Document of

The World Bank

FOR OFFICIAL USE ONLY

Report No. 4298-HO

STAFF APPRAISAL REPORT

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

April 25, 1983

Projects Department
Latin America and the Caribbean Regional Office

CURRENCY EQUIVALENTS

US$1.00 = 2.00 Lempiras (L)

WEIGHTS AND MEASURES

Metric System

GLOSSARY OF ABBREVIATIONS

BANADESA	National Bank of Agricultural Development
BCH	Central Bank of Honduras
COHBANA	Honduran Banana Corporation
COHDEFOR	Honduran Corporation for Forestry Development
CONADI	National Investment Corporation
CONSUPLANE	Superior Council of Economic Planning
CU	Coordination Unit
IHCAFE	Honduran Coffee Institute
IHMA	Honduran Agricultural Marketing Institute
IMF	International Monetary Fund
INA	National Agrarian Institute
MRN	Ministry of Natural Resources
PU	Project Unit of the Central Bank
RUTA	UNDP's Regional Unit for Technical Assistance
SOE	Statement of Expenditure
USAID	United States Agency for International Development

GOVERNMENT OF HONDURAS

FISCAL YEAR

January 1 to December 31

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

STAFF APPRAISAL REPORT

TABLE OF CONTENTS

This report is based on the findings of an appraisal mission that visited Honduras during September/October 1982. The mission comprised Messrs. M. Fairless (mission leader), V. Ferrer, O. Schulz, J. Yaron (Bank) and J. Velez (consultant).

TABLE OF CONTENTS (CONTINUED) Page No.

TABLE OF CONTENTS (CONTINUED)

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

I. PROJECT BACKGROUND AND OBJECTIVE

1.01 The Government of Honduras has requested the World Bank Group to continue to finance a rediscount facility for the banking system that provides for investment in agriculture. It would be the Bank's fifth agricultural credit project to be administered by a well qualified Project Unit (PU) established for this purpose in 1970 in the Central Bank of Honduras (BCH).

1.02 Due to the rapid commitment of funds of the ongoing Second Agricultural Credit Project (Credit 1005-HO/Loan 1833-HO), Bank missions identified the proposed project in March 1982, and in June 1982 reviewed the preparation work undertaken by the PU. During July and August, the United Nations Development Program's Regional Unit for Technical Assistance (RUTA) in Costa Rica assisted the PU in drafting the preparation document. By March 31, 1983, 70% of the US$25.0 million provided by Credit 1005-HO/Loan 1833-HO was committed and 53% was actually disbursed.

1.03 The main objective of the proposed project would be to provide long-term financing for investments and short-term financing for incremental working capital and thereby promote:

(i) agricultural exports to improve the country's balance of payments;

(ii) rural production, incomes and consumption; and

(iii) employment.

1.04 Other objectives of the project would be to:

(i) improve subloan collection by the National Bank of Agricultural Development (BANADESA);

(ii) upgrade the commercial banks' agricultural loan officers' project appraisal techniques;

(iii) improve small-scale farmers' managerial and bookkeeping capacity; and

(iv) reduce the present paperwork and time needed for subloan approval.

II. THE AGRICULTURAL SECTOR

A. Economic Setting

2.01 Honduras is one of the most underdeveloped countries in the Western Hemisphere; its per capita income was US$590 in 1981. During 1950-75, real GDP grew at 3.7% a year but with a 2.7% rate of population growth, real per capita income grew only about 1% a year. This low growth is partly the result of the economy's dependence on banana production that is often hampered by hurricanes. During 1976-79, GDP recovered and grew at 7.7% a year owing to increased banana and coffee production, high coffee prices and a substantial expansion of both public and private investment. But in 1980, the GDP growth rate was reduced to 2.9% per annum and in 1981 to only 0.8% per annum, due to reduced production levels and lowered private investment because of political events in neighboring Central American countries. In addition, public finances deteriorated and caused a large increase in the use of domestic credit that resulted in a tightening of credit to the private sector.

2.02 The newly elected Government took office in late January 1982 facing a balance of payments deficit and fiscal problems. The Government took steps to redress these financial difficulties and the adjustment program it designed provided the basis for negotiating a stand-by arrangement with the IMF in November 1982. The program included new tax measures, a reduction of current expenditures of the public sector, higher budget controls over decentralized agencies, elimination of arrears in payments and the phasing out of import restrictions. However, solving the balance of payments deficit in the medium term will depend on export growth originating in the agricultural sector.

B. Importance, Performance and Prospects

2.03 Agriculture currently generates three quarters of export earnings and over one quarter of the GDP; the sector also employs over half the economically active population. Agriculture's value added however grew only at an annual compound rate of 1.9% during 1970-80 mostly owing to Hurricanes Francelia and Fifi and to the land tenure insecurity caused by the Agrarian Reform in the first half of the decade.

2.04 The agricultural economy is dominated by two crops, bananas and coffee. During 1977-81, bananas accounted for 31% of the value added by the cropping sector and coffee accounted for 25%. The main basic grain, maize, accounted for 14%; sorghum, rice and beans for 9%; sugar, 6%; tobacco, 3%;and other crops, the most important being plantains, cotton, oil palm and citrus, for the balance. The whole cropping subsector accounted for about 68% of the value added in the agricultural sector; livestock, including poultry, accounted for 19%; forestry for 12%; and fisheries, beekeeping and hunting for the rest.

2.05 During 1977-80, coffee exports accounted for about 28% of the nation's exports; bananas for 26%; timber for 8%; and beef for 7%. The main other agricultural exports were sugar, cotton and tobacco. The

main agricultural imports are wheat, averaging about 65,000 tons per year for about US$12.0 million; dairy products, averaging about 6,000 tons per year, for US$9.0 million; and occasionally maize.

2.06 The near term prospects of the agricultural sector are not promising. The world economic recession has depressed the prices of Honduras' main agricultural exports and caused recent international trading restrictions: the coffee export quota for 1982/83 to markets covered by the International Coffee Organization is 180,000 bags less than the previous year's quota, representing a revenue loss of about US$40 million; furthermore, US preferential treatment for Honduras' sugar exports has been cut back, representing an annual loss of about US$25 million. In conclusion agriculture is a key sector within the Honduran economy and under the present difficult world trade outlook agriculture must diversify rapidly to meet the impact of market fluctuations. To that end agricultural farm investment must be increased and the proposed project would help achieve this.

C. Main Features and Structure

Natural Resources

2.07 Honduras has a land area of 11.2 million ha, 80% of which is rugged mountains and 20% is flat to undulating land. About 6.6 million ha are forests (mostly hardwood and coniferous) and some 1.8 million ha are covered by eroded soils, swamps or urban areas. In 1981 the estimated potential farmland was about 2.8 million ha, about 1.0 million of which was used as grasslands or fallow. Use of the remaining 1.8 million ha varies each year, but currently 1.1 million ha is under pastures, 0.2 million under permanent crops, and about 0.5 million under seasonal crops.

2.08 Honduras has five geographic regions: western Honduras is mountainous terrain used mainly for lumber, cattle and coffee; the northeastern coastal plain has a humid tropical climate, poor soils and is used for cattle raising; the southern coastal plain has a long dry season and is used mostly for cattle raising, sugarcane, cotton and rice under irrigation; and the central valleys have relatively fertile soils that are used for similar crops. The northwestern valleys and plains hold the most productive soils and there the major banana plantations are located; it is, however, an area subject to flooding.

Population

2.09 Of the country's 3.8 million inhabitants in 1982, increasing at a rate of 3.4% per annum, 64% is rural. The country has a low demographic density (32 persons per square kilometer) but an uneven distribution as most of the population is concentrated in the northwestern part of the country. Malnutrition is severe and health standards are poor with one-half of the nation's population not having access to potable water and three-quarters of the households being without sanitary waste disposal and electricity. Underemployment is pronounced although labor shortages are seasonal, almost 80% of the agricultural labor force is engaged in subsistence agriculture.

Land Use

2.10 The agricultural sector shows a dichotomy in its productive and social structure. The low average yields of subsistence crops (such as basic grains) are a result of the low level of technology used by small-scale farmers. These crops are often grown on hillsides under shifting cultivation, causing erosion. These farmers have great difficulty in both obtaining production credit and in marketing their product. Export-oriented or industrial crops, such as bananas and tobacco, are usually grown under a high level of technology and in close coordination with organizations that support production and marketing. Coffee is an exception, being produced under both low and high levels of technology. Livestock production including dairy production is undertaken by both small and large farmers under a wide array of technology.

Land Reform

2.11 Actual land distribution is highly skewed. According to the 1974 National Census, there were 195,341 farms, 64% of which were less than 5 ha, accounting for only 9% of the 2.6 million ha available for agricultural development (Table 1).

2.12 The first land reform legislation was decreed in December 1972 in order to create more stable political conditions as the downfall of the previous Government had been caused by land invasions by peasant groups. A more comprehensive agrarian reform law, still in force, was decreed in January 1975 and aimed at improving land utilization by transferring poorly used land held by large landowners to landless rural families. The National Agrarian Institute (INA) is responsible for land acquisition and distribution as well as for the organization, training, management and technical support including extension of the peasant settler groups. By mid-1981, INA had settled about 48,000 peasant families; about 36,000 remained organized in nearly 1,400 farmer groups, after initial desertion due to lack of adequate infrastructure. Beneficiaries were forced to form these groups to qualify for credit from the National Development Bank that later became BANADESA, but they did not always blend well into a working group and often ended with low production, splintered groups and credit mismanagement. Seventy percent of the land settled has still not been properly titled, but titling is a priority of the present Government, and external financial resources are being provided by the United States Agency for International Development (USAID).

