Control Fitosanitario	Jorn.	7.50	10.00	10.00	10.00	10.00	10.00	7.50
4to Control Fitosanitario	Jorn.	7.50	10.00	10.00	10.00	10.00	10.00	7.50
Sub Total		70.00	102.50	108.00	108.00	108.00	108.00	82.00
IMPREVISTOS		75.00	50.00	75.00	50.00	50.00		75.00
SUB TOTAL		1,926.00	506.50	661.00	631.00	607.50	561.00	502.00

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ACTIVITY	UNIT	YEAR						
		1	2	3	4	5	6	7
COSECHA								
Quintales Uva			55	228	205	228	182	137
Corte Jornal por qq.			3.29	3.29	3.29	3.29	3.29	3.29
Beneficio por Quintal			0.55	0.55	0.55	0.55	0.55	0.55
Transporte por qq.			0.44	0.44	0.44	0.44	0.44	0.44
Corte Total			180	750	675	750	600	450
Beneficio Total			30	125	113	125	100	75
Transporte Total			24	100	90	100	80	60
Sub Total			234	976	878	976	781	586
GASTOS FINANCIEROS AGRICOLAS								
Total Mano de Obra	1,926	741	1,637	1,509	1,583	1,342	1,088	
Componente Importado	668	418	970	890	940	795	643	
Total Otros	190	175	293	293	293	293	188	
	1,069	148	374	326	350	254	257	
PRODUCCION								
Quintales Pergamino			12	50	45	50	40	30
COSTOS INDUSTRIALES Y MERCADERO								
Mano de Obra			229	956	860	956	764	573
Componente Importado			46	191	172	191	153	115
Otros			183	764	688	764	612	459
Sub Total			459	1,911	1,720	1,911	1,529	1,147
COSTOS ECONOMICOS								
FACTORES DE AJUSTES								
Mano de Obra		0.6	0.6	0.6	0.6	0.6	0.6	0.6
Divisas		1.3	1.3	1.3	1.3	1.3	1.3	1.3
COSTOS ECONOMICOS TOTALES								
Mano de Obra		401	388	1,155	1,050	1,137	936	730
Componente Importado		246	287	629	604	629	579	393
Otros		1,069	331	1,138	1,014	1,115	865	716
Sub Total		1,716	1,007	2,923	2,669	2,881	2,380	1,838
Impuestos Indirectos		34	20	58	53	58	48	37
TOTAL COSTOS ECONOMICOS		1,682	987	2,864	2,615	2,824	2,333	1,802
JORNALES UTILIZADOS								
Agricola		267	179	438	401	426	358	287
Industrial			23	96	86	96	76	57
Total Jornales		267	202	534	487	522	434	344

Source: IHCAFE, 1985.

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TABLE 1.2
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
INVESTMENT PLAN - PARTIAL RENOVATION
(U.S. DOLLARS)

ACTIVITY	UNIT	YEAR				
		1	2	3	4	5
Muestreo y analisis suelo	Determi.	1.50				
Regulacion de Sombra	Jorn.	25.00				
Poda de Plantacion	Jorn.	25.00				
Trazo de resiembra	Jorn.	7.50				
Ahoyado	mil/plan	25.00				
Compra plantas en vivero	Plantas	107.50				
Transportacion de plantas	Viaje	25.00				
Acarreo de plantas	Jorn.	7.50				
Resiembra	Jorn.	12.50				
Sub Total		236.50	0.00	0.00	0.00	0.00
LABDRES CULTURALES						
Regulacion de Sombra	Jorn.			25.00		25.00
Poda de la Plantacion	Jorn.		25.00	25.00		
Sub Total		0.00	25.00	50.00	0.00	25.00
CONTROL DE MALEZAS						
Primera Limpieza	Jorn.	25.00	25.00	25.00	25.00	25.00
Segunda Limpieza	Jorn.	25.00	25.00	25.00	25.00	25.00
Tercera Limpieza	Jorn.	25.00	25.00	25.00	25.00	25.00
Cuarta Limpieza	Jorn.					
Quinta Limpieza	Jorn.					
Sub Total		75.00	75.00	75.00	75.00	75.00
FERTILIZACION						
Muestreo y Ana. Suelo	Determ.					
Formula 1er	qq.	92.50	111.00	148.00	148.00	148.00
Mano de Obra 1er Fertili.	Jorn.	17.50	20.00	25.00	25.00	25.00
Formula 2da	qq.	45.00	60.00	75.00	75.00	75.00
Mano de Obra 2da Fertili.	Jorn.	10.00	13.00	17.50	17.50	17.50
Formula 3ra	qq.	45.00	60.00	75.00	75.00	75.00
Mano de Obra 3ra Fertili.	Jorn.	10.00	15.00	17.50	17.50	17.50
Sub Total		220.00	281.00	358.00	358.00	358.00
CONTROL FITOSANITARIO						
Fungicidas	Lbs.	32.00	40.00	40.00	48.00	48.00
Insecticidas	Lts.	15.00	15.00	15.00	15.00	15.00
Adherentes	Lts.	5.00	5.00	5.00	5.00	5.00
1er Control Fitosanitario	Jorn.	7.50	10.00	10.00	10.00	10.00
2do Control Fitosanitario	Jorn.	7.50	10.00	10.00	10.00	10.00
3ro Control Fitosanitario	Jorn.	7.50	10.00	10.00	10.00	10.00
4to Control Fitosanitario	Jorn.	7.50	10.00	10.00	10.00	10.00
Sub Total		82.00	100.00	100.00	108.00	108.00
IMPREVISTOS		50.00	50.00	50.00	50.00	50.00
SUB TOTAL		663.50	531.00	633.00	591.00	616.00

ACTIVITY	UNIT	YEAR				
		1	2	3	4	5
COSECHA						
Quintales Uva		91	137	182	228	182
Corte Jornal por qq.		3.29	3.29	3.29	3.29	3.29
Beneficio por Quintal		0.55	0.55	0.55	0.55	0.55
Transporte por qq.		0.44	0.44	0.44	0.44	0.44
Corte Total		300	450	600	750	600
Beneficio Total		50	75	100	125	100
Transporte Total		40	60	80	100	80
Sub Total		390	586	781	976	781
TOTAL		1,054	1,117	1,414	1,567	1,397
Total Mano de Obra		520	640	825	925	800
Componente Importado		235	291	358	366	366
Total Otros		299	185	231	276	231
PRODUCCION						
Quintales Pergamino		20	30	40	50	40
COSTOS INDUSTRIALES Y MERCADEO						
Mano de Obra		382	573	764	956	764
Componente Importado		76	115	153	191	153
Otros		306	459	612	764	612
Sub Total		764	1,147	1,529	1,911	1,529
COSTOS ECONOMICOS						
FACTORES DE AJUSTES						
Mano de Obra		0.6	0.6	0.6	0.6	0.6
Divisas		1.3	1.3	1.3	1.3	1.3
COSTOS ECONOMICOS TOTALES						
Mano de Obra		541	728	954	1,128	939
Componente Importado		404	527	664	724	675
Otros		605	644	842	1,040	842
Sub Total		1,551	1,899	2,460	2,893	2,455
Impuestos Indirectos		31	38	49	58	49
TOTAL COSTOS ECONOMICOS		1,520	1,861	2,411	2,835	2,406
JORNALES UTILIZADOS						
Agricola		228	286	370	420	360
Industrial		38	57	76	96	76
Total Jornales		266	343	446	516	436

Source: IHCAFE, 1985

TABLE 1.3
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL RATE OF RETURN TO FARMER - TOTAL RENOVATION
(U.S. DOLLARS)

Year	Cost			Production			Price		Additional Income		Additional Net Benefits	
	Bef.	After	Net	Bef	Aft	Net	(1)	(2)	(1)	(2)	(1)	(2)
	(US\$)			(qq)								
1	200	1,926	1,726	7		(7)	70	50	(490)	(350)	(2,216)	(2,076)
2	180	741	561	6	12	6	70	50	399	285	(162)	(276)
3	162	1,637	1,475	6	50	44	70	50	3,103	2,217	1,628	742
4	146	1,509	1,363	5	45	40	70	50	2,793	1,995	1,430	632
5	131	1,583	1,452	5	50	45	70	50	3,179	2,270	1,727	819
6	118	1,342	1,224	4	40	36	70	50	2,511	1,793	1,287	569
7	106	1,088	982	4	30	26	70	50	1,840	1,314	858	332
8	96	1,088	992	3	30	27	70	50	1,866	1,333	873	340
9	86	1,088	1,002	3	30	27	70	50	1,889	1,349	887	347
10	77	1,088	1,011	3	30	27	70	50	1,910	1,364	900	354
11	70	1,088	1,018	2	30	28	70	50	1,929	1,378	911	360
12	63	1,088	1,025	2	30	28	70	50	1,946	1,390	921	365
IRR											41.0%	15.7%

Source: Table 1.1.

TABLE 1.4
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL RATE OF RETURN TO FARMER - PARTIAL RENOVATION
(U.S. DOLLARS)

Year	Cost			Production			Price		Additional Income		Additional Net Benefits	
	Bef.	After	Net	Bef	Aft	Net	(1)	(2)	(1)	(2)	(1)	(2)
		(US\$)				(qq)						
1	200	1,054	854	7	7	0	70	50	0	0	(854)	(854)
2	180	1,117	937	7	30	23	70	50	1,635	1,168	698	231
3	162	1,414	1,252	6	40	34	70	50	2,358	1,684	1,106	432
4	146	1,567	1,421	6	50	44	70	50	3,080	2,200	1,659	779
5	131	1,397	1,266	6	40	34	70	50	2,401	1,715	1,135	449
6	118	1,397	1,279	5	30	25	70	50	1,721	1,229	442	(50)
7	106	1,397	1,291	5	30	25	70	50	1,740	1,243	449	(48)
8	96	1,397	1,301	5	30	25	70	50	1,758	1,256	456	(46)
9	86	1,397	1,311	5	30	25	70	50	1,775	1,268	464	(43)
10	77	1,397	1,320	4	30	26	70	50	1,791	1,279	472	(40)
11	70	1,397	1,327	4	30	26	70	50	1,807	1,290	479	(37)
12	63	1,397	1,334	4	30	26	70	50	1,821	1,301	487	(33)
IRR											108.5%	33.0%

Source: Table 1.2.