Institutions and Supporting Services

2.13 The Ministry of Natural Resources (MRN), BANADESA (paras 3.10 to 3.15), and INA (para 2.12) are the most important institutions in the agricultural sector. Other organizations in specific fields are the Honduran Banana Corporation (COHBANA), the Honduran Corporation for Forestry Development (COHDEFOR), the Honduran Coffee Institute (IHCAFE) and the Honduran Agricultural Marketing Institute (IHMA).

2.14 MRN is responsible for animal health, plant quarantine, research and extension, and some services such as machinery rental and the execution of specific projects such as the Bank-financed Guayape Rural Development

Project. MRN received technical support financed under the First Agricultural Credit Project, Credit 628-HO (para 2.20), but its performance has deteriorated in the last few years owing to frequent personnel changes. USAID is presently providing funds to help improve MRN and consolidate the extension service and research.

2.15 The marketing of major export commodities is well handled by the private sector. IHMA has begun to have a positive effect on the marketing of the four basic grains. Inefficiencies occur at the processing stage usually because of overdesigned facilities, as in the case of milk, meat, feed concentrates, cotton and sugar. Price controls through market intervention is exercised for selected products but the recent freeing of price controls at the consumer level for milk and meat is expected to act as a needed stimulant to production.

Public Policy

2.16 The Government is attempting to improve the financial performance of the public sector by controlling expenditures and increasing tariffs of public enterprises. The public investment program is designed to encourage export production, particularly forestry and palm oil from the areas of Olancho and the Aguan Valley where the agricultural frontier can still be expanded. Private investment is expected to recover some of its previous dynamics on the basis of increased access to credit with the support of external credits from international banks. As mentioned above (para 2.12), the present Government is promoting effective land titling in addition to policies to strengthen the agricultural sector, such as the development of sound land use and watershed management practices; preparation of a new water law; implementation of a new seed law; training of public agricultural staff, and improvement of management personnel policies.

D. Bank/IDA Involvement in the Sector

2.17 The Bank has helped develop Honduran agriculture with the Guayape Rural Development Project that is proceeding well and four agricultural credit projects, implemented by BCH. In addition to its lending, the Bank has recently undertaken two studies 1/ on the sector.

2.18 The First Livestock Credit Development Project had a total project cost of US$5.2 million, of which US$2.6 million was provided by IDA Credit 179-HO; the project became effective in October 1970 and was fully disbursed by January 1975, a year before the original closing date. The objective of the project was to help diversify Honduran agriculture by increasing livestock production and exports in addition to raising beef consumption. Funds were lent to medium- and large-scale farmers to cover long-term needs for beef and dairy development and working capital for fattening operations. A PU headquartered in Tegucigalpa with three regional offices was set up in

---

1/ "Review of Selected Key Problems of the Agricultural Sector" (Green Cover, October 28, 1981) and "An Inquiry into Rural Population, Small Farmers and Agrarian Reform" (Gray Cover, January 14, 1982).

BCH to promote the project and control procedures. Seven private banks participated as financial intermediaries and made sizeable financial contributions to the project (Table 2 shows both the number of subloans and amounts financed while Table 3 shows the types of activity that were financed). The Project Performance Audit Report (No. 1920) of February 21, 1978 showed that, compared to appraisal expectations, fewer farmers were involved for larger amounts, less pasture improvement took place but a greater number of cattle were involved; the project had increased production but mostly by extensive means of production.

2.19 The Second Livestock Development Project had a total project cost of US$11.0 million, of which US$6.6 million was provided by IDA Credit 434-HO. It became effective in January 1974 and was fully disbursed by the end of 1979, a year after its original closing date. The objectives of the first lending operation were expanded to encompass lending to smaller scale livestock producers, including pig breeders, and to municipalities to construct abattoirs. The project also provided for the hiring of four livestock advisors and for the training of PU staff. Nine private banks participated as well as the National Development Bank. Changes were made to the lending terms (Table 4), the main innovation being a 3% spread allowed to BCH to help cover the PU costs. The Project Completion Report (dated May 3, 1982) showed that project implementation slowed down due to the environment created by the Agrarian Reform Law as well as by a decline in the international demand for beef. As in the previous project, only about half the number of subloans expected at appraisal were financed, with a higher percentage of the funds being used for buildings and pasture development than expected. Despite the slow disbursement, the broad objectives of the project were achieved.

2.20 The First Agricultural Credit Project has an estimated total project cost of US$20.0 million, of which US$14.0 million was provided by IDA Credit 628-HO; the Credit became effective in December 1976 and by March 31, 1983, all funds were fully committed and US$13.0 million was actually disbursed. The objectives of this project are broader than those of previous projects, with subloans for on-farm investments being made available to the cropping subsector for agro-industries and for the purchase of heavy agricultural machinery as well as to the livestock subsector. The project also included funds for technical assistance to maintain the momentum of agrarian reform by strengthening institutions such as MRN, INA, COHBANA and the Pan-American Agricultural School and to provide full time technical staff and credit to finance the rehabilitation of the Isletas banana plantation. Funds were on-lent by 10 participating banks, including the National Development Bank; the interest rate charged to sub-borrowers was increased from 9 to 11% per annum. The original funds for general credit activities were disbursed in only three years. BCH provided additional counterpart funds amounting to about US$2.6 million. Despite the quick disbursement of the credit component, the slow implementation and disbursement of the technical assistance components has resulted in three extensions of the project's closing date, the latest being to June 30, 1983.

2.21 The Second Agricultural Credit Project has an estimated project cost of US$38.5 million, of which US$5.0 million is provided by IDA Credit 1005-HO and US$20.0 million by IBRD Loan 1833-HO; the project became effective in September 1980 and is still under implementation (para 1.02). The objective of the project is to provide long-term credit for farm development,

the purchase of agricultural machinery, and the construction of municipal abattoirs. Funds were also provided for flood control and drainage works on the Ulua River to allow for more banana plantations, the implementation of a pilot forestry project, and various studies. The rediscounting percentage for financial intermediaries was changed to encourage them to lend to small-scale farmers, and a separate loan category for these farmers was established to facilitate the monitoring of funds channeled to them. Interest rates have been increased from 11% to 16% during implementation because of the higher international rates that predominated during the last two years. The disbursement of project funds is proceeding well, with 12 financial intermediaries participating but lending to small-scale farmers is proving difficult, mainly because they lack collateral. Of the 861 subloans made by December 31, 1982, 380 went to small-scale farmers, accounting for about 26% of the total investment funds on-lent. Lending has taken place for the production of a wide array of commodities, including tobacco, maize, sugarcane, cotton, citrus, oilpalm, bees, rabbits, shrimp, poultry, pigs and goats, in addition to cattle. The level of arrears in BANADESA has risen considerably and by October 30, 1982 39% of the principal and interest due was still outstanding. Implementation of the non-credit components is proceeding at a slower pace but is still satisfactory.

2.22 Over the past 12 years, there has been a gradual change in the Bank's agricultural credit projects with regard to sub-borrowers, financial intermediaries, lending terms, and activities. These changes are worth noting, as they have been taken into account in the design of the proposed project. First, sub-borrowers have changed, both in number and in economic status, from 78 cattle ranchers to about 1,800 sub-borrowers, including agrarian reform settlers. Second, the number of financial intermediaries has grown from seven to 12, and the type of institutions participating has also widened as BANADESA now is the most important institution because of both the volume of funds on-lent and because of the emphasis on lending to small-scale farmers. Third, there has been a great improvement in financial reporting by FIs, thanks to guidance from BCH's Office of the Superintendency of Banks. Fourth, the activities that are financed have changed, from exclusively cattle ranching to investment in almost any productive enterprise (para 2.21), thus encouraging diversification. The PU has also changed: in staff numbers, rising from two technicians to 34; in regional offices, going from two to five; and in expertise ranging from strict agriculturalists to economists, financial analysts and cooperative experts. This staff expertise is due to training (in part undertaken at the Bank's Economic Development Institute) and to the experience gained over time as there has been very little turnover in personnel. These improvements in the PU's capacity have enabled it to draft the Completion Report for the Second Livestock Credit Project and to be primarily responsible for the preparation of the proposed project.

III. THE FINANCIAL SYSTEM

A. Monetary Policy

3.01 BCH was established in 1950 with the responsibility for formulating and implementing monetary policy and supervising the banking system; it also takes an active role in economic development, policy formulation, planning

and financing. BCH exercises the function of being the regulatory body for the banking system through the Office of the Superintendency of Banks that also undertakes external audits of projects financed by international banks, including past and ongoing Bank agricultural credit projects. BCH is regarded, both inside and outside Honduras, as professionally managed and adequately staffed.

3.02 As the monetary authority, BCH determines credit policy and regulates the flow of credit to the economy by: (a) fixing minimum legal reserve requirements on deposits; (b) determining rediscount facilities (mostly for agricultural activities and export financing); (c) setting maximum interest rates for lending and deposits; (d) fixing sector portfolio limits; (e) determining limits for external debts; (f) conducting open market operations; and (g) setting exchange rates. Monetary policy in Honduras has traditionally focused on: (a) maintaining the stability of the Lempira within a system of free currency convertibility; (b) maintaining equilibrium in the balance of payments; and (c) maintaining domestic inflation at a rate not exceeding the US' level of inflation as the US is Honduras' main trading partner.

3.03 As a result of a conservative monetary policy, the historical rate of inflation in Honduras, as measured by the consumer price index, has been low compared to that in many other Latin American countries. The US dollar-Lempira exchange rate has been maintained at a 2:1 ratio for the last four decades, and, despite the recent pressure on the exchange rate, the Government plans to maintain the existing exchange rate with the support of an IMF standby arrangement. The increase of the consumer price index averaged 3.3% per annum between 1970 and 1973, but it rose to 13.9% per annum between 1979 and 1981. In 1980 inflation rose to 19% because of substantially higher prices of imported goods and low basic grain production; however, in 1981 and 1982 inflation abated to about 9%, as the production of basic grains improved and international inflation slowed down.

3.04 BCH's policy requires that banks in Honduras presently have to maintain a 30% reserve requirement (either in cash or Government bonds) against both their domestic and foreign liabilities. To help channel funds for productive activities, BCH has set a limit of 25% as the maximum share of domestic trade and consumption in the loan funds of commercial and development banks. However, most of the production credit is only for short-term credit; almost all long-term credit for agriculture in Honduras stems from Bank-financed agricultural credit projects.

3.05 Interest rates were modified infrequently in the 1960s, but since the 1970s they have played an important role in monetary policy. Following the trend in the international capital markets, in December 1982, BCH reduced the interest rate to 17% per annum on short-term loans for production credit that are financed through local resources; loans for basic grains production have a special incentive rate of 14%. There is no limit on interest rates for loans financed with foreign funds. The deposit rate has been left free to fluctuate in accordance with market forces. Both loan and deposit interest rates are reviewed quarterly in the light of domestic and foreign financial market conditions in order to ensure a positive return in real terms to domestic savers as well as to maintain the competitiveness of domestic interest rates vis-a-vis comparable rates in foreign markets.

B. The Banking System

3.06 The banking system in Honduras consists of BCH, 15 commercial banks, three development banks namely, BANADESA, the National Investment Corporation (CONADI) and the Municipal Bank, as well as nine specialized credit institutions that are mostly savings banks and loan institutions.

3.07 The commercial private banks (11 of which participate in the ongoing agricultural credit project) operate 222 branches throughout the country; in addition, BANADESA has 28 branches. The three largest commercial banks -- Banco Atlantida, Bancahsa and Banco El Ahorro Hondureno -- accounted for 44% of the total assets of the commercial banking sector, 50% of all deposits mobilized, and 50% of the total time deposits and savings accounts of the sector as of October 31, 1981. All commercial bank assets accounted for 79% of the total assets of the banking sector at the end of 1981 and for 95% of total deposits.

C. Financing Agriculture

3.08 Private commercial banks usually account for about 70% of the funds lent annually to agriculture; BANADESA accounts for the remainder. Both commercial banks and BANADESA depend heavily on BCH's rediscounting facility that is used almost exclusively for the financing of short-term credit. Although the new loans financed through the Bank's agricultural credit projects do not even amount to 10% of the total amount lent to agriculture each year, they are almost the only available source of investment financing.

3.09 The present economic crisis that Honduras is facing (paras 2.01 and 2.02) has produced a shortage of funds that has resulted in a reduction of the credit made available to agriculture. The main cropping and livestock activities financed during 1976-81 were:

	1976	1977	1978	1979	1980	1981
	(US$ million)					
Total new credit granted for crops and livestock	126	189	168	190	140	137
Coffee	64	108	86	74	42	24
Sugarcane	8	21	10	19	14	19
Basic grains	9	8	11	12	16	20
Livestock	17	17	20	31	26	24
Other	28	35	41	54	42	50

Despite the crop diversification that has begun to take place in Honduras, the increase in the financing of activities other than coffee, has not been sufficient to compensate for the decline in the financing of coffee that occurred because coffee prices dropped after 1977. However, the Bank's previous agricultural credit projects (Table 3) and particularly the ongoing Second Agricultural Credit Project (para. 2.21) have been specially important in promoting the diversification of agricultural production. The proposed project would continue with this objective.

D. National Bank of Agricultural Development

3.10 The National Bank of Agricultural Development (BANADESA) was created from the National Development Bank in March 1980, as an autonomous Government institution with an authorized capital of L 75 million. BANADESA's Board of Directors is made up of the Ministers of MRN (Chairman), Economy, Finance and Public Credit; the Executive Secretaries of the Superior Council of Economic Planning and INA; the President of BCH; representatives of the associations of farmers, cattlemen and the peasant organizations; and BANADESA's Executive President. The Board decides credit policies and annual budgets and approves the naming of senior staff. A smaller Executive Committee, made up of selected Board members, has the power to approve major loans, interest rates and the opening and closing of branches. The three main managers of the bank are in charge of Operations, Administration and Finance; legal counsel and the head of Special Studies also report directly to the Executive President. In October 1982, the bank had a total staff of nearly 1,000 employees, 40% of whom were based in the Tegucigalpa headquarters.

3.11 The Government did not immediately arm the new institution with adequate financing because of the lack of resources. Finally in July 1982, the National Congress authorized BANADESA's gradual capitalization program (1982-96) with L 114.9 million to cover: the previously authorized capitalization of L 75.0 million, an inherited deficit from the National Development Bank of L 27.8 million and various portfolio losses of L 12.1 million. At the same time Congress authorized the Government to become the guarantor of a loan given by BCH to BANADESA for L 107 million under favorable terms to help reschedule the loans BANADESA had with BCH itself.

3.12 BANADESA's income statements show that it has suffered losses since it was founded; its losses for the last nine months in 1980 amounted to L 7.1 million and in 1981 losses rose to L 16.3 even though no allowance was made for unpaid subloans that fell due that year. The negative equity BANADESA shows on its balance sheet results from operating losses that in turn are mostly because of high administrative costs and a very poor rate of recovery of its loan portfolio.

3.13 BANADESA's loan portfolio as of December 31, 1981 totalled L 143.9 million. Current loan portfolio, without arrears, amounted to 47% of the portfolio, arrears exceeding 12 months amounted to 23%, arrears of less than 12 months amounted to 15%, rescheduled loans to 9% and loans with partial arrears to 6% of the portfolio. Partial unaudited data for the first six months of 1982 indicates that loan collection has not improved. Several factors contribute to BANADESA's extremely low rate of loan recuperation: inadequate drafting and supervision of farm development plans, lengthy subloan processing, poor field supervision of the use of the funds provided to sub-borrowers and insufficient collection efforts.

3.14 BANADESA's past loan recuperation performances under Bank-financed projects has not been much better than that of the overall institution; 55% of the principal and 29% of the interest payments; 39% of the amounts due on Bank-financed subprojects was outstanding as of October 30, 1982 (para 5.08).

3.15 BANADESA's problems are not new; the previous National Development Bank, despite costly studies financed by international donors was an equally weak institution that was dismembered with the hope of creating a new, strong institution. This did not occur; BANADESA is inadequately run and in serious financial disarray. However, BANADESA is the main source of funds for on-lending to small-scale farmers and in that light its participation under the project, within conditions that were agreed upon at negotiations, is possible and desirable. The proposed strategy and suggested conditionality for dealing with BANADESA is outlined in paragraphs 5.07 to 5.10.

IV. THE PROJECT

A. Brief Description

4.01 The project would consist of:

(a) a nationwide credit program to finance, through rediscounting facilities, investments in rural areas for both on- and off-farm activities;

(b) the incremental short-term credit needed to complement long-term investments;

(c) incremental PU administration costs; and

(d) training for PU staff, the financial intermediaries'(FIs) staffs,including BANADESA, and farmers.

B. Detailed Features

Credit Program

4.02 The credit funds are expected to be committed by the banking system in three years and disbursed in four. Most of the funds would be used to finance farm development, but funds could be used to finance any rural activities, including non-farm activities such as milk collection centers or cottage brick-making. Participating FIs would bear the credit risk and would provide part of the funds. About 40% of the total credit funds are expected to be lent to small-scale farmers (para 5.19), most of whom would be settlers in agrarian reform groups. Cost details of the credit components are shown in Table 5.

4.03 Specific investments would consist of items such as pasture development, fencing, water supply, farm buildings, machinery and breeding animals. Complementary short-term capital would be provided under the project to finance the seasonal production costs such as seed, fertilizer and labor that are related to the investment plan. Most of the lending is expected to follow the pattern established under the ongoing projects with

different average subloan sizes according to the type of sub-borrower. For example in 1982 small-scale independent farmers spent about US$15,000 on investments and about US$5,000 for their first-year short-term credit requirements, however, small-scale farmers who borrowed as a collective group usually required about US$60,000 for investments and nearly US$30,000 for their short-term capital needs. Larger scale farmers, on average, spent about US$50,000 on investments and required some US$15,000 for short-term capital.

Project Unit

4.04 The PU in BCH would administer the program. Three new staff posts would be created at headquarters: a Deputy Director, an Extension Specialist, and a Training Coordinator. All PU staff would receive a better benefits package and one that would be comparable to that received by other BCH staff. A new office would be started in Juticalpa, Department of Olancho. A computer would be installed at PU headquarters to assist with financial analysis, monitoring and evaluation, administration, accounting, and the control of subloan repayments. Ten vehicles would be purchased for use by the PU staff. Consultant services would be used by the PU, as described in paragraph 5.04. Cost details of the PU component are shown in Table 6.