TABLE 1.5
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
COSTS TO FARMERS (WITH RUST) - TOTAL RENOVATION
(1000 U.S. DOLLARS)

Year	Number of Manzanas	Costs of Manzanas Renewed in Year							New			
		1982	1983	1984	1985	1986	1987	1988	1989	Total	Before(a)	Net
1982	736	1,418								1,418	147	1,270
1983	1,079	545	2,078							2,624	348	2,275
1984	2,028	1,205	800	3,906						5,910	719	5,191
1985	1,665	1,111	1,766	1,503	3,207					7,586	980	6,606
1986	2,000	1,165	1,628	3,320	1,234	3,852				11,199	1,282	9,917
1987	1,500	988	1,708	3,060	2,726	1,482	2,889			12,853	1,454	11,399
1988	1,100	801	1,448	3,210	2,512	3,274	1,112	2,119		14,476	1,529	12,947
1989	950	801	1,174	2,722	2,636	3,018	2,456	815	1,830	15,450	1,566	13,885
1990		801	1,174	2,206	2,234	3,166	2,264	1,801	704	14,350	1,409	12,941
1991		801	1,174	2,206	1,812	2,684	2,375	1,660	1,555	14,266	1,268	12,998
1992		801	1,174	2,206	1,812	2,176	2,013	1,741	1,434	13,357	1,141	12,215
1993		801	1,174	2,206	1,812	2,176	1,632	1,476	1,504	12,781	1,027	11,754
1994			1,174	2,206	1,812	2,176	1,632	1,197	1,275	11,472	883	10,589
1995				2,206	1,812	2,176	1,632	1,197	1,034	10,056	734	9,323
1996					1,812	2,176	1,632	1,197	1,034	7,850	546	7,304
1997						2,176	1,632	1,197	1,034	6,038	397	5,641
1998							1,632	1,197	1,034	3,862	244	3,618
1999								1,197	1,034	3,264	195	3,069
2000									1,034	1,034	60	974

Source: Table 1.1, and IHCAFE.

(a) Traditional Costs were assumed at US\$200/Mz. the first year, declining 10% every year after

TABLE 1.6
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
COSTS TO FARMERS (WITH RUST) - PARTIAL RENOVATION
(1000 U.S. DOLLARS)

Year	No of Mzs.	1982	1983	1984	1985	1986	1987	1988	1989	New Total	Be fore(a)	Net
1982	131	138								138	26	112
1983	55	146	58							204	35	170
1984	59	185	61	62						309	43	266
1985	51	205	78	66	54					403	49	354
1986	32	183	86	83	57	34				443	50	393
1987	94	183	77	92	72	36	99			559	64	495
1988	30	183	77	82	80	45	105	32		604	64	540
1989	30	183	77	82	71	50	133	34	32	662	63	598
1990		183	77	82	71	45	147	42	34	681	57	624
1991		183	77	82	71	45	131	47	42	679	51	628
1992		183	77	82	71	45	131	42	47	678	46	632
1993		183	77	82	71	45	131	42	42	673	42	632
1994			77	82	71	45	131	42	42	490	30	460
1995				82	71	45	131	42	42	414	24	390
1996					71	45	131	42	42	331	18	313
1997						45	131	42	42	260	13	246
1998							131	42	42	215	10	205
1999								42	42	84	4	80
2000									42	42	2	40

Source: Table 1.2, and IHCAFE.

(a) Traditional Costs were assumed at US\$200/Mz. the first year, declining 10% every year after.

TABLE 1.7
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
COFFEE PRODUCTION DUE TO PROJECT
(100 LBS.)

Yield	No. of Man	Production of Manzanas Renewed in Year												TOTAL						
		1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993							
ParTotYear	Par.Total	Part. Total	Part. Total	Part. Total	Part. Total	Part. Total	Part. Total	Part. Total	Part. Total	Part. Total	Part. Total	Part. Total	Part. Total	Part. Total	Part. Total	Part. Total				
	131	736																		
30 12 1983	55	1,079	3,930	8,832																
40 50 1984	59	2,028	5,240	36,800	1,650	12,948										12,762				
50 45 1985	51	1,665	6,550	33,120	2,200	53,950	1,770	24,336								56,638				
40 50 1986	32	2,000	5,240	36,800	2,750	48,555	2,360	101,400	1,530	19,980						121,926				
30 40 1987	94	1,500	3,930	29,440	2,200	53,950	2,950	91,260	2,040	83,250	960	24,000				218,615				
30 30 1988	30	1,100	3,930	22,080	1,650	43,160	2,360	101,400	2,550	74,925	1,280	100,000	2,820	18,000		293,980				
30 30 1989	30	950	3,930	22,080	1,650	32,370	1,770	81,120	2,040	83,250	1,600	90,000	3,760	75,000	900	13,200	374,155			
30 30 1990			3,930	22,080	1,650	32,370	1,770	60,840	1,530	66,600	1,280	100,000	4,700	67,500	1,200	55,000	900	11,400	432,750	
30 30 1991			3,930	22,080	1,650	32,370	1,770	60,840	1,530	49,950	960	80,000	3,760	75,000	1,500	49,500	1,200	47,500	433,540	
30 30 1992			3,930	22,080	1,650	32,370	1,770	60,840	1,530	49,950	960	60,000	2,820	60,000	1,200	55,000	1,500	42,750	398,350	
30 30 1993			3,930	22,080	1,650	32,370	1,770	60,840	1,530	49,950	960	60,000	2,820	45,000	900	44,000	1,200	47,500	376,500	
1994					1,650	32,370	1,770	60,840	1,530	49,950	960	60,000	2,820	45,000	900	33,000	900	38,000	329,690	
1995							1,770	60,840	1,530	49,950	960	60,000	2,820	45,000	900	33,000	900	28,500	286,170	
1996									1,530	49,950	960	60,000	2,820	45,000	900	33,000	900	28,500	223,560	
1997											960	60,000	2,820	45,000	900	33,000	900	28,500	172,080	
1998												960	60,000	2,820	45,000	900	33,000	900	28,500	111,120
1999													2,820	45,000	900	33,000	900	28,500	63,300	
2000															900	33,000	900	28,500	29,400	

Source Yields - Tables 1.1 and 1.2

Number of Manzanas Renewed - IHCAFE.

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TABLE 1.8
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
COFFEE PRODUCTION OBTAINED BEFORE THE PROJECT
(100 LBS.)

Yield		No. of Man		Production of Manzanas Renewed in Year																TOTAL		
Par	Tot	Year	Par.	Total	1982		1983		1984		1985		1986		1987		1988		1989			
					Total	Part.	Total	Part.	Total	Part.	Total	Part.	Total	Part.	Total	Part.	Total	Part.	Total	Part.	Total	
7	7	1982	131	736	917	5,152																6,069
6	6	1983	55	1,079	825	4,637	385	7,553														13,400
6	6	1984	59	2,028	743	4,173	347	6,798	413	14,196												26,669
5	5	1985	51	1,665	668	3,756	312	6,118	372	12,776	357	11,655										36,014
5	5	1986	32	2,000	602	3,380	281	5,506	335	11,499	321	10,490	224	14,000								46,637
4	4	1987	94	1,500	541	3,042	253	4,956	301	10,349	289	9,441	202	12,600	658	10,500						53,131
4	4	1988	30	1,100	487	2,738	227	4,460	271	9,314	260	8,496	181	11,340	592	9,450	210	7,700				55,728
3	3	1989	30	950	439	2,464	200	4,014	244	8,383	234	7,647	163	10,206	533	8,505	189	6,930	210	6,650		57,015
3	3	1990			395	2,218	184	3,613	219	7,544	211	6,882	147	9,185	480	7,655	170	6,237	189	5,985		51,314
3	3	1991			355	1,996	166	3,251	198	6,790	190	6,194	132	8,267	432	6,889	153	5,613	170	5,387		46,182
2	2	1992			320	1,796	149	2,926	178	6,111	171	5,575	119	7,440	389	6,200	138	5,052	153	4,848		41,564
2	2	1993			288	1,617	134	2,634	160	5,500	154	5,017	107	6,696	350	5,580	124	4,547	138	4,363		37,408
		1994					121	2,370	144	4,950	138	4,515	96	6,027	315	5,022	112	4,092	124	3,927		31,953
		1995							130	4,455	124	4,064	87	5,424	283	4,520	100	3,683	112	3,534		26,516
		1996									112	3,657	78	4,881	255	4,068	90	3,315	100	3,181		19,738
		1997											70	4,393	229	3,661	81	2,983	90	2,863		14,372
		1998													206	3,295	73	2,685	81	2,576		8,917
		1999															66	2,416	73	2,319		4,874
		2000																	66	2,087		2,153

TABLE 1.9
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL INTERNAL RATE OF RETURN TO FARMERS
COFFEE

Year	Production (100 Lbs.)			Price (US\$/qq)		Income (1,000 US\$)		Part.	Costs (1,000 US\$)		Net Benefits (1,000 US\$)	
	Before	After	Net	(1)	(2)	(1)	(2)		Total	Both	(1)	(2)
1982	6,069		(6,069)	41	41	(249)	(249)	112	1,270	1,382	(1,631)	(1,631)
1983	13,400	12,762	(638)	61	61	(39)	(39)	170	2,275	2,445	(2,484)	(2,484)
1984	26,669	56,638	29,969	59	59	1,768	1,768	266	5,191	5,457	(3,689)	(3,689)
1985	36,014	121,926	85,912	110	110	9,450	9,450	354	6,606	6,960	2,490	2,490
1986	46,637	218,615	171,978	70	50	12,038	8,599	393	9,917	10,310	1,729	(1,711)
1987	53,131	293,980	240,849	70	50	16,859	12,042	495	11,399	11,894	4,966	149
1988	55,728	374,155	318,427	70	50	22,290	15,921	540	12,947	13,488	8,802	2,434
1989	57,015	412,670	355,655	70	50	24,896	17,783	598	13,885	14,483	10,413	3,300
1990	51,314	432,750	381,436	70	50	26,701	19,072	624	12,941	13,565	13,135	5,507
1991	46,182	433,540	387,358	70	50	27,115	19,368	628	12,998	13,626	13,489	5,742
1992	41,564	398,350	356,786	70	50	24,975	17,839	632	12,215	12,847	12,128	4,992
1993	37,408	376,500	339,092	70	50	23,736	16,955	632	11,754	12,385	11,351	4,569
1994	31,953	329,690	297,737	70	50	20,842	14,887	460	10,589	11,049	9,793	3,838
1995	26,516	286,170	259,654	70	50	18,176	12,983	390	9,323	9,712	8,463	3,270
1996	19,738	223,560	203,822	70	50	14,268	10,191	313	7,304	7,617	6,650	2,574
1997	14,372	172,080	157,708	70	50	11,040	7,885	246	5,641	5,888	5,152	1,998
1998	8,917	111,120	102,203	70	50	7,154	5,110	205	3,618	3,823	3,331	1,287
1999	4,874	63,300	58,426	70	50	4,090	2,921	80	3,069	3,149	941	(228)
2000	2,153	29,400	27,247	70	50	1,907	1,362	40	974	1,014	893	348
IRR											47.4%	22.7%

Source: Tables 1.5, 1.6, 1.7, and 1.8.