Training

4.05 PU staff, who are usually agriculturalists, are expected to require training mostly in finance and banking. FIs' agricultural loan officers would be trained in credit analysis and project appraisal; BANADESA's agricultural loan officers would, in addition, be trained in loan collection while branch managers would be provided with general banking courses. Training for farmers would be geared toward small-scale settlers and would cover bookkeeping, credit management, administration, accounting and cooperative management. Cost details of the training component are shown in Table 7.

C. Cost Estimates and Financing

4.06 The total project cost is estimated at US$73.9 million, of which about 33% represents foreign exchange. As most of the goods and services expected to be financed under the project are exempt from taxes, there are no significant taxes included in the project cost. Costs are based on September 1982 prices; price contingencies have been allowed for the PU and training components and are based on international inflation figures of 8% in 1983, 7.5% in 1984 and 7% in 1985; the domestic inflation figures used differ only in 1983, when 9% was used. The summary of the project cost is shown on the following page:

Project Cost

Project Components	Local	Foreign	Total	Local	Foreign	Total	Foreign Exchange	Baseline Cost
	(L million)			(US$ million)			(%)	
I. Credit Program								
A. Long-term Investments:								
Small farms	23.6	13.2	36.8	11.8	6.6	18.4	36	-
Other farms	42.0	20.6	62.6	21.0	10.3	31.3	33	-
Non-farm investments	0.9	2.8	3.7	0.4	1.4	1.8	72	-
Subtotal	66.5	36.6	103.1	33.2	18.3	51.5	36	70
B. Short-term Credit:								
Small farms	11.6	5.6	17.2	5.8	2.8	8.6	33	-
Other farms	14.2	4.0	18.2	7.1	2.0	9.1	22	-
Non-farm investments	1.6	0.2	1.8	0.8	0.1	0.9	22	-
Subtotal	27.4	9.8	37.2	13.7	4.9	18.6	27	26
II. Project Unit	2.9	1.6	4.5	1.4	0.8	2.2	35	3
III. Training	1.2	0.8	2.0	0.6	0.4	1.0	34	1
IV. Project Cost (Baseline)	98.0	48.8	146.8	48.9	24.4	73.3	33	100
V. Price Contingencies	0.8	0.4	1.2	0.4	0.2	0.6	33	-
VI. Total Project Cost	98.8	49.2	148.0	49.3	24.6	73.9	33	-
Front-end fee on Bank loan (0.25%)	-	0.4	0.4	-	0.2	0.2	100	-
Total Financing Required	98.8	49.6	148.4	49.3	24.8	74.1	34	-

4.07 The financing plan provides for a Bank loan of US$45.0 million to the Government of Honduras including the capitalized front-end fee of about US$113,000. The Bank loan would finance all the estimated foreign exchange costs and about US$20.2 million of the local costs, adding up to about 61% of total project costs. The financing of local costs is justified on country economic grounds. Sub-borrowers would contribute about US$8.8 million (12%) of total project cost and banks would finance about US$7.7 million (10%) and BCH about US$12.6 million (17%) of total project costs. Project financing is shown below:

Project Financing

Project Components	Project Beneficiaries		Financial Intermediaries		BCH		Bank		Total Investment	
	US$ m	%	US$ m	%	US$ m	%	US$ m	%	US$ m	%
I. Credit Program										
A. Long-term Investments										
Small farms	1.8	10	2.5	13.5	0.8	4.5	13.3	72	18.4	25
Other farms	6.7	21	4.9	16.0	1.2	4.0	18.5	59	31.3	43
Non-farm investments	0.3	20	0.3	16.0	0.1	4.0	1.1	60	1.8	3
B. Short-term Credit:										
Small farms	-	-	-	-	4.3	50	4.3	50	8.6	12
Other farms	-	-	-	-	4.5	50	4.6	50	9.1	12
Non-farm investments	-	-	-	-	0.5	50	0.4	50	0.9	1
II. Project Unit	-	-	-	-	0.6	30	1.6	70	2.2	3
III. Training	-	-	-	-	0.3	30	0.7	70	1.0	1
IV. Project Cost (Baseline)	8.8	12	7.7	10	12.3	17	44.5	61	73.3	100
V. Price Contingencies	-	-	-	-	0.3	50	0.3	50	0.6	-
VI. Total Project Cost	8.8	12	7.7	10	12.6	17	44.8	61	73.9	-
Front-end fee on Bank loan	-	-	-	-	-	-	0.2	100	0.2	-
Total Financing Required	8.8	-	7.7	-	12.6	-	45.0	-	74.1	-

D. Procurement

4.08 Both the investment and the seasonal inputs to be purchased through the credit component would be for a widely dispersed number of farmers to cover a variety of activities and therefore would not be suitable for procurement through bulk purchasing or international competitive bidding. Foreign firms are represented in Honduras, and all procurement undertaken by sub-borrowers would be done through normal commercial channels, which are adequate. Whenever practicable, but for all purchases of US$50,000 or more, the FIs would require that sub-borrowers obtain quotations from at least three suppliers and confirmation of the order would require the prior approval of the financial intermediary. The PU would assist the farming community by publishing a six-month price list of key farm inputs and investments that would be distributed through the FIs.

4.09 Goods: Vehicles and equipment for the PU totalling about US$270,000 equivalent would be grouped to the extent practicable to increase competition in bidding; packages of US$100,000 equivalent or more would be awarded on the basis of ICB in accordance with the Bank's Procurement Guidelines. Items that cannot be grouped to form packages of more than US$100,000 equivalent would be awarded on the basis of local competitive bidding in accordance with current procedures within BCH that are acceptable to the Bank.

4.10 Services: Consultants, most of whom would be internationally recruited, are estimated to cost US$0.5 million (at a cost of approximately US$10,000 per man-month including travel and subsistence expenses). All terms-of-reference and draft contracts for consultants would be subject to prior review by the Bank.

4.11 Contract Review: All bidding packages and contracts for goods estimated to cost over US$100,000 would be subject to Bank review prior to their awarding. This would mean Bank review of a total of two contracts for goods. Assurances were obtained at negotiations that procurement procedures to be followed would be as outlined in this and preceding paragraphs.

E. Disbursement

4.12 Disbursements for the credit program would be made against Statements of Expenditures (SOE) as has been the case in the past. The documentation supporting the SOE would be kept by the PU and made available to the Bank during project supervision. Disbursements requested for all other components would be supported by standard documentation that has been satisfactory in the past.

4.13 Disbursements for subloans would be for 69% of the amounts previously disbursed by FIs. Disbursements for training, vehicles and equipment, and consultants would be made at 100% of foreign expenditures and 58% of local expenditures. Disbursements for materials and services would be made at 58% of local expenditures. Assurances that disbursements procedures would be followed in accordance with this and the preceding paragraph were obtained at negotiations.

4.14 Commitments are estimated to begin in July 1983 and cover a three-year period; disbursements would cover a four-year period. Experience under the last two projects indicates that the disbursement of credit components was better than the average disbursement profile for agricultural credit projects in Latin America; this has been taken into account when estimating the disbursement schedule (Table 8).

V. PROJECT IMPLEMENTATION

A. Organization and Management

Executive Committee

5.01 Under the ongoing project the Executive Committee, to which the PU Director reports, has proved to have too many members. Under the proposed project the Executive Committee, formed by December 31, 1983, would be composed of senior representatives of BCH (Chairman), BANADESA, MRN, and the Honduran Association of Banking Institutions. The committee would monitor the PU's budget and the lending program and approve the annual evaluation report as well as the auditor's report (para 5.38). Assurances on the Executive Committee's membership and tasks were obtained at negotiations.

Project Unit

5.02 The Project Unit (para 1.01) responsible for the ongoing Second Agricultural Credit Project that has performed well in the past would be responsible for project implementation (see organization chart). Present staff at Headquarters includes the PU Director, an economist in charge of monitoring and evaluation and two financial analysts in charge of all financial relations with financial intermediaries. There are five regional offices -- Tegucigalpa, San Pedro Sula, Choluteca, La Ceiba and Santa Rosa de Copan -- that are staffed by agriculturalists. In addition, the San Pedro Sula office has one staff member who specializes in cooperative financing, and the La Ceiba office has a veterinarian. Technical staff in the PU now total 34 and only three new staff positions would be required, namely, a Deputy Director needed because of the increase both in staff numbers and in credit demand; an Extension Specialist (see para 5.25) and a Training Coordinator (para 5.27). Draft terms of reference for the Extension Specialist and Training Coordinator are in Annex 1. It would be a condition of effectiveness that the three new posts had been filled.

5.03 The PU would strengthen its activities in the Department of Olancho, which has become more accessible due to the upgrading of a major road from Talanga to Catacamas (financed under the Bank's Seventh Highway Project, Loans 1341-HO and 1342-HO). Initially, a project officer from the PU would establish a small office in Juticalpa, capital of Olancho, that would depend administratively on the Tegucigalpa regional office. If and when BCH establishes a branch office in Juticalpa, the PU's office would become a full-fledged regional office.

5.04 The PU has an information processing system that helps management monitor project activities. This has been maintained manually and has been satisfactory but limited in scope. Bank supervision missions of the Second

Agricultural Credit Project have suggested the development of a more complete computerized managerial information system for the PU to give the PU Director easier and more timely access to information to allow for better planning, given the recent increase in credit demand and in the PU's size. The other objective would be to include accounting and a portfolio management system. A projected cash flow is shown in Table 9. Funds have been included under the proposed project for consultants to help design and maintain computer systems, the training of PU staff in computer techniques, and the purchase of computer soft and hardware. In addition consultants may be needed to assist the PU in drafting legislation to legalize the use of chattel mortgages by banks and to assist in the institutional improvements of BANADESA referred to in paragraph 5.10. Under terms-of-reference, previously cleared by the Bank, short-term consultants would be engaged by the PU as the need arises during project implementation.