TABLE 1.10
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
ECONOMIC COSTS OF COFFEE PRODUCTION - TOTAL RENOVATION
(1000 U.S. DOLLARS)

Year	Number of Manzanas	Costs of Manzanas Renewed in Year								Total	Before(a)	Net	
		1982	1983	1984	1985	1986	1987	1988	1989				
1982	736	1,238											
1983	1,079	726	1,815							1,238	184	1,054	
1984	2,028	2,108	1,065	3,411						2,541	435	2,106	
1985	1,665	1,925	3,090	2,002	2,801					6,584	899	5,685	
1986	2,000	2,078	2,822	5,808	1,643	3,364				9,817	1,225	8,592	
1987	1,500	1,717	3,047	5,303	4,769	1,974	2,523			15,716	1,603	14,113	
1988	1,100	1,326	2,517	5,727	4,354	5,728	1,481	1,850		19,333	1,817	17,516	
1989	950	1,326	1,944	4,731	4,702	5,230	4,296	1,086	1,598	22,983	1,911	21,073	
1990		1,326	1,944	3,654	3,884	5,648	3,923	3,150	938	24,914	1,957	22,956	
1991		1,326	1,944	3,654	3,000	4,666	4,236	2,877	2,721	24,468	1,761	22,707	
1992		1,326	1,944	3,654	3,000	3,604	3,500	3,106	2,484	24,425	1,585	22,839	
1993		1,326	1,944	3,654	3,000	3,604	2,703	2,566	2,683	22,620	1,427	21,193	
1994			1,944	3,654	3,000	3,604	2,703	1,982	2,216	21,482	1,284	20,197	
1995				3,654	3,000	3,604	2,703	1,982	1,712	19,105	1,104	18,001	
1996					3,000	3,604	2,703	1,982	1,712	16,656	917	15,739	
1997						3,604	2,703	1,982	1,712	13,001	682	12,319	
1998							2,703	1,982	1,712	10,001	496	9,505	
1999								1,982	1,712	6,397	306	6,092	
2000									1,982	1,712	5,406	244	5,162
										1,712	1,712	75	1,637

Source: Table 1.1

(a) Traditional Costs were assumed at US\$250/Mz. the first year, declining 10% every year after

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TABLE 1.11
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
ECONOMIC COSTS OF COFFEE PRODUCTION - PARTIAL RENOVATION
(1000 U.S. DOLLARS)

Year	No of Mzs.	1982	1983	1984	1985	1986	1987	1988	1989	New Total	Be fore(a)	Net
1982	131	199								199	33	166
1983	55	220	84							304	43	261
1984	59	316	92	90						498	54	444
1985	51	371	133	99	78					681	61	620
1986	32	315	156	142	86	49				748	63	685
1987	94	315	132	167	123	54	143			934	80	854
1988	30	315	132	142	145	77	158	46		1,015	80	935
1989	30	315	132	142	123	91	227	50	46	1,126	79	1,046
1990		315	132	142	123	77	266	72	50	1,178	71	1,107
1991		315	132	142	123	77	226	85	72	1,173	64	1,109
1992		315	132	142	123	77	226	72	85	1,173	58	1,115
1993		315	132	142	123	77	226	72	72	1,160	52	1,108
1994			132	142	123	77	226	72	72	845	37	807
1995				142	123	77	226	72	72	712	30	682
1996					123	77	226	72	72	570	23	548
1997						77	226	72	72	448	17	431
1998							226	72	72	371	13	358
1999								72	72	144	5	139
2000									72	72	2	70

Source: Table 1.2, and IHCAFE.

(a) Traditional Costs were assumed at US\$250/Mz. the first year, declining 10% every year after.

TABLE 1.12
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
ECONOMIC RATE OF RETURN
COFFEE

Year	Addit. Product. (qq)	Fin. Price		Eco. Price		Income		Costs			Net Benefits	
		(1)	(2)	(1)	(2)	(1)	(2)	Partial	Total	Both	(1)	(2)
	(US\$/qq)	(US\$/qq)	(US\$/qq)	(US\$/qq)	(1,000 US\$)	(1,000 US\$)		(1,000 US\$)		(1,000 US\$)	(1,000 US\$)	(1,000 US\$)
1982	(4,855)	122	122	158	158	(770)	(770)	166	1,054	1,220	(1,990)	(1,990)
1983	(510)	115	115	150	150	(77)	(77)	261	2,106	2,367	(2,443)	(2,443)
1984	23,975	111	111	144	144	3,446	3,446	444	5,685	6,129	(2,684)	(2,684)
1985	68,729	200	200	260	260	17,870	17,870	620	8,592	9,212	8,658	8,658
1986	137,583	127	89	165	116	22,715	15,918	685	14,113	14,798	7,917	1,121
1987	192,679	127	89	165	116	31,811	22,293	854	17,516	18,370	13,441	3,923
1988	254,742	127	89	165	116	42,058	29,474	935	21,073	22,008	20,050	7,466
1989	284,524	127	89	165	116	46,975	32,919	1,046	22,956	24,003	22,972	8,917
1990	305,149	127	89	165	116	50,380	35,306	1,107	22,707	23,814	26,566	11,492
1991	309,886	127	89	165	116	51,162	35,854	1,109	22,839	23,948	27,214	11,906
1992	285,429	127	89	165	116	47,124	33,024	1,115	21,193	22,308	24,817	10,716
1993	271,274	127	89	165	116	44,787	31,386	1,108	20,197	21,305	23,482	10,081
1994	238,190	127	89	165	116	39,325	27,559	807	18,001	18,808	20,517	8,751
1995	207,724	127	89	165	116	34,295	24,034	682	15,739	16,421	17,874	7,613
1996	163,058	127	89	165	116	26,921	18,866	548	12,319	12,867	14,054	5,999
1997	126,167	127	89	165	116	20,830	14,597	431	9,505	9,935	10,895	4,662
1998	81,762	127	89	165	116	13,499	9,460	358	6,092	6,449	7,050	3,011
1999	46,741	127	89	165	116	7,717	5,408	139	5,162	5,302	2,415	106
2000	21,798	127	89	165	116	3,599	2,522	70	1,637	1,707	1,892	815
IRR											82.6%	55.9%

Source: Tables 1.9, 1.10, and 1.11

TABLE 1.13
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
EMPLOYMENT GENERATION IN COFFEE PRODUCTION
(PERSON YEARS)

Person Days	No. of Mzs		Person Years Used in Manzanas Renewed in Year												New	Before	Addi				
			1982		1983		1984		1985		1986		1987					1988		1989	
Par	Tot	Par	Tot	Par	Tot	Par	Tot	Par	Tot	Par	Tot	Par	Tot	Par	Tot	Par	Tot				
266	267	131	736	139	786																
343	202	55	1,079	180	595	59	1,152												925	694	232
446	534	59	2,028	234	1,572	75	872	63	2,166										1,985	1,531	454
516	487	51	1,665	270	1,434	98	2,305	81	1,639	54	1,778								4,982	3,048	1,934
436	522	32	2,000	228	1,537	114	2,102	105	4,332	70	1,345	34	2,136						7,659	4,116	3,543
436	434	94	1,500	228	1,278	96	2,253	122	3,951	91	3,556	44	1,616	100	1,602				12,003	5,330	6,673
436	344	30	1,100	228	1,013	96	1,873	103	4,234	105	3,243	57	4,272	129	1,212	32	1,175		14,937	6,072	8,865
436	344	30	950	228	1,013	96	1,485	103	3,521	89	3,477	66	3,896	168	3,204	41	889	32	17,773	6,369	11,404
436	344			228	1,013	96	1,485	103	2,791	89	2,890	56	4,176	194	2,922	54	2,350	41	19,321	6,516	12,805
436	344			228	1,013	96	1,485	103	2,791	89	2,291	56	3,472	164	3,132	62	2,143	54	19,254	5,864	13,390
436	344			228	1,013	96	1,485	103	2,791	89	2,291	56	2,752	164	2,604	52	2,297	62	19,206	5,278	13,928
436	344			228	1,013	96	1,485	103	2,791	89	2,291	56	2,752	164	2,064	52	1,910	52	17,933	4,750	13,182
	1994					96	1,485	103	2,791	89	2,291	56	2,752	164	2,064	52	1,984	52	17,129	4,275	12,854
	1995							103	2,791	89	2,291	56	2,752	164	2,064	52	1,514	52	15,157	3,652	11,505
	1996									89	2,291	56	2,752	164	2,064	52	1,307	52	13,235	3,030	10,204
	1997										89	2,291	56	2,752	164	2,064	52	1,307	10,341	2,256	8,085
	1998											56	2,752	164	2,064	52	1,514	52	7,961	1,642	6,319
	1999													164	2,064	52	1,514	52	5,153	1,019	4,134
	2000															52	1,514	52	2,925	557	2,368
																	52	1,307	1,360	246	1,113

Source: Tables 1.1 and 1.2

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TABLE 2.1. CONTINUED

ACTIVITY	YEAR									
	1	2	3	4	5	6	7	8	9	10
i) Fertilizacion a la planta										
- 20-10-6-5	89.92	89.92	179.85	179.85	179.85	179.85	179.85	179.85	179.85	179.85
- K-Mg	9.15	9.15	18.31	18.31	18.31	18.31	18.31	18.31	18.31	18.31
- Aplicacion del Prod.	9.79	9.79	19.58	19.58	19.58	19.58	19.58	19.58	19.58	19.58
j) Control de plag. y enf.										
- Kocide 101	3.67	3.67	3.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
- Adherente	0.35	0.35	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
- Myrex	4.90	4.90	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
- Aplicacion del Prod.	14.69	14.69	19.58	22.03	22.03	22.03	22.03	22.03	22.03	22.03
k) Mant. Caminos y drenaje	0.00	19.58	12.24	12.24	12.24	12.24	12.24	12.24	12.24	12.24
l) Cosecha y beneficio	0.00	0.00	36.71	48.95	48.95	48.95	48.95	48.95	48.95	48.95
Sub-Total	270.74	235.27	401.65	384.52	389.41	389.41	389.41	389.41	389.41	389.41
IMPREVISTOS	85.64	23.95	41.28	39.57	39.57	39.57	39.57	39.57	39.57	39.57
TOTAL GASTOS	974.82	272.21	458.93	440.09	444.98	444.98	444.98	444.98	444.98	444.98
Mano de Obra	222.73	122.38	135.84	134.62	139.51	139.51	139.51	139.51	139.51	139.51
Componente Importado	210.09	96.79	212.02	204.89	204.89	204.89	204.89	204.89	204.89	204.89
Otros	542.01	53.04	111.07	100.58	100.58	100.58	100.58	100.58	100.58	100.58
PRODUCCION (QQ)	0.00	0.00	3.85	7.69	10.77	12.31	18.46	18.46	18.46	18.46
COSTOS DE MERCADEO										
Mano de Obra			4.62	9.23	12.92	14.77	22.15	22.15	22.15	22.15
Componente Importado			3.08	6.15	8.62	9.85	14.77	14.77	14.77	14.77
Otros			7.69	15.38	21.54	24.62	36.92	36.92	36.92	36.92
Sub Total			15.38	30.77	43.08	49.23	73.85	73.85	73.85	73.85
COSTOS ECONOMICOS										
FACTORES DE AJUSTES										
Mano de Obra	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Divisas	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
COSTOS ECONOMICOS TOTALES										
Mano de Obra	133.64	73.43	84.27	86.31	91.46	92.57	97.00	97.00	97.00	97.00
Componente Importado	273.11	125.83	279.63	274.36	277.56	279.16	285.56	285.56	285.56	285.56
Otros	542.01	53.04	118.76	115.97	122.12	125.20	137.51	137.51	137.51	137.51
Sub Total	948.76	252.30	482.67	476.63	491.14	496.92	520.06	520.06	520.06	520.06
Impuestos Indirectos	18.98	5.05	9.65	9.53	9.82	9.94	10.40	10.40	10.40	10.40
TOTAL COSTOS ECONOMICOS	929.78	247.25	473.01	467.10	481.31	486.98	509.66	509.66	509.66	509.66
JORNALES UTILIZADOS										
Agricola	64	36	42	41	43	43	43	43	43	43
Industrial				1	1	1	2	2	2	2
Total Jornales	64	36	42	42	44	44	45	45	45	45