5.05 Responsibility for loan processing would be further decentralized; PU staff would gradually reduce the close supervision exercised in the past on the preparation of the farm development plans by FIs agricultural loan officers, who have developed an adequate capability that would be further enhanced with training. The latter would now prepare the farm development plans by themselves and obtain their own bank's clearance on the sub-borrower's credit rating prior to submitting the farm development plan to the PU for approval. The disbursement of subloans would now be left to the FI's discretion and the FI would also be responsible for supervising the use of the funds by the sub-borrower. PU staff would undertake field inspections to ensure that the FIs' control was effective.

Financial Intermediaries (FIs)

5.06 As under past projects, FIs interested in participating in the project would have to have staff capable of appraising agricultural investment loans and have acceptable accounting, audited records and an adequate network of branch offices. Each FI would sign a project administration contract with BCH that would stipulate the rediscounting arrangements. It would be a condition of effectiveness that at least four project administration contracts between BCH and FIs, one of which would be BANADESA's, had been signed.

National Bank of Agricultural Development

5.07 The National Bank of Agricultural Development (BANADESA) is the main on-lending bank for small-scale farmers. Of the 380 subloans made under the Second Agricultural Credit Project for small-scale farmers by the end of December 1982, 199 were made by BANADESA. BANADESA is more attractive to small-scale farmers because, being a State-run development bank, it has lower loan collateral requirements. Unfortunately, it has also acquired a reputation for being more lenient with late payers than most commercial banks; this has been the major cause of the poor financial performance of the institution (paras 3.12 and 3.13). However, measures, part of which have already been initiated, would be taken to improve BANADESA's performance as an FI operating under the Bank-financed agricultural credit projects. In addition, the Bank would, during the implementation of the proposed project, begin a dialogue with BANADESA's management to address its overall institutional and portfolio problems.

5.08 BANADESA has begun to send to the Bank reports on subloan recuperation as requested at appraisal. The first report shows that as of October 30, 1982, 39% of the principal and interest payments due on the Bank-financed portfolio were still outstanding. The second report shows that as of December 31, 1982, some improvement had been made but no account was given of the subloans that had been rescheduled. Both reports show that on the Bank-financed portfolio the main subloan delinquencies are from subloans made to small-scale farmers' groups belonging to the Agrarian Reform (para 2.12). In order to ensure that BANADESA would improve loan recuperation of the Bank-financed subloans, it would prepare a plan of action, to be approved by the Bank before being implemented. The plan would clearly specify loan recuperation targets and a timetable for reaching the targets. Loan recuperation would be measured as a ratio between the payments of principal and interest actually made for a given period and the payments of principal and interest due during the same period. Rescheduled loans that fell due in the reported period would be considered delinquent for that period (an exception would be made for the first audited report). BANADESA would continue to furnish quarterly reports on loan arrears and in addition BANADESA's Bank-financed accounts would be audited every six months by BCH within 60 days of the close of the semester. If BANADESA were not able to fulfill the agreed plan of action, BCH would stop rediscounting subloans and the Bank would have the option of suspending disbursements on the whole loan until the targets had been met. It would be a condition of loan effectiveness that BANADESA had furnished to the Bank a plan of action, satisfactory to the Bank, for the improvement of the recuperation rate of Bank-financed subloans.

5.09 Since October 1982, BANADESA has begun to take positive steps to improve its operations related to the Bank-financed agricultural credit projects. With the assistance of two experienced staff members from BCH's, PU who were seconded to BANADESA, a small coordination unit (CU) is in the process of being created. The CU is to be managed by an experienced BANADESA employee who would have qualifications, experience and terms of employment satisfactory to the Bank and would report directly to BANADESA's Banking Manager. The CU, which is to be located at BANADESA's headquarters, would work at the branch level with the loan officers responsible for Bank-financed subloans. Under the project, the individual responsibility of loan officers would be increased. Each loan officer would be given a specific portfolio of subloans for which he would be responsible for subloan processing, disbursement, supervision of the use of the funds and most importantly subloan collection. It would be a condition of loan effectiveness that the CU had been established, was satisfactorily managed, and that the job description of loan officers had been redefined as established above.

5.10 To begin to address BANADESA's overall institutional and portfolio problems, BANADESA's project administration contract would, in addition to the requirements established in paragraphs 5.06, 5.08 and 5.09, also require that BANADESA undertake, by mid-1984, a major review of its organizational and financial position with particular emphasis on financial programming, overall lending procedures including the use of guarantees and the granting of credit for non-agricultural purposes, portfolio management, staffing and training. For this purpose, the results of previous studies 2/ would be taken into account. In addition, BANADESA would also prepare by mid-1984 a plan of action for a progressive improvement in subloan recuperation of its

---

2/ Such as "Agricultural Credit: Analysis and Recommendations" by Coopers and Lybrand.

overall portfolio. BANADESA would discuss both the findings of the review and the plan of action with the Bank and thereafter steps would have to be taken by BANADESA to implement the agreed recommendations. Assurances were obtained at negotiations on the undertaking by BANADESA of both the review and the plan of action.

B. Lending Procedures

Flow of Funds

5.11 The Government would pass on to BCH, that would bear the foreign exchange risk, the full amount of the loan under the same lending terms as obtained from the Bank in accordance with a subsidiary loan agreement to be signed between the Government and BCH . Rediscounted loans from BCH to FIs would be governed by the conditions of the project administration contract to be signed between BCH and each FI (paragraphs 5.15 through 5.18). Finally, FIs would lend to sub-borrowers under the conditions detailed in paragraphs 5.19 through 5.24. It would be a condition of effectiveness that the Government and BCH had signed the subsidiary contract mentioned above.

Lending Procedures between the Bank and the Government

5.12 The Government of Honduras, would cause the implementing agency, BCH, to agree to: (a) maintain the existing revolving funds of L 10.0 million for credit operations and L 2.5 million for PU expenditures created to cover the time lag incurred with Bank disbursements; (b) provide adequate counterpart funds; and (c) agree not to change or waive any of the lending procedures and conditions detailed below without prior Bank approval. The Bank and BCH would, at the request of either and in joint agreement, review the lending terms and conditions during the execution of the project. Assurances were obtained at negotiations to ensure the compliance of the agreements mentioned above and the need to review lending terms and conditions from time to time.

5.13 The approval of investment plans by the Bank would be necessary for all investment subloans of US$200,000 equivalent or above. Similarly, without prior approval by the Bank, an investor would not be entitled to borrow long-term funds in excess of US$200,000 equivalent including the total of the value of previous subloans, or fractions thereof in the case of partnerships, made under any previous Bank Group loans or credits. Assurances to this effect were obtained at negotiations.

5.14 Lending procedures and conditions covering, inter alia, the following subjects detailed below, would now be established in a credit manual to be drafted by the PU, for approval by the Bank, and to be distributed to FIs:

(a) the preparation of farm development plans, the methodology to be used for subloan appraisal, including the application of a minimum financial rate-of-return criterion;

(b) definitions of the three types of beneficiary (small-scale, large-scale and other farmers), sub-borrower eligibility and previous credit performance, subloan eligibility criteria, sub-borrower and FIs contributions, interest and rediscount rates and lending terms and conditions;

(c) subloan disbursements, investment control, loan delinquencies and penalties, and supervision by the PU;

(d) guidelines for providing technical assistance; and

(e) accounting and reporting requirements of FIs.

It would be a condition of effectiveness that a credit manual had been produced and was approved by the Bank.

Lending Procedures between BCH and FIs

5.15 The analysis for subloan appraisal would be simplified vis-a-vis prior projects. For subloans of US$35,000 equivalent or less, the PU would develop representative farm models for various types of investment sub-projects that would be used as a guide to help expedite the preparation of farm development plans and of financial rate-of-return analysis and the processing and approval of subloans by the PU staff. Subloans for more than US$35,000 would require the detailed appraisal that is used presently and consists of the following documents: a credit request, an investment proposal consisting of a description of the project, a detailed investment plan showing all the sources of financing, a specific herd development projection if relevant, a cash flow projection, and a financial rate-of-return analysis. In the future, because of heavy past loan deliquency on subloans to groups of farmers, an assessment of the group's managerial capacity would be undertaken by the FI's staff who would, in such cases, be guided by PU staff. The analysis would review the individuals responsible for managerial decisions, the bookkeeping practices and the projections for the use of each year's revenue. Assurances that the first 10 subloans to groups would be submitted to the Bank for review were obtained at negotiations.

5.16 Rediscounting procedures and spreads between BCH and FIs would be the same as those used under the ongoing project (Table 4). Subloans would be denominated in lempiras and would finance 85% of subloans granted to small-scale farmers and 80% to other borrowers. To encourage FIs to complete subloan approval expeditiously, BCH would charge a commitment fee of 1% per annum of the subloan beginning 60 days after the PU had approved an investment plan and continuing until the date of signature of the corresponding subloan. Interest paid by the FI to BCH on the outstanding principal of the subsidiary loan would be fixed at a rate 1.5 points above the rate the Bank charges on the principal of its loan for interest periods commencing during the semester in which the subloan was approved, rounded to the nearest half point. 3/ Principal and interest on each rediscounted subloan would be repayable to BCH as the repayments of the principal and interest of the corresponding subloan fell due. FIs would assume the credit risk, but the Government would finalize details on the establishment of a mechanism to enable BCH to restore the liquidity of an FI that had been adversely affected by the replacement of land, held as collateral, by Agrarian Reform bonds issued in connection with the expropriation of such land under the Agrarian Reform Law. Assurances were obtained at negotiations that BCH would formalize such a mechanism by March 31, 1984.