Source: IHCAFE, 1986.

TABLE 2.1
 HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
 COCCA - INVESTMENT PLAN
 (US\$/M2.)

ACTIVITY	YEAR										
	1	2	3	4	5	6	7	8	9	10	
EQUIPO Y HERRAMIENTAS											
a) Booba de Aspersión	94.00										
b) Herramientas (varios)	15.00										
c) Cajas para fermentación	0.00	3.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	
d) Tendal para secado	0.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	
Sub-Total	109.00	13.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	
PREPARACION DEL TERRENO											
a) Limpieza del terreno	34.27										
b) Drenaje	39.16										
c) Caminos	12.24										
Sub-Total	85.66										
PLANTACION											
a) Corte de Estacas	2.45										
b) Trazado esta. y aho.	7.34										
c) Ahoyado	12.24										
d) Compra de Plantas	384.62										
e) Siembra de Plantas	17.13										
Sub-Total	423.78										
DESARROLLO Y MANT. PLANT.											
a) Podas Formación y Mant.	0.00	4.90	9.79	9.79	9.79	9.79	9.79	9.79	9.79	9.79	
b) Resiembra	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
- Compra de Plantas	19.23	0.00	6.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
- Labores de resiembra	2.45	0.00	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
c) Deschuponada	0.00	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	
d) Poda fitosanitaria	0.00	0.00	0.00	9.79	9.79	9.79	9.79	9.79	9.79	9.79	
e) Regulación de Soombra	0.00	0.00	0.00	12.24	12.24	12.24	12.24	12.24	12.24	12.24	
f) Control de Maleza											
- Comalec (2 por año)	66.08	24.48	19.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
- Chapia (4 por año)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
- Limpia manual	0.00	48.95	12.24	0.00	4.90	4.90	4.90	4.90	4.90	4.90	
- Control químico	0.00	0.00	41.96	41.96	41.96	41.96	41.96	41.96	41.96	41.96	
- Aplicación del ovis.	0.00	0.00	9.79	4.90	4.90	4.90	4.90	4.90	4.90	4.90	
g) Pesticidas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
- Aplicación del pesti.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
h) Fertilización al Hoyo											
- D1: 10-30-10	30.15										
- D2: Nitrato de amonio	15.46										
- Aplicación de fert.	4.90										

TABEL 2.2
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL INTERNAL RATE OF RETURN OF ONE MANZANA OF COCOA
(U.S. DOLLARS)

Year	Cost		Production (qq/Mz.)	Value of Production (a)		Net Benefits To Farmer	
	Invest ment	Mainte nance		(1)	(2)	(1)	(2)
1	975					(975)	(975)
2	272					(272)	(272)
3		459	3.85	289	204	(170)	(255)
4		440	7.69	577	408	137	(32)
5		445	10.77	808	571	363	126
6		445	12.31	923	652	478	207
7		445	18.46	1,385	978	940	533
8		445	18.46	1,385	978	940	533
9		445	18.46	1,385	978	940	533
10		445	18.46	1,385	978	940	533
11		445	18.46	1,385	978	940	533
12		445	18.46	1,385	978	940	533
13		445	18.46	1,385	978	940	533
14		445	18.46	1,385	978	940	533
15		445	18.46	1,385	978	940	533
16		445	18.46	1,385	978	940	533
17		445	18.46	1,385	978	940	533
18		445	18.46	1,385	978	940	533
19		445	18.46	1,385	978	940	533
20		445	18.46	1,385	978	940	533
IRR						27.9%	17.2%

Source: Table 2.1.

(a) Column (1): is calculated based upon price of US\$75/qq.
Column (2): is calculated based upon price of US\$53/qq.

TABLE 2.3
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL INTERNAL RATE OF RETURN TO FARMERS
COCOA

Year	Production (100 Lbs.)	Price (US\$/qq)		Income (1,000 US\$)		Cost (1,000 US\$)	Net Benefits		
		(1)	(2)	(1)	(2)		(1)	(2)	
1987						458	(488)	(488)	
1988						530	(530)	(530)	
1989	1,925	75	53	144	102	339	(195)	(237)	
1990	5,400	75	53	405	286	405	(0)	(119)	
1991	8,492	75	53	637	450	400	237	50	
1992	10,506	75	53	788	557	402	386	155	
1993	14,203	75	53	1,065	753	402	663	350	
1994	16,688	75	53	1,252	884	402	849	482	
1995	16,688	75	53	1,252	884	402	849	482	
1996	16,688	75	53	1,252	884	402	849	482	
1997	16,688	75	53	1,252	884	402	849	482	
1998	16,688	75	53	1,252	884	402	849	482	
1999	16,688	75	53	1,252	884	402	849	482	
2000	16,688	75	53	1,252	884	402	849	482	
2001	16,688	75	53	1,252	884	402	849	482	
2002	16,688	75	53	1,252	884	402	849	482	
2003	16,688	75	53	1,252	884	402	849	482	
2004	16,688	75	53	1,252	884	402	849	482	
2005	16,688	75	53	1,252	884	402	849	482	
2006	16,688	75	53	1,252	884	402	849	482	
2007	7,458	75	53	559	395	180	380	215	
IRR							27.9%	17.2%	

Source: Tables 2.1 and 2.2.

Note: Assuming 500 mzs. will be planted in 1987,
and 404 mzs. in 1988.

TABLE 2.4
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
ECONOMIC INTERNAL RATE OF RETURN
COCOA

Year	Production (qq)		Price (US\$/qq)		Income		Cost (1,000 US\$)	Net Benefits	
	(1)	(2)	(1)	(2)	(1)	(2)		(1)	(2)
1987									
1988							465	(465)	(465)
1989	1,925	91	65	118	85	228	163	499	(499)
1990	5,400	91	65	118	85	639	456	336	(109)
1991	8,492	91	65	118	85	1,005	718	425	214
1992	10,506	91	65	118	85	1,243	888	429	575
1993	14,203	91	65	118	85	1,680	1,200	437	806
1994	16,688	91	65	118	85	1,974	1,410	461	1,229
1995	16,688	91	65	118	85	1,974	1,410	461	1,513
1996	16,688	91	65	118	85	1,974	1,410	461	1,513
1997	16,688	91	65	118	85	1,974	1,410	461	1,513
1998	16,688	91	65	118	85	1,974	1,410	461	1,513
1999	16,688	91	65	118	85	1,974	1,410	461	1,513
2000	16,688	91	65	118	85	1,974	1,410	461	1,513
2001	16,688	91	65	118	85	1,974	1,410	461	1,513
2002	16,688	91	65	118	85	1,974	1,410	461	1,513
2003	16,688	91	65	118	85	1,974	1,410	461	1,513
2004	16,688	91	65	118	85	1,974	1,410	461	1,513
2005	16,688	91	65	118	85	1,974	1,410	461	1,513
2006	16,688	91	65	118	85	1,974	1,410	461	1,513
2007	7,458	91	65	118	85	882	630	206	676
IRR								43.8%	31.4%

Source: Table 2.1 and 2.2.

Note: Assuming 500 mzs. will be planted in 1987,
and 404 mzs. in 1988.

TABLE 3.1
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
CARDAMOM - INVESTMENT PLAN
(US\$/MZ.)

ACTIVITY	YEAR				
	1	2	3	4	5
EQUIPO Y HERRAMIENTAS					
a) Bomba de mochila	100.00				
b) Herramientas (varios)	75.00				
Sub-Total	175.00				
INFRAESTRUCTURA					
Limpieza del terreno	112.59				
PLANTACION					
a) Corte de Estacas	8.60				
b) Trazado esta. y aho.	112.59				
c) Compra de Plantas	286.71				
d) Siembra de Plantas	56.29				
Sub-Total	464.20				
DESARROLLO Y MANT. PLANT.					
a) Podas Formacion y Mant.					
b) Resiembra					
- Compra de Plantas	14.34	5.59			
- Labores de resiembra	2.45	2.45			
c) Poda fitosanitaria				26.92	26.92
d) Regulacion de Sombra				29.37	29.37
e) Control de Maleza					
- Limpia manual	112.59	112.59	112.59	112.59	112.59
- Deshije y poda	56.29	56.29	56.29		
f) Pesticidas					
- Aplicacion del pesti.					
g) Fertilizacion					
- D1: 13-13-21	83.92	125.87	167.83	195.80	195.80
- D2: Nitrato de amonio					
- Aplicacion de fert.	36.71	36.71	36.71	50.17	50.17
h) Control de plag. y enf.					
- Adherente adsee 775	15.73	15.73	15.73	15.73	15.73
- Benlate	52.45	52.45	52.45	52.45	52.45
- Aplicacion del Prod.	17.13	19.58	19.58	19.58	19.58
i) Cosecha y beneficio			150.70	225.52	225.52
Sub-Total	391.61	427.27	611.89	728.15	728.15
IMPREVISTOS					
	109.09	42.66	61.19	72.38	72.38

TABLE 3.1. CONTINUED

ACTIVITY	YEAR				
	1	2	3	4	5
TOTAL GASTOS	1,252.48	469.93	673.08	800.52	800.52
Mano de Obra	506.64	227.62	375.87	464.16	464.16
Componente Importado	261.68	155.24	188.81	211.19	211.19
Otros	484.16	87.06	108.39	125.17	125.17
PRODUCCION (QQ)			2.10	3.50	4.90
COSTOS DE MERCADEO					
Mano de Obra			2.52	4.20	5.87
Componente Importado			1.68	2.80	3.92
Otros			4.20	6.99	9.79
Sub Total			8.39	13.99	19.58
COSTOS ECONOMICOS					
FACTORES DE AJUSTES					
Mano de Obra	0.60	0.60	0.60	0.60	0.60
Divisas	1.30	1.30	1.30	1.30	1.30
COSTOS ECONOMICOS TOTALES					
Mano de Obra	303.99	136.57	227.03	281.01	282.02
Componente Importado	340.18	201.82	247.64	278.18	279.64
Otros	484.16	87.06	112.59	132.17	134.97
Sub Total	1,128.33	425.45	587.26	691.36	696.62
Impuestos Indirectos	22.57	8.51	11.75	13.83	13.93
TOTAL COSTOS ECONOMICOS	1,105.76	416.95	575.51	677.54	682.69
JORNALES UTILIZADOS					
Agricola	207	93	92	97	97
Industrial				1	1
Total Jornales	207	93	92	98	98

Source: IHCAFE, 1986.

TABEL 3.2
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL INTERNAL RATE OF RETURN OF ONE MANZANA OF CARDAMOM
(U.S. DOLLARS)

Year	Cost		Production (qq/Mz.)	Value of Production (a)		Net Benefits To Farmer	
	Invest ment	Mainte nance		(1)	(2)	(1)	(2)
1	1,252					(1,252)	(1,252)
2	470					(470)	(470)
3		673	2.10	1,260	882	587	209
4		800	3.50	2,100	1,470	1,300	670
5		800	4.90	2,940	2,058	2,140	1,258
6		800	4.90	2,940	2,058	2,140	1,258
7		800	4.90	2,940	2,058	2,140	1,258
8		800	4.90	2,940	2,058	2,140	1,258
9		800	4.90	2,940	2,058	2,140	1,258
10		800	4.90	2,940	2,058	2,140	1,258
11		800	4.90	2,940	2,058	2,140	1,258
12		800	4.90	2,940	2,058	2,140	1,258
13		800	4.90	2,940	2,058	2,140	1,258
14		800	4.90	2,940	2,058	2,140	1,258
IRR						56.6%	37.7%

Source: Table 3.1.

(a) Column (1): is calculated based upon price of US\$600/qq.
Column (2): is calculated based upon price of US\$420/qq.

TABLE 3.3
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL INTERNAL RATE OR RETURN TO FARMERS
CARDAMOM

Year	Pro duction(a) (100 Lbs.)	Price (1) (2) (US\$/qq)		Income (1) (2)		Cost (1,000 US\$)	Net Benefits (1) (2)		
1987						94	(94)	(94)	
1988						98	(98)	(98)	
1989	158	600	420	95	66	74	21	(8)	
1990	368	600	420	221	154	94	127	61	
1991	543	600	420	326	228	100	226	128	
1992	613	600	420	368	257	100	268	157	
1993	613	600	420	368	257	100	268	157	
1994	613	600	420	368	257	100	268	157	
1995	613	600	420	368	257	100	268	157	
1996	613	600	420	368	257	100	268	157	
1997	613	600	420	368	257	100	268	157	
1998	613	600	420	368	257	100	268	157	
1999	613	600	420	368	257	100	268	157	
2000	613	600	420	368	257	100	268	157	
2001	245	600	420	147	103	40	107	63	
IRR							56.6%	37.7%	

Source: Table 3.1 and 3.2.

Note: Assuming 75 mzs. will be planted in 1987,
and 50 Mzs. in 1988.

TABLE 3.4
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
ECONOMIC INTERNAL RATE OF RETURN
CARDAMOM

Year	Pro Fin. Price		Econ Price		Income		Cost (1,000 US\$)	Net Benefits		
	duction (QQ)	(1) (US\$/qq)	(2)	(1)	(2)	(1)		(2)	(1)	(2)
1987							83	(83)	(83)	
1988							87	(87)	(87)	
1989	158	600	420	780	546	123	86	64	59	22
1990	368	600	420	780	546	287	201	80	207	121
1991	543	600	420	780	546	423	296	85	338	211
1992	613	600	420	780	546	478	334	85	392	249
1993	613	600	420	780	546	478	334	85	392	249
1994	613	600	420	780	546	478	334	85	392	249
1995	613	600	420	780	546	478	334	85	392	249
1996	613	600	420	780	546	478	334	85	392	249
1997	613	600	420	780	546	478	334	85	392	249
1998	613	600	420	780	546	478	334	85	392	249
1999	613	600	420	780	546	478	334	85	392	249
2000	613	600	420	780	546	478	334	85	392	249
2001	245	600	420	780	546	191	134	34	157	100
IRR								80.5% 58.9%		

Source: Table 3.1 and 3.2.

Note: Assuming 75 mzs. will be planted in 1987,
and 50 Mzs. in 1988.

TABLE 4.1
 HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
 INVESTMENT AND YEARLY OPERATING COST OF A TYPICAL COFFEE MILL
 (US DOLLARS)

Description	(US\$)
INVESTMENT	
- Plant and Equipment	36,000.00
- Working Cap. (Operation)	36,000.00
- Working Cap. (Inventory)	203,832.50
Total Investment	275,832.50
FIX COSTS	
a) Depreciation	
b) Manager	3,600.00
c) Mecanic	5,200.00
d) Watchman	1,800.00
e) Maintenance and Repair	1,300.00
	7,500.00
Total Fix Costs	19,400.00
VARIABLE COSTS	
	(US\$/qq Export Ready Coffee)
a) Depulping	
1 Person to weigh	0.59
1 Helper	0.04
1 Person to Sifon	0.03
1 Through the pulp	0.09
1 To handle the pulp	0.12
- Diesel and Lubricant	0.09
	0.22
b) Wash and Spreading Labor	0.12
c) Drying Labor	0.60
d) Dry Milling Labor	0.34
Diesel and Lubricant	0.12
	0.22
e) Selection and Preparatio Labor	2.30
Bags	1.30
	1.00
f) Transportation	2.80
g) Imprevistos	0.15
Total Variable Costs	6.89

Source: Fixed and Variable costs derived from the Cooperativa de Caficultores e Industrial del Sur, Inc. in Choluteca.

TABLE 4.2
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
OPERATING BUDGET FOR A TYPICAL COFFEE MILL
(US DOLLARS)

Description	1	2	3	4	5	6	7	8	9	10
INCOME										
Volume Exported (qq)	3,290	4,230	5,170	6,110	6,580	6,580	6,580	6,580	6,580	6,580
Volume Local (QQ)	210	270	330	390	420	420	420	420	420	420
Total Volume (qq)	3,500	4,500	5,500	6,500	7,000	7,000	7,000	7,000	7,000	7,000
Export Price (US\$/qq)	133	133	133	133	133	133	133	133	133	133
Local Price (US\$/qq)	45	45	45	45	45	45	45	45	45	45
Value Exported (US\$)	437,570	562,590	687,610	812,630	875,140	875,140	875,140	875,140	875,140	875,140
Value Local (US\$)	9,450	12,150	14,850	17,550	18,900	18,900	18,900	18,900	18,900	18,900
TOTAL INCOME	447,020	574,740	702,460	830,180	894,040	894,040	894,040	894,040	894,040	894,040
FIX COSTS										
	19,400	19,400	19,400	19,400	19,400	19,400	19,400	19,400	19,400	19,400
VARIABLE COSTS										
Coffee Purchase										
Volume (qq uva)	21,000	27,000	33,000	39,000	42,000	42,000	42,000	42,000	42,000	42,000
Price (US\$/qq uva)	14.53	14.53	14.53	14.53	14.53	14.53	14.53	14.53	14.53	14.53
Value (US\$)	305,135	392,317	479,498	566,680	610,271	610,271	610,271	610,271	610,271	610,271
Operating Costs										
Volume (qq oro)	3,500	4,500	5,500	6,500	7,000	7,000	7,000	7,000	7,000	7,000
Unit (US\$/qq oro)	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89
Value (US\$)	24,115	31,005	37,895	44,785	48,230	48,230	48,230	48,230	48,230	48,230
Total Variable Costs	329,250	423,322	517,393	611,465	658,501	658,501	658,501	658,501	658,501	658,501
Export Taxes										
Volume (qq oro)	2,310	2,970	3,630	4,290	4,620	4,620	4,620	4,620	4,620	4,620
Price (US\$/qq oro)	161	161	161	161	161	161	161	161	161	161
Unit Tax (US\$/qq)	24.24	24.24	24.24	24.24	24.24	24.24	24.24	24.24	24.24	24.24
Total Export Tax	55,986	71,982	87,978	103,974	111,972	111,972	111,972	111,972	111,972	111,972
Export Permit										
Unit (US\$/qq)	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Total (US\$)	5,775	7,425	9,075	10,725	11,550	11,550	11,550	11,550	11,550	11,550
F.A.C.										
Unit (US\$/qq)	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25
Total (US\$)	14,438	18,563	22,688	26,813	28,875	28,875	28,875	28,875	28,875	28,875
TOTAL EXPENSES	424,849	540,691	656,534	772,376	830,298	830,298	830,298	830,298	830,298	830,298
NET OPERATING INCOME	22,171	34,049	45,926	57,804	63,743	63,743	63,743	63,743	63,743	63,743

Source: Table 4.1

TABLE 4.3
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
FINANCIAL INTERNAL RATE OF RETURN OF A TYPICAL COFFEE MILL
(US DOLLARS)

Year	Investment	Net Benefits		Depreciation	Net Cash Flow	
		(1)	(2)		(1)	(2)
0	275,832				(275,832)	(275,832)
1		22,171	8,941	3,600	25,771	12,541
2		34,049	17,039	3,600	37,649	20,639
3		45,926	25,136	3,600	49,526	28,736
4		57,804	33,234	3,600	61,404	36,834
5		63,743	37,283	3,600	67,343	40,883
6		63,743	37,283	3,600	67,343	40,883
7		63,743	37,283	3,600	67,343	40,883
8		63,743	37,283	3,600	67,343	40,883
9		63,743	37,283	3,600	67,343	40,883
10	(239,832)	63,743	37,283	3,600	67,343	40,883
					307,175	280,715
IRR					18.2%	10.8%

Source: Table 4.2.

Note: (1) Assumes an export price of US\$133.00/qq.
(2) Assumes an export price of US\$93.00/qq.