5.17 A project administration contract, spelling out the provisions of the previous paragraphs would be signed by BCH and an FI before disbursements would be made for subloans by that FI. BCH would be entitled to terminate

---

3/ E.g., if the Bank's rate were 10.97%, the ongoing rate to be charged by the BCH to FI would be 12.5%.

any project administration contract if the FI: (a) failed to make due and punctual payment to BCH of any amount due; or (b) failed to undertake in a manner satisfactory to the Bank and BCH, any other obligation specified in the project administration contract. It would be a condition of disbursement of Bank funds for rediscounts of a particular FI that BCH had signed a project administration contract with that FI.

5.18 Funds repaid to BCH by FIs would be used to service the Bank loan and for additional lending under the PU for similar purposes. Assurances to this effect were obtained at negotiations.

Lending Procedures between FIs and Sub-borrowers

5.19 Subloans would be made to any person or group with a sound investment plan for the development of farm or non-farm rural activities outside the urban limits of Tegucigalpa and San Pedro Sula, subject to the terms and conditions specified in the project administration contract. A small-scale farmer would be defined as one who derives at least 75% of the family income from farming activities and has net assets (excluding assets financed under the project) not exceeding the equivalent of US$40,000 and/or is a beneficiary of the National Agrarian Reform Program, as defined in Chapter I, Title IV of the Agrarian Reform Law. The aggregate ceiling for investment subloans under the terms applicable to small-scale farmers would be US$35,000; for groups of small-scale farmers, the maximum would be the equivalent of US$35,000 multiplied by the number of members of the group. A large-scale farmer would be defined as one who has net assets exceeding the equivalent of US$400,000. The ceilings for lending to beneficiaries other than small-scale farmers would be those expressed in paragraph 5.13.

5.20 All subloans would be denominated in lempiras and would not finance more than 90%, 70% and 80% of the value of an approved investment plan in the case of small-scale farmers, large-scale farmers and other beneficiaries, respectively. Investment plans could include sub-borrower's contribution in labor or in kind. Short-term subloans would be made only for complementary working capital needs associated with the long-term investments to be financed. There would be 100% rediscount by BCH for short-term subloans made to all farmers in keeping with existing rediscounting procedures used by BCH.

5.21 Interest on the outstanding balance of a subloan would be paid by sub-borrowers at a rate of 5.5 points above the rate the Bank charges on the principal of its loan for interest periods commencing during the semester in which the subloan was approved, rounded to the nearest half point, inclusive of any applicable commissions, taxes, charges or fees. At present this would mean an interest rate of 16.5% that would be positive, as the inflation rate in Honduras for 1983 is projected to be 9% and in later years to equal that of the international inflation (para 4.06). Since the market is not sophisticated enough for variable interest rates at this time, the rate for an individual subloan would be fixed for the entire period of amortization.

5.22 Repayment terms would reflect the capacity and timing of the investment to generate sufficient net revenues in the cash flow projections of the investment plan. Investment subloans would be made for a period of at least 18 months and for not more than 12 years (including a maximum of five years grace period). Short-term credit subloans would not exceed 18 months. Subloans could be prematurely repaid without penalty.

5.23 Fees for private consultants used for technical assistance would be allowed to be included as an investment item up to the value of 5% of the total value of the investment plan unless otherwise authorized by the PU Director; in addition, the cost of land titling could also be included up to the same ceiling.

5.24 FIs would be permitted to charge a penalty fee on arrears of interest and principal equal to the highest interest rate allowed by BCH within the banking system; in addition a 2% interest fee on the principal outstanding would be charged for loan collection expenses. Assurances were obtained at negotiations on the terms and conditions of lending to sub-borrowers as described in paragraphs 5.19 through 5.24.

C. Technical Assistance and Training

Technical Assistance

5.25 The project would promote and coordinate technical assistance for sub-borrowers, using the institutions that already exist in this field (paras 2.12 and 2.14). The PU would not directly provide technical assistance, but would ensure that sub-borrowers had access to technical assistance through the use of MRN, INA or private consultants. To carry out this work, a small team of technical assistance officers would be formed within the PU, consisting of the Extension Specialist at headquarters and officers in the regional offices. No extra staff posts for extension work other than that of the specialist are necessary as there already exists a three-person extension unit that works out of the San Pedro Sula office; however, staff may have to be reallocated within the country and cover more than one regional office.

5.26 The Extension Specialist and officers would not undertake supervision of lending activities and would strictly concentrate on technical assistance. The Extension Specialist would report directly to the PU Director and the technical assistance officers would report to the Specialist but their administrative chief would be the Regional Chief where they were based. The technical assistance officers would have access to a petty cash fund to help defray the recurrent costs of extension agencies. Technical assistance officers would also be able to provide advice on suitable agriculturalists that could be used as private consultants to help farmers. Some of the second-tier cooperatives of small-scale farmers and the regional cooperatives are interested in providing technical assistance to their members and technical assistance officers would give top priority to assisting these organizations in forming their own staff for such work.

Training

5.27 The post of a Training Coordinator would be created within the PU at headquarters, and he would report to the PU Director. The Training Coordinator would identify and select relevant training institutions in Honduras and abroad and nominate appropriate candidates for the courses in consultation with management of the institutions to which they belonged. Training would be provided to PU staff, FI agricultural loan officers, BANADESA's staff, and small-scale farmers, mostly beneficiaries from agrarian reform schemes. It would be a condition of effectiveness that a training program for the first year had been designed by the PU and approved by the Bank.

5.28 PU staff in the past has built up expertise in agricultural technology and project analysis and it would now be gradually trained in banking and finance. Overseas courses on these two subjects would be provided to the five regional chiefs and their deputies. Credit analysis courses would be given to all staff while computer courses would be provided to the financial analysts, economists, and Deputy Chief. Every year a staff member from the Office of the Superintendency of Banks, which audits the FIs' accounts as well as the project's, would be sent overseas for an auditing course to upgrade skills. PU staff members that joined in 1982 or later would be provided with project appraisal courses in Honduras. The persons chosen for the new staff positions of Training Coordinator and Extension Specialist would be expected to go overseas on relevant study tours once they were familiar with the PU and their newly created roles. Finally, given the recently increased number of staff, both the PU Director and his deputy would go on management courses abroad.

5.29 Training for FIs' agricultural loan officers would consist of courses on project appraisal and credit analysis. BANADESA's agricultural loan officers would be given the same courses separately, considering their large number, as well as a course on loan recuperation. BANADESA's branch managers would be given general banking courses in Honduras under the aegis of the project. The main subjects to be covered would be: staff management, portfolio analysis, credit and project analysis, and collection procedures. Courses would be short and frequent and would be tailor-made for the institution.

5.30 A major training program to strengthen the administrative, managerial and accounting capacity of both first- and second-tier small-scale farmer cooperatives to promote the effective use of credit would also be undertaken. About 190 first-tier groups would have access to the courses as well as an estimated four second-tier cooperatives. There would be three types of courses offered by the training institutions: basic, intermediate, and advanced. The basic-level course, to be offered to farmer groups in their place of work or residence, would motivate participants to study their own group as an enterprise, and would attempt to elicit a commitment from members to improve their situation through the implementation of a modest action plan. The course would also cover simple bookkeeping and credit utilization. Courses would be given on an iterative basis three times in the first year, two in the second; and once in the third year of the group's participation in the credit program. Intermediate level courses would be aimed only at beneficiaries with management responsibility within the group such as treasurers and finance secretaries, with participants being selected in agreement with the cooperative during the basic course. Courses would take place at INA's existing regional training centers and would cover subjects such as administration, accounting and management development. Advanced level training in organizational management, financial analysis and accounting would be given to managers of second-tier and regional cooperatives to assist them in improving the technical assistance that the tier organization would be capable of giving the cooperatives.

D. Management Information System, Evaluation and Reporting

Management Information System

5.31 To date, the PU has been sufficiently small to allow good management without a structured information system; however, with the increase of staff in 1982, the three new staff posts that would be created under the proposed project, and the increased need for planning by management, a more formalized information system would be needed. Short progress reports would be written every quarter by Regional Chiefs, the Technical Assistance Specialist, the Senior Financial Analyst, and the Training Coordinator for Project Management. These reports would fall due one month before the project's overall quarterly progress report and would be incorporated into the quarterly report that would continue to be prepared by the project economist in charge of monitoring and evaluation.

Evaluation

5.32 The PU's monitoring and evaluation unit would evaluate on an annual basis the physical and technical progress of a sample of about 5% of the sub-borrowers. These sub-borrowers, for whom an ex-ante profile would have been established before they invested, would continue to be evaluated both technically and socio-economically after the period of subloan disbursement until they had completed the payment of their subloan. The sub-borrowers would be chosen for evaluation, stratified by category of sub-borrowers, region and farm enterprise by the monitoring and evaluation unit at the stage of subloan approval. A record of each evaluation undertaken would be kept and a summary would be sent to the Bank in the PU's annual report (5.34).

Reporting

5.33 The quarterly progress report under past projects, has been consistently sent to the Bank in a timely fashion. The report would contain information on the activities undertaken that quarter and would also show the planned work program for the PU and training components including the hiring of consultants.