TABLE 4.4
HONDURAS SMALL FARMER COFFEE IMPROVEMENT PROJECT
ECONOMIC BENEFITS OF COFFEE MILL REHABILITATION
(US DOLLARS)

Year	Coffee Exported (qq)	Fin Pr Differ.		Eco Pr Differ.		Economic Benefits	
		(1)	(2)	(1)	(2)	(1)	(2)
		(US\$/qq)				(US\$1000)	
1987	46,060	6	4	8	5	359	240
1988	59,220	6	4	8	5	462	308
1989	72,380	6	4	8	5	565	376
1990	85,540	6	4	8	5	667	445
1991	92,120	6	4	8	5	719	479
1992	92,120	6	4	8	5	719	479
1993	92,120	6	4	8	5	719	479
1994	92,120	6	4	8	5	719	479
1995	92,120	6	4	8	5	719	479
1996	92,120	6	4	8	5	719	479

Source: Table 4.2

ANNEX B

SCOPES OF WORK FOR LONG-TERM TECHNICAL ADVISORS

STATEMENT OF WORK

Background:

The first evaluation of the Project was conducted by Experience Incorporated and a final report submitted in February 1984. During 1985 a number of mini-evaluations have been carried out relative to the loan portfolio, the paratécnicos activity, and baseline data. The second evaluation was completed in January 1986. These evaluations are available to assist in the final Project evaluation.

Article I. Title

Final evaluation of the Small Farmer Coffee Improvement Project.

Article II. Objectives

1. To evaluate the capacity developed so far by IHCAFE to coordinate Project activities and to provide improved extension services to small coffee farmers.
2. To evaluate the efficiency developed by the involved banking institutions to provide credit to the Project's target group.
3. To evaluate the impact of the Project on participating small coffee producers with respect to changes in production; income and profitability; use of modern technology and inputs; and provide an overview of the sociological impact of the Project.

Title III. Statement of Work

A. Methodology

Contractors should contact BANADESA, BANHCAFE, Banco de Occidente and Banco Sogerin for credit experience under the Project. Within IHCAFE, the Project Coordinator will be the primary contact. IHCAFE will coordinate field visits with regional offices to assure maximum exposure to activities and problems. Field work may approximate one half of total work days requested. IHCAFE will provide contractors with all quarterly reports as well as quarterly reports from Servicios Técnicos del Caribe technicians working on the Project. It is anticipated that approximately two months will be required for this work.

B. Specific Terms of Reference

1. Overall Institutional Development

- 1.1. How effective has been IHCAFE in implementing the Project given additional ongoing 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?
- 1.2. How effective has been the Central Bank in managing loan funds and in making capital available to BANADESA, BANHCAFE, Banco Sogerin and Banco de Occidente according to Project needs?
 - 1.3. 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,
 - (f) the implementation of credit activities for groups?
 - 1.4. What support links have been developed between regional institutions (e.g., IICA and PROMECAFE) and IHCAFE, and to what extent have these links facilitated the implementation of the Project?
 - 1.5. How effective has been IHCAFE in promoting the participation of additional banks in the Project?
 - 1.6. To what extent are the Small Farmer Titling and Services Project (522-0173) and the Small Farmer Coffee Improvement Project being coordinated, and what formal linkages should be established between both to maximize impact?
2. Extension Activities
- 2.1. Has the Extension Department within IHCAFE been expanded and its coverage increased as a result of Project activities? How?
 - 2.2. What is the status of the in-service training program instituted to improve the capacity of IHCAFE extension agents to transfer technology to coffee farmers? That is:
 - (a) what kinds of training activities have been organized;
 - (b) what has been the quality of training received up to date;
 - (c) to what extent is the content of courses, seminars, and workshops organized relevant to field activities planned for extensionists?

- 2.3. What Project promotion activities are being organized, how do extension agents participated in the organization of such activities, and to what extent are they being effective in getting target farmers involved in the Project?
- 2.4. 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?
- 2.5. 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?
- 2.6. What is the current extensionist/beneficiaries ratio? Is this ratio adequate to provide needed technical assistance?
- 2.7. 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 is this type of assistance being utilized as a training follow-up mechanism?
- 2.8. What is the effect of the new training program on the technification on the farm?

3. Credit Activities

- 3.1. What arrangements have been made by IHCAFE to adequately organize and staff its Credit Division? To what extent has the Project amendment in this respect proven to be an appropriate decision?
- 3.2. How effective have been the participating banks 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?

- 3.3. What level of funding is now available for the credit program, including both investment and production loans? Is the GOH making available stipulated counterpart for such program?
 - 3.4. 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?
 - 3.5. Are production loans in addition to investment loans being made available to participating farmers by BANADESA, Banco de Occidente, BANHCAFE and Banco Sogerin?
4. Project Acceptability, Technological Adoption and Diffusion
- 4.1. Have target farmers accepted the technification program proposed by IHCAFE technicians? In this respect, to what extent have (a) the credit terms designed, (b) the type of assistance offered, and (c) the possibility of a gradual renovation of damaged plantations enhanced Project involvement?
 - 4.2. Has any previous interest in the Project among beneficiaries been affected by the current world coffee prices?
 - 4.3. Are Project participants adequately following instructions provided by IHCAFE technicians? That is, are participating farmers replacing old coffee varieties with new ones; repopulating plantations to optimum levels; and utilizing fertilizers, pest control practices, advanced shading and pruning techniques as expected? If not, why and what modifications must be introduced for technology transfer to occur?
 - 4.4. Are Project participants satisfied with the credit assistance (e.g., both investment and production) and technical assistance being provided under the Project? If not, what are their complaints, and how can existing problems be overcome?
 - 4.5. To what extent has IHCAFE acquired the capacity and become involved in promoting the advantages of processing and marketing cooperatives through its technical assistance activities? Have farmers shown any receptivity to such promotion? If not, what modifications must be introduced for the adopted cooperative involvement strategy to be effective?
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5. Impact of the Project on Participating Small Coffee Producers

- 5.1. What are the production increases, if any, resultant from Project participation?
- 5.2. How do production increases, if existent, affect income and profitability to small producers? Compare pre-Project income patterns with post-Project income patterns in the third, fourth, fifth and sixth year following renovation.
- 5.3. To what extent have Project participants continued to utilize fungicides, pesticides and fertilizers following the initial two-year disbursement of Project subloans?
- 5.4. 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.

Article IV. Reports

The Contractor is expected to present to the USAID/ORD in Honduras a draft of the evaluation report prior to departure from Honduras, and by _____, 10 copies in English of the final evaluation report. This report should follow the Project Evaluation Summary (PES) format and have the following sections:

1. Summary

- 1.1. Overall Implementation Capacity within IHCAFE and involved banking institutions.
- 1.2. Accomplishments with respect to Extension Program.
- 1.3. Accomplishments with respect to Credit Program.
- 1.4. Impact on participating small coffee producers.

2. Evaluation Methodology

3. External Factors affecting Project implementation

4. Status of Inputs

5. Status of Outputs

6. Status of Project's Purpose Achievement

7. Status of General/Subgeneral Achievement

8. Description of Project Impact on Beneficiaries to Date

9. Unplanned Effects

10. Lessons Learned

11. Special Comments or Remarks

12. Recommendations

Article V. Relationships and Responsibilities

The Contractor will receive technical direction from the Rural Development Office at USAID/Honduras.

ANNEX C

DRAFT SCOPE OF WORK FOR FINAL EVALUATION OF PROJECT

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STATEMENT OF WORK

General:

Assist the Project Manager and the IHCAFE Coordinator in strengthening the Extension Program of IHCAFE. This assistance includes: i) designing proper supervision and controls; ii) monitoring and assessing effectiveness of IHCAFE's technical assistance; iii) establishing continuous programming mechanisms which closely integrate the timely provision of technical assistance in the areas of credit, supervision, outreach and training; and iv) establishing appropriate policies for IHCAFE's Program response to the coffee sector.

Specific

- A. Strengthening IHCAFE's organizational framework through assisting management and implementation of Project 522-0176, Small Farmer Coffee Improvement by:
- 1) analyzing and evaluating IHCAFE's performance as a service organization to coffee growers, processors, exporters and other intermediaries;
 - 2) assessing mechanisms used to allocate financial resources and personnel of IHCAFE;
 - 3) assessing policy framework affecting IHCAFE;
 - 4) assessing IHCAFE's decision making channels and responsibility assignment process;
 - 5) assessing IHCAFE's relationship with other public and private sector entities serving coffee producer needs with respect to finance, research and other technology transfer.
- B. Assist IHCAFE management in assessing the internal structure of IHCAFE departments. Identify for each department the following:
1. objectives
 2. planning strategy
 3. chronological action plan
 4. monitoring and evaluation mechanisms
 5. linkages with other departments
 6. relationship between IHCAFE goals and department goals
 7. department strategy being implemented and the interdepartmental complementary in implementing IHCAFE strategy to achieve goals.
- C. Based on the results of (A) and (B) above, make recommendations for improving IHCAFE's services and reducing costs. These recommendations should be presented in the format of an action plan which should include; 1) specific changes; (b) concrete outcomes; (c) define schedules; (d) financial and human resources required; (e) policy negotiation issues; and (f) key assumptions.

- D. Plan and devise methods to evaluate the impact of technology transfer carried out by the paratechnician and extensionist to the farmer, emphasizing agronomic and milling practices which are relevant to production increases, and decreases in pest incidence, which lead to standardizing quality of coffee and increases on the return on investment.
- E. Design and oversee training programs for the small farmer to assure the Project that modern agronomic practices are being implemented and adapted to the coffee growers regions.
- F. Oversee an in-depth analysis of the existing wet coffee mills as to their cost and operational effectiveness from a production, geographical and coffee policy viewpoint. Suggest to IHCAFE the proper use that each of these "beneficios" should be given; as well as the controls that should be implemented to assure this.
- G. Assist management in leading research in planting designs and densities, systematization of pruning methods, organize spraying systems for pest prevention and control, uniform coffee processing and other areas that will have economic impact on coffee production.
- H. Assist in other duties as assigned by the Project Manager or Project Coordinator.