5.34 In addition to BANADESA's quarterly reports on loan arrears (para 5.08), the following reports would be made available for project managemment and the Bank:

(a) quarterly progress reports, to be received by the Bank two months after the close of the quarter;

(b) annual evaluation report that summarizes both the progress of the project and of the evaluated investments (para 5.32), to be received by February 28 each year;

(c) annual audited financial statements on the project's accounts, to be received by April 30 each year (para 5.38); and

(d) draft project completion report, to be received no later than four months after the loan's closing date.

5.35 Assurances were obtained at negotiations that reporting requirements would be complied with as described in the paragraphs above.

E. Accounts and Auditing

5.36 In addition to BANADESA's six-monthly audited reports on loan arrears (para 5.08), the PU would continue to establish and maintain separate project accounts for the proposed project in accordance with sound and consistent accounting principles. Each FI would establish and maintain separate project accounts and keep any detailed records deemed necessary by BCH and especially the Office of the Superintendency of Banks to reflect at all times the financial transactions in respect of the project.

5.37 The project accounts and related supplementary financial information of the PU would be audited annually in accordance with sound auditing standards by auditors of good standing appointed by the BCH and acceptable to the Bank. The scope of each annual audit examination would be sufficient to enable the auditors to express an opinion as to whether or not the project's annual balance sheet, income statement, statement of sources and applications of funds and supplementary financial information fairly present the financial position of the project. The auditors would also be required to provide a specific opinion on the accuracy of statements of expenditure which had been submitted to the Bank.

5.38 With regard to the FIs financial reporting, the basic financial statements, together with an independent auditor's opinion on compliance by each FI with the financial and accounting clauses of the Loan and Project Agreement and its project administration contract with BCH, would be forwarded to the Bank through the PU. A statement of the auditing requirements would be incorporated in the project administration contracts to be signed between the FIs and BCH. The underlying basic annual financial statements would be prepared using the accrual basis of accounting and would consist of a balance sheet, income statement, statement of sources, and applications of funds and reporting on credit performance, with comparative figures for the previous fiscal year and such explanatory notes and supporting schedules as may be appropriate in the particular circumstances and with such other additional information as the Bank may request from time to time.

5.39 In addition, the Office of the Superintendency of Banks would continue to carry out regular examinations and inspections of the books, accounts and vouchers of both BANADESA and other FIs as required by Honduran law. The Bank would require the Office of the Superintendency of Banks to express an opinion on the adequacy of the accounting system and procedures of BCH's Trust Department, which maintains the project accounting for the PU at the time of the annual audit. The PU would be informed by the Office of the Superintendency of Banks on all matters of material interest affecting the operations of the proposed project arising out of regular inspections in the banking system without prejudice to the independent audit of the project to be carried out by external auditors. Assurances were obtained at negotiations that auditing would be undertaken as described in paragraphs 5.36 through 5.39.

VI. PROJECT BENEFITS, ANALYSIS AND RISK

A. Project Benefits

6.01 The provision of long-term financing for investment in rural areas is expected to increase and diversify agricultural production and help Honduras reduce its dependence on coffee and banana exports. In addition, increased production of food crops would encourage better nutrition as well as improve efficiency of the presently underutilized food processing industry. About 36,000 people (some 6,000 families) are expected to be direct beneficiaries and increase their incomes; 90% of them are expected to be small-scale farmers (para 4.02), most of whom would be farming in groups. Assuming investments made under this project follows the pattern of investments financed under the last project about 14,000 new jobs are expected to be created. Although it is not possible to quantify, the Government of Honduras would receive incremental fiscal revenue mainly from exports of beef, tobacco and bananas and from increased sales tax revenues on the domestic marketing of farm produce.

6.02 The project's training component is expected to have considerable impact on upgrading the FIs' staff skills especially BANADESA's staff. This would also improve BANADESA's overall performance. The training to be provided to small-scale farmers would improve credit management by the small-scale farmers' groups and by second-tier cooperatives.

B. Economic and Financial Analysis

6.03 As the actual mix of enterprises to be financed is unknown, because farmers will modify their choice of investments over the disbursement period in keeping with relative price and market changes of the commodities to be produced, no aggregate economic or financial rate-of-return has been computed. However, four typical investment models have been developed for illustrative purposes to give an idea of the average returns that could be expected. The models (Tables 10 through 13) represent investments that have been made under the ongoing Second Agricultural Credit Project. They include: a milk collection and refrigeration center for 12,000 liters/day located on the north coast, the typical sub-borrower being a milk plant or farmers' association; a 10-ha tobacco and maize farm located in the Ulua valley in northwestern Honduras and run by a small-scale farmers group of agrarian reform beneficiaries; a 4.2-ha melon and maize farm located in the south run by an individual small-scale farmer; and a 200-ha dual-purpose cattle farm located in central Honduras and owned by a large-scale farmer. The financial and economic rates-of-return for each investment model are adequate, as is shown below:

Investment Model	Financial Rate of Return	Economic Rate of Return
Milk collection and refrigeration center	30	33
Tobacco and maize farm	31	45
Melon and maize farm	37	49
Dual-purpose cattle farm	19	26

The main reasons for the difference between financial and economic rates-of-return are the shadow wages and export taxes that are taken into account in the economic analysis.

6.04 The financial rates-of-return were derived using market prices for both inputs (including labor) and products (Table 14).

6.05 The main assumptions on which the economic rates-of-return were based are indicated in the paragraphs below:

(a) Pricing of outputs. All outputs with the exception of milk were considered tradable commodities and efficiency prices were derived from their CIF or FOB value adjusted for taxes, transportation and, when applicable, processing and intermediary costs. The efficiency price for milk was derived from its financial price modified by a consumption conversion factor (for which the standard conversion factor of 0.98 was used as a proxy). Prices of outputs for future years have been estimated according to trends projected by the Bank's Export Projections and Commodities Department.

(b) Pricing of inputs. All tradable inputs were valued at their CIF import price adjusted for taxes and other internal costs. Specific conversion factors were derived for important non-tradable inputs while the standard conversion factor was used for non-important inputs to convert them into border prices.

(c) Shadow wage rate. The efficiency wage rate was derived on the assumption that, without the project, only an average of about 83% of the available farm labor is engaged in productive activities. The market wage was assumed to represent the marginal productivity of labor and the efficiency wage rate (EWR) was estimated as:

$$EWR = R \times P = 0.98 \times 0.83 = 0.81$$

where R is the consumption conversion factor used to convert the opportunity cost of labor into border prices and P is the probability of hiring a previously employed worker.

6.06 Sensitivity analysis on the economic rates-of-return has been undertaken using switching values 4/ (Table 15). The analysis shows the investment models could sustain drops in benefits of about 25% or increases in operating costs that range from 40% to over 60%.

C. Project Risk

6.07 This repeater project would be run by a well established and professionally run PU in BCH that has had experience with four Bank Group-assisted projects since 1970. The private commercial banks in Honduras that would participate in the project have also proven to be competent and careful in their lending operations.

4/ The percentage reduction in benefits or increase in costs that would make the investment models' rate-of-return equal to the opportunity cost of capital. For the sensitivity analysis, the opportunity cost of capital used was 11%.

6.08 BANADESA, on the other hand, despite substantial assistance from international lending agencies usually in the form of studies and financial aid is still inefficient and in serious financial difficulties. This project attempts to promote change in BANADESA from within the organization and under guidance from the Bank and BCH, by helping it create a small, efficiently run unit to oversee the projects' portfolio within BANADESA. Once the system proves its efficiency, it could be adopted by the whole institution.

6.09 However, if BANADESA's portfolio under the project, measured in terms of loan delinquency, deteriorates, BANADESA would not be allowed to participate under the project. BANADESA's exclusion could affect the level of lending to small-scale farmers as private commercial banks have been reluctant, in the past, to lend to this category of farmer mainly because of their lack of adequate collateral. However, three financial instruments, that are in different stages of preparation, are expected to encourage private banks to overcome the problem of small-scale farmers' lack of adequate collateral. First, a study under the project would help produce an effective mechanism that would legally protect banks that use chattel mortgages, such as cattle, by making them legally binding and enforceable. Second, INA's land titling program partially financed by USAID, would help banks feel more secure in their lending to small-scale farmers knowing the land tenure situation has been resolved. Third, BCH is going to create a small, limited guarantee fund for private banks that would partially guarantee subloans made to small-scale farmers who do not possess enough collateralfor private banks to lend to them otherwise. The implementation of these financial instruments would assist in overcoming the risk of not lending sufficient funds to small-scale farmers should BANADESA not improve its performance and have to be excluded as a financial intermediary during implementation.

VII. SUMMARY OF AGREEMENTS REACHED AND RECOMMENDATION

7.01 During negotiations, assurances were obtained from the Government that:

(a) procurement procedures would be followed as outlined in paragraphs 4.08 to 4.11;

(b) disbursement procedures would be followed as outlined in paragraph 4.13;

(c) the project Executive Committee would be formed by December 31, 1983 and would have the membership and tasks as described in paragraph 5.01;

(d) BANADESA would undertake by June 30, 1984 a major review of its organization and would prepare a plan of action to improve subloan collection on its overall portfolio as described in paragraph 5.10;

(e) BCH would maintain the existing revolving funds, provide counterpart funds, agree not to change or waive any of the lending terms and conditions without Bank approval and review with the Bank lending terms and conditions from time to time as described in paragraph 5.12;

(f) reviews of subloans by the Bank would be necessary under conditions established in paragraphs 5.13 and 5.15;

(g) BCH would use a mechanism to be established by Government to restore the liquidity of an FI in the event of land expropriation as outlined in paragraph 5.16;

(h) the use of recuperated funds would be as specified in paragraph 5.18;

(i) terms and conditions of subloans would be as indicated in paragraphs 5.19 to 5.24;

(j) reports as established in paragraph 5.34 would be made available to the Bank; and

(k) project accounts would be maintained and audited as set out in paragraphs 5.36 to 5.39.