STATEMENT OF WORK

The Credit/Financial Advisor, will be attached to the Coordination Unit of IHCAFE and will have as his principal responsibility the technical support of the Credit/Financial activities within this Unit. He will also provide advice to the Technical/Credit Unit of IHCAFE and the participating financial institutions of the Project. His primary functions will be as follows:

- 1) Prepare an annual work plan based upon the planned activities expected to appear during the expansion of the Project.
- 2) Train IHCAFE's technical personnel in the formulation, follow-up and evaluation of agricultural finance activities.
- 3) Establish control mechanisms, registration and evaluation programs for the credit activities, including revision and updating of the credit policies of the Project whenever required.
- 4) Propose credit systems and policies for lending activities with individuals and formally organized groups such as cooperatives.
- 5) In concert with the Project's Agricultural Economist, evaluate the economic and financial results of the Project and participate in the restructuring of the loan portfolio of the Project, beginning with the start of the Project.
- 6) Participate in work sessions between the Coordination Unit and the financial institutions involved in the Project, assisting in the selection of effective, interinstitutional coordination mechanisms.
- 7) Review and strengthen credit recuperation norms and procedures through in-service training, institutional coordination and adequate written materials on the subject, including mass media coverage.
- 8) Establish a mechanized, credit control system in the regional offices of the Project.
- 9) Present periodic quarterly progress reports to the Chief of the Coordination Unit concerning the activities carried-out during that period; prepare an annual report for the Coordination Unit which contains an evaluation of the degree of acceptability and application of the methodology and credit mechanisms introduced by the Project, including recommendations for changes to respond to deficiencies identified during implementation.
- 10) Other duties as assigned by the Project Managers of AID and IHCAFE.

AGRICULTURAL ECONOMIST

1. Review and analyze the economic aspects of the two coffee renovation schemes being applied under the Project to ascertain:
 - a. Economic viability in light of experience gained so far on costs incurred by the coffee producer, coffee yields per manzana, prices and income.
 - b. Working in coordination with the Credit Advisor will assess repayment capacity of the loans being obtained by producers and whether there is need for modifications in view of apparently higher and earlier production than originally expected. Answer questions such as: Should grace periods and period of time to repay the loans be shortened? Are loans installments being paid on time? Is loan delinquency a potential problem? Are the various financial institutions participating performing a satisfactory role on loan supervision and collection?
 - c. Assess short-term credit requirements for plantations that have reached commercial production, in terms of adequacy and need from counterpart funds.
2. Assess, on a zonal basis, the socio-economic impact being felt and expected of the Coffee Project. Employment generation and the probable use or reinvestment of profits should be explored in close coordination and with the participation of the Sociologist on the team.
3. Assess present and potential impact of Project on global coffee production in Honduras trying to evaluate design concept that Project is oriented to protect small coffee producers against massive attacks of rust and insects.
4. Examine the potential for specific diversification projects where the Coffee Project is being implemented with emphasis on economic viability and administrative capacity present or that can be created in the short run. Attitudes of potential clientele for new projects need to be explored with the active participation of the Sociologist.
5. Assess IHCAFE cost structure in promoting and servicing the Coffee Project clientele with special emphasis on cost of maintaining an extension agent in the field. Costs will be related to income received as part of the interest rate paid by Coffee Project beneficiaries, which in turn will be assessed on the basis of actual repayment record of beneficiaries and the impact on IHCAFE finances assuming various levels of delinquency.
6. Collaborate in developing the information system required for the Coffee Project for the computerized system to be installed.
7. Other duties as assigned by the Project Managers of A.I.D. and IHCAFE.

RURAL SOCIOLOGIST

1. Assess the impact of the AID/IHCAFE Project on beneficiaries and families with special emphasis on receptivity and attitude to significant technological change in coffee production, increased indebtedness, application of the new technology, disposition of already received or expected higher net or disposable income generated. What are the priorities? Reinvest, improve house, spend it on new cloth, etc.?
2. Assist in the examination of the functioning of a "grupo solidario" approach to lending to small producers attitude particularly towards collective credit risk, and consequences if one or more members of a group become delinquent.
3. Assist in the examination of the role of coffee cooperatives in facilitating services to small producers and attitudes of these families toward cooperative benefits and responsibilities of members. Are coffee cooperatives in the Project zones performing well in terms of management and having adequate member support? Do members trust management and appear to be willing to fully support the cooperatives approach? Are cooperatives in these zones an acceptable vehicle to start discrete diversification projects?
4. Assist in assessing the experience being gained in the utilization of paratechnicians in the Coffee Project. This will be carried out in conjunction with the Agricultural Extension Consultant.
5. Test and evaluate the overall performance of the IHCAFE Extension Program taking into consideration the mechanisms and/or systems of mass communication being utilized, ability to transfer technology to groups of producers, impact of extension agents upon coffee producers and their families. As result of this assessment dissemination of information directed to target communities, advise on in-service training to extension agents, propose a personnel evaluation system, assist in designing a manual that permits the integration of policies of central office to enhance the coherent flow of information from central office to regional offices and field agents.
6. Other duties as assigned by the Project Manager of A.I.D. and IHCAFE.

ANNEX D

WORKSHEET PIO/CS COMMODITY PROCUREMENT

PIO/C	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT		<input checked="" type="checkbox"/> Worksheet <input type="checkbox"/> Issuance		PAGE 1 OF <u>2</u> PAGES	
			1. Cooperating Country HONDURAS		2. PIO/C Number	
	PROJECT IMPLEMENTATION ORDER/COMMODITIES		3. Project Number and Title Small Farmer Coffee Improvement Project 522-0176			
4. Appropriation Symbol:		5. Allotment Symbol and Charge:		6. Funds Alloted To <input type="checkbox"/> AID/W <input checked="" type="checkbox"/> Mission		
7. Obligation Status <input checked="" type="checkbox"/> Administrative <input type="checkbox"/> By Agreement <input checked="" type="checkbox"/> Reservation			8. <input checked="" type="checkbox"/> Original OR Amendment Number _____			
9. Authorized Agent USAID/Honduras Contracting Officer			10. Method of Financing A. <input checked="" type="checkbox"/> U.S. Government B. <input type="checkbox"/> Direct Letter of Commitment:			
11. Contracting Period (Mo., Day, Yr.) From: Issuance To:		12. Delivery Period (Mo., Day, Yr.) From: Issuance To:		13. Project Assistance Completion Date (Mo., Day, Yr.) 5/26/90		
14. Area of Source Code 000		15. DOLLAR VALUE				
		A. Previous Total	B. Increase	C. Decrease	D. Total to Date	
			366,000		366,000	
16. Quantity, Description, Specifications, Instructions and Special Provisions						
Contracting Officer is requested to procure 24 4WD vehicles, C.I.F. Tegucigalpa, with the following specifications, subject to Special Provisions (Attachment A).						
Item 1. 20 units Utility Pick-up with hard-top cab, at \$13,000.						
Item 2. 4 units Utility Station Wagon with metal top, individual front seats and rear bench seats, at \$14,000 approximate unit cost.						
Item 3. Manufacturers recommended spare parts for 3 years of operation.						
All 24 vehicles should have the following characteristics and options:						
17. MISSION REFERENCES	-4 wheel drive		-Wheel base at least 100 inches			
	-Dual range transfer case		-Ground clearance 7 inches			
	-4 or 5 speed manual transmission		-Heavy duty springs and shock absorbers			
	-4 cylinder diesel engine of at least 2,000 cc. displacement		-Front and rear bumpers			
	-Heavy duty, off-road tread tires		-Spare tire lock (pick-ups)			
	-16 gallon fuel capacity		-USAID emblems and Maintenance Manuals			
	-Locking fuel tank cap		-Beige or brown color			
			-Dual outside mirrors			
18. MISSION CLEARANCES		DATE	MISSION CLEARANCES		DATE	
RD:GAStraub'nj			CONT/BAO:RZelaya			
DF:PKranstover			CMGT:CELyons			
19. Date of Original Issuance			20. Date of this Issuance			

21. For the Cooperating Country --
The terms and conditions set forth herein are hereby agreed to:

Signature _____ Date _____
 Title Efraín Bu Giron
Minister of Finance & Public Credit

22. For the Agency for International Development

Signature _____ Date _____
 Title Anthony J. Cauterucci
Mission Director

10/78

X Original

Small Farmer Coffee Improvement
Project 522-0176

ATTACHMENT A

SPECIAL PROVISIONS

1. Supplier must provide international warranty for at least 12,000 miles or 12 months whichever comes first.
2. Supplier/manufacturer must have duly authorized representative in Tegucigalpa, Honduras to provide pre-delivery services, warranty coverage (if necessary), and aftersales service and maintenance. Said representative must also have adequate spare parts to provide such services and maintenance.

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UNITED STATES INTERNATIONAL DEVELOPMENT
COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT

DOCUMENT DISTRIBUTION AND
SHIPPING INSTRUCTIONS

1. DATE	PAGE	OF	PAGES
2. U.S. AID ORDERING OFFICE Commodity Management Office USAID APO Miami 34022			
3. U.S. AID PROCUREMENT REQUEST NO.	4. DOCUMENT CONTROL NO. (Leave Blank)		

IMPORTANT: This form shall be completed by the U.S. AID Ordering Office and attached to all requests for commodities (PA's and PIO/C's) submitted for supply action. A separate form is required for each ultimate consignee receiving material.

SHIPPING

5. CONSIGN SHIPMENT TO: Commodity Management Office USAID/Honduras c/o American Embassy Tegucigalpa, Honduras Contract 1P.O. No.	6. MARK FOR (Final Destination): Instituto Hondureño del Café (IHCAFE) Tegucigalpa, D.C., Honduras, C.A. USAID/Honduras Contract No.
7. PARTIAL DELIVERY ACCEPTANCE <input type="checkbox"/> a. YES <input type="checkbox"/> b. NO	

DOCUMENTATION

8. ADDRESS TO RECEIVE INFORMATION REGARDING STATUS OF PROCUREMENT REQUEST: Commodity Management Office USAID APO Miami 34022	9. ADDRESS TO WHICH BILLING DOCUMENTS ARE TO BE SENT Controller's Office USAID APO Miami 34022
---	---

10. SHIPPING DATA (Insert complete addresses) below, items a through c, to receive shipping documents in the number of copies indicated.)

	ADDRESS	OCEAN BILL OF LADING		AIR FREIGHT B/L	PACKING LISTS	EXPORT INVOICE
		NEGOTIABLE	COPY			
a.	Commodity Management Office USAID APO Miami 34022	1	2	NA	3	3
b.	Instituto Hondureño del Café (IHCAFE) Tegucigalpa, D.C., Honduras, C.A.		1	NA	1	1
c.	GSO/Customs American Embassy APO Miami 34022	1	1	NA	2	2

11. SPECIAL DOCUMENTATION (Identify any special documents required, such as import licenses, certificates of origin, etc.)

Insurance Certificate must accompany the negotiable copies of bill of lading.

* Supply documents furnished to the addressee will serve to inform the ordering office of the status of the procurement request during the export processing cycle.

PIO/C	AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT IMPLEMENTATION ORDER/COMMODITIES		<input checked="" type="checkbox"/> Worksheet <input type="checkbox"/> Issuance	PAGE 1 OF _____ PAGES
			1. Cooperating Country HONDURAS	2. PIO/C Number
			3. Project Number and Title Small Farmer Coffee Improvement Project 522-0176	
		4. Appropriation Symbol	5. Allotment Symbol and Charge	6. Funds Alloted To <input type="checkbox"/> AID/W <input checked="" type="checkbox"/> Mission
		7. Obligation Status <input checked="" type="checkbox"/> Administrative Reservation <input type="checkbox"/> By Agreement		8. <input checked="" type="checkbox"/> Original OR Amendment Number _____
		9. Authorized Agent USAID/H Contracting Officer		10. Method of Financing A. <input checked="" type="checkbox"/> U.S. Government B. <input type="checkbox"/> Direct Letter of Commitment
		11. Contracting Period (Mo., Day, Yr.) From: Issuance To:	12. Delivery Period (Mo., Day, Yr.) From: Issuance To:	13. Project Assistance Completion Date (Mo., Day, Yr.) May 26, 1990.
		14. Area of Source Code		15. DOLLAR VALUE A. Previous Total B. Increase C. Decrease D. Total to Date
17. MISSION REFERENCES	16. Quantity, Description, Specifications, Instructions and Special Provisions 2 - IBM PC - AT, 512 Kb RAM, 1.2 MB D.D., 360 Kb D.D. 30 MB H.D., keyboard. 2 - TECMAR Maestro memory expansion board with 512 Kb. 2 - IBM or PGS color monitor. 2 - Monitor/printer/graphics card. 2 - IBM D.O.S. 3.1 2 - EPSON FX - 286 printer, 200 cps, 132 columns, w/cable. 2 - Combination UPS 1000 watt, voltage regulator 600 watt. 12 - IBM PC - XT, 256 Kb, 2 hh D.D. (360 Kb each) 30 MB H.D., keyboard. 12 - QUADRAM quadboard memory expansion board with 384 Kb installed & clock. 12 - Monochrome monitor (IBM equivalent). 12 - Mono/printer/graphics adapter card. 12 - IBM D.O.S. 3.1. 12 - EPSON FX - 286 printer, 200 cps, 132 col. w/cable. 12 - Combination UPS 425 watt, voltage regulator 500 watt.			
		18. MISSION CLEARANCES	DATE	MISSION CLEARANCES
		RD:GAStraub		CONT/BAO:RZelaya
		DF:PKranstover		MGT:HBrown
		19. Date of Original Issuance		20. Date of this Issuance
21. For the Cooperating Country - The terms and conditions set forth herein are hereby agreed to: Signature _____ Date _____ Efraín BÚ Girón Minister of Finance & Public Credit			22. For the Agency for International Development: Signature _____ Carl H. Leonard Deputy Mission Director Title _____ Date _____	

X Original

Small Farmer Coffee Improvement
Project 522-0176

ATTACHMENT A

SPECIAL PROVISIONS

1. Supplier/manufacturer must have duly authorized representative in Tegucigalpa, Honduras to provide pre-delivery services, warranty coverage (if necessary), and aftersales service and maintenance. Said representative must also have adequate spare parts to provide such services and maintenance.

UNITED STATES INTERNATIONAL DEVELOPMENT
COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT

DOCUMENT DISTRIBUTION AND
SHIPPING INSTRUCTIONS

IMPORTANT: This form shall be completed by the U.S. AID Ordering Office and attached to all requests for commodities (PA's and PIO/C's) submitted for supply action. A separate form is required for each ultimate consignee receiving material.

1. DATE _____ PAGE _____ OF _____ PAGES

2. U.S. AID ORDERING OFFICE
Commodity Management Office
USAID
APO Miami 34022

3. U.S. AID PROCUREMENT REQUEST NO.

4. DOCUMENT CONTROL NO.
(Leave Blank)

SHIPPING

5. CONSIGN SHIPMENT TO:
Commodity Management Office
USAID/Honduras
c/o American Embassy
Tegucigalpa, Honduras, C.A.

Contract 1P.O.No.

6. MARK FOR (Final Destination):
Instituto Hondureño del Café (IHCAFE)
Tegucigalpa, Honduras, C.A.

USAID/Honduras Contract No.

7. PARTIAL DELIVERY ACCEPTANCE
 a. YES b. NO

DOCUMENTATION

8. ADDRESS TO RECEIVE INFORMATION REGARDING STATUS OF PROCUREMENT REQUEST:
Commodity Management Office
USAID
APO Miami 34022

9. ADDRESS TO WHICH BILLING DOCUMENTS ARE TO BE SENT
Controller's Office
USAID
APO Miami 34022

10. SHIPPING DATA (Insert complete address(es) below, items a through c, to receive shipping documents in the number of copies indicated.)

ADDRESS	OCEAN BILL OF LADING		AIR FREIGHT	PACKING	EXPORT
	NEGOTIABLE	COPY	B/L	LISTS	INVOICE
a. Commodity Management Office USAID APO Miami 34022	1	2	NA	3	3
b. Instituto Hondureño del Café (IHCAFE) Tegucigalpa, Honduras, C.A.		1	NA	1	1
c. GSO/Customs American Embassy APO Miami 34022	1	1	NA	2	2

11. SPECIAL DOCUMENTATION (Identify any special documents required, such as import licenses, certificates of origin, etc.)

Insurance Certificate must accompany the negotiable copies of bill of lading.

* Supply documents furnished to the addressee will serve to inform the ordering office of the status of the procurement request during the export processing cycle.

PIO/C	AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT IMPLEMENTATION ORDER/COMMODITIES		<input checked="" type="checkbox"/> Worksheet <input type="checkbox"/> Issuance		PAGE 1 OF <u>2</u> PAGES
			1. Cooperating Country HONDURAS		2. PIO/C Number
			3. Project Number and Title Small Farmer Coffee Improvement Project 522-0176		
4. Appropriation Symbol		5. Allotment Symbol and Charge		6. Funds Allotted To <input type="checkbox"/> AID/W <input checked="" type="checkbox"/> Mission	
7. Obligation Status <input checked="" type="checkbox"/> Administrative Reservation <input type="checkbox"/> By Agreement			8. <input checked="" type="checkbox"/> Original OR Amendment Number _____		
9. Authorized Agent USAID/Honduras Contracting Officer			10. Method of Financing A. <input checked="" type="checkbox"/> U.S. Government B. <input type="checkbox"/> Direct Letter of Commitment		
11. Contracting Period (Mo., Day, Yr.) From: Issuance To:		12. Delivery Period (Mo., Day, Yr.) From: Issuance To:		13. Project Assistance Completion Date (Mo., Day, Yr.) May 26, 1990.	
14. Area of Source Code 000		15. DOLLAR VALUE			
		A. Previous Total	B. Increase	C. Decrease	D. Total to Date
				4,800	4,800
16. Quantity, Description, Specifications, Instructions and Special Provisions					
Item 1. (1) Polaroid ID system, Model 703 self-contained unit with die cutter, two timers. ID-3 camera, electric laminator (no counter) or similar. Item 2. Film and plastic envelops for 400 ID cards.					
17. MISSION REFERENCES					
18. MISSION CLEARANCES		DATE	MISSION CLEARANCES		DATE
RD:GAStraub			CONT/BAO:RZelaya		
DF:PKranstover			MGT:HBrown		
19. Date of Original Issuance			20. Date of this Issuance		
21. For the Cooperating Country - The terms and conditions set forth herein are hereby agreed to:			22. For the Agency for International Development:		
Signature _____ Date _____			Signature _____		
Efraín BÚ Girón Minister of Finance & Public Credit			Carl H. Leonard Deputy Mission Director		
Title _____			Title _____		
Date _____			Date _____		

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X Original

Small Farmer Coffee Improvement
Project 522-0176

ATTACHMENT A

SPECIAL PROVISIONS

1. Supplier/manufacturer must have duly authorized representative in Tegucigalpa, Honduras to provide pre-delivery services, warranty coverage (if necessary), and aftersales service and maintenance. Said representative must also have adequate spare parts to provide such services and maintenance.

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UNITED STATES INTERNATIONAL DEVELOPMENT
COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT

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SHIPPING INSTRUCTIONS

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SHIPPING

5. CONSIGN SHIPMENT TO: Commodity Management Office USAID c/o American Embassy Tegucigalpa, Honduras, C.A. Contract 1P.O.No.	6. MARK FOR (Final Destination): Instituto Hondureño del Café (IHCAFE) Tegucigalpa, Honduras, C.A. USAID/Honduras Contract No.
7. PARTIAL DELIVERY ACCEPTANCE <input type="checkbox"/> a. YES <input type="checkbox"/> b. NO	

DOCUMENTATION

8. ADDRESS TO RECEIVE INFORMATION REGARDING STATUS OF PROCUREMENT REQUEST: Commodity Management Office USAID APO Miami 34022	9. ADDRESS TO WHICH BILLING DOCUMENTS ARE TO BE SENT Controller's Office USAID APO Miami 34022
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		NEGOTIABLE	COPY			
a.	Commodity Management Office USAID APO Miami 34022	NA	NA	1	NA	NA
b.	Instituto Hondureño del Café (IHCAFE) Tegucigalpa, Honduras, C.A.	NA	NA	1	NA	NA
c.	GSO/Customs American Embassy APO Miami 34022	NA	NA	1	NA	NA

11. SPECIAL DOCUMENTATION (Identify any special documents required, such as import licenses, certificates of origin, etc.)

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SECRETARIA DE HACIENDA Y CREDITO PUBLICO
REPUBLICA DE HONDURAS

Tegucigalpa, D. C., Junio 3 de 1986. No. CP-SD-043.

OFFICE	ACTION	INITIALS
MO		/
DMD		/
MCT		
M/C. I		
M/CH		
M/AS		
DP		
DE		/
CONT		/
RD	<i>RSD</i>	/
HRD		
HRD/1		
HRD/2		
HRD/3		
PSP		
EPA		/
ENCR		
RIG		
RHULO		
CHRON		/
READI		/
OTHER		
C&R		
DUE DATE	<i>6/16</i>	
ACTION TAKEN	<input type="checkbox"/> NA	
ATTACH. YES NO	<input type="checkbox"/> <input type="checkbox"/>	
INITIALS		

Señor
Anthony J. Cauterucci
Director
Agencia para el Desarrollo
Internacional (AID)
Su Despacho.

Estimado Señor Director:

De acuerdo a las negociaciones que se han venido celebrando entre representantes del Gobierno de Honduras y de esa Agencia en torno a la continuación del Proyecto AID-522-0176 Mejoramiento del Pequeño Caficultor, por este medio, en representación del Gobierno de la República, solicito formalmente el financiamiento de US\$ 7,000.000.00 en calidad de préstamo y US\$ 3,000.000.00 en calidad de Donación a fin de seguir implementando el referido proyecto por un período de 3 años adicionales y asegurar de esta forma el éxito que el mismo ha tenido en sus etapas iniciales.

Atentamente,



[Handwritten Signature]
J. EFRAIN BU GIRON
Ministro

CFC/OIP/nih.