7.02 The conditions of effectiveness would be that:

(a) the new posts of Deputy Director, Extension Specialist and Training Coordinator had been filled (para 5.02);

(b) four administration contracts between BCH and FIs (including BANADESA's) had been signed (para 5.06);

(c) BANADESA had prepared a plan of action, satisfactory to the Bank, for the improvement of the recuperation rate of subloans rediscounted under Bank-financed projects (para 5.08);

(d) BANADESA had established a coordination unit and redefine the terms of reference of loan officers (para 5.09);

(e) Government had signed a subsidiary contract with BCH that stipulates that the full amount of the loan would be passed on to BCH under the same terms as obtained from the Bank (para 5.11);

(f) a credit manual had been produced and approved by the Bank (para 5.14); and

(g) the first year's training program had been designed and approved by the Bank (para 5.27).

7.03 A condition of disbursement of Bank funds as rediscounts for a particular FI would be that BCH had signed an administration contract with that FI (para 5.17).

7.04 Subject to the above assurances, the proposed project would be suitable for a Bank loan of US$45.0 million at standard terms for Honduras. The Borrower would be the Government of Honduras.

April 25, 1983

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Terms of Reference

A. Training Coordinator

1. The duties of the Training Coordinator would include the following:

(a) Management of the project's training component, which would include planning, organizing, and financing the training needs of BCH staff from the PU and the Office of the Superintendency of Banks, FIs agricultural loan officers, BANADESA's staff, and small-scale farmers;

(b) Selection of participants to be trained in consultation with the participating institutions and farmers' groups;

(c) Maintenance of an up-to-date roster of relevant training courses, including costs, duration, timing, nomination procedures and logistical arrangements;

(d) Preparation of a detailed annual training schedule no later than September 30 eah year for the next calendar year (the first year's program should be drafted no later than June 30, 1983);

(e) Collection of the necessary information on the progress of the training component to be used by the PU Director and included in the project quarterly progress report; and

(f) Preparation of a mid-term evaluation report on the impact of the training component by December 31, 1984; the evaluation would be repeated for the completion report.

2. The Training Coordinator would report to the PU Director.

B. Extension Specialist

3. The duties of the Extension Specialist would include the following:

(a) Management of the project's technical assistance component, including planning and supervising the annual work program of the technical assistance officers in coordination with their administrative supervisors, the Regional Chiefs;

(b) Maintenance of close liaison with the extension staff of both MRN and INA;

(c) provision of assistance to the second-tier and regional cooperatives in building up their own technical assistance staff;

(d) Keeping a roster of proven agricultural experts available in Honduras;

(e) Keeping a price list of farm inputs and investment costs, updating it every six months;

(f) Collection of the necessary information on the technical assistance component to be used by the PU Director and included in the project quarterly progress report; and

(g) Preparation of a mid-term evaluation report on the impact of the technical assistance component by December 31, 1984; the evaluation would be repeated for the completion report.

4. The Extension Specialist would report to the PU Director.

April 25, 1983

THIRD AGRICULTURAL CREDIT PROJECT

Selected Documents and Data

Available in the Project File

A. On the Agricultural Sector

A.1 Report No. 971-HO titled "Agricultural/Rural Sector Survey, Honduras," IBRD/IDB/AID, January 1978.

A.2 Report No. 3606a-HO titled "Honduras, A Review of Selected Key Problems of the Agricultural Sector," IBRD, October 28, 1981.

A.3 Report No. 3963-HO titled "Honduras, An Inquiry into Rural Population, Small Farmers and Agrarian Reform," IBRD, January 14, 1983.

B. On the Financial Sector

B.1 Report No. 3312-HO titled "Current Economic Memorandum on Honduras," IBRD, July 17, 1981.

C. On Previous Projects and Project Preparation

C.1 Honduras, Algunos Documentos de Identificacion para un Tercer Proyecto UP-BCH, Junio 1982.

C.2 Honduras, Tercer Proyecto de Credito Agropecuario, Solicitud de Prestamo al Banco Mundial, UP/BCH y UNDP-RUTA, Agosto 23, 1982.

C.3 Titulacion y Adquisicion de Tierras, UP/BCH, Agosto 1982.

C.4 Modelos de Financiamiento para Pequenos Productores Agropecuarios del Pais, UP/BCH, Setiembre 1982.

C.5 Fondo de Garantia - Propuesta para su Creacion, UP/BCH, Noviembre 1982.

C.6 Normas y Procedimientos - Fondo de Desarrollo del Pequeno Productor Rural.

D. Working Papers Prepared during Appraisal

D.1 Farm Investment Models - Financial and Economic Analysis.

D.2 Training Component.

D.3 BANADESA.

D.4 The Financial System

April 25, 1983

Table 1

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Farm Distribution in Honduras

Size of Farms (ha)	Number of Farms	Area (ha)
Less than 1	33,771	21,542
From 1 to 3	67,353	123,528
From 3 to 5	23,657	93,923
From 5 to 10	28,264	201,274
From 10 to 100	38,823	1,030,589
From 100 to 500	3,028	579,904
From 500 to 2,500	405	369,749
More than 2,500	40	209,350
Total	195,341	2,629,859

Source: Nacional Agricultural Census of 1974.

April 25, 1983

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Number and Value of Subloans Granted by Financial Intermediaries under previous Bank Projects

Financial Intermediary	Cr. 179-HO		Cr. 434-HO		Cr. 628-HO		Cr. 1005/Ln 1833-HO 1/		Total	
	No.	US$'000	No.	US$'000	No.	US$'000	No.	US$'000	No.	US$'000
Atlantida	14	464	13	353	38	1,139	161	6,092	226	8,048
Ahorro Hondureno	25	1,147	44	857	13	449	18	1,210	100	3,663
BANCAHSA	18	608	55	1,367	19	547	20	1,277	112	3,799
Occidente	7	281	35	942	32	1,486	54	3,259	128	5,968
Financiera	6	181	22	494	13	993	-	-	41	1,668
Honduras	4	215	8	317	2	429	17	1,570	31	2,531
BANADESA	-	-	69	2,204	237	5,967	438	19,626	744	27,797
Sogerin	5	405	52	1,518	87	3,089	50	3,499	194	8,511
Comercio	-	-	6	197	38	1,699	42	4,007	86	5,903
Continental	-	-	2	113	51	2,447	35	3,096	88	5,656
America	-	-	-	-	-	-	25	1,785	25	1,785
Mercantil	-	-	-	-	-	-	1	81	1	81
Central Bank	-	-	4	1,398	-	-	-	-	4	1,398
Total	79	3,301	310	9,760	530	18,245	861	45,502 2/	1,780	76,808

1/ Up to December 31, 1982.
2/ Total beneficiaries are 8,880 (includes 116 groups of farmers with 5,245 members).

Source: Project Unit and mission estimates.

April 25, 1983

Table 2

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Number and Value of Subloans Granted by Activity Under previous Bank Projects

	Cr. 179-HO		Cr. 434-HO		Cr. 628-HO		Cr. 1005/Ln. 1833-HO 1/		Total	
	No.	US$'000	No.	US$'000	No.	US$'000	No.	US$'000	No.	US$'000
Livestock	79	3,301	309	8,760	374	10,495	627	32,467	1,389	55,023
Dairy and Breeding	46	1,486	227	4,920	266	6,856	468	21,427	1,007	34,689
Dairy	-	-	8	212	28	764	43	2,396	79	3,372
Breeding and Fattening	27	1,518	38	1,413	22	1,021	37	2,776	124	6,728
Breeding	6	297	2	105	-	-	4	460	12	862
Fattening	-	-	23	598	55	1745	22	1,986	100	4,329
Pigs	-	-	7	114	3	109	23	1,197	33	1,420
Poultry	-	-	-	-	-	-	24	1,264	24	1,264
Municipal Slaughterhouses	-	-	4	1,398	-	-	-	-	4	1,398
Other	-	-	-	-	-	-	6	961	6	961
Crops	-	-	1	1,000	139	6,306	229	12,334	369	19,640
Sugar	-	-	-	-	113	4,153	75	4,665	188	8,818 2/
Rice	-	-	-	-	17	1,607	7	620	24	2,227 3/
Tobacco	-	-	-	-	-	-	113	3,463	113	3,463 4/
Bananas	-	-	1	1,000 5/	-	-	1	40	2	1,040
Other	-	-	-	-	9	546	33	3,546	42	4,092 6/
Heavy Machinery	-	-	-	-	10	853	4	501	14	1,354
Agroindustries	-	-	-	-	7	591	-	-	7	591
Grain Storage	-	-	-	-	-	-	1	200	1	200
Total	79	3,301	310	9,760	530	18,245	861	45,502	1,780	76,808

1/ Up to December 31, 1982
2/ Area financed: 9,287 ha
3/ Area financed: 2,801 ha
4/ Area financed: 1,814 ha
5/ Subloan to Isletas Banana Cooperative: 2,000 ha
6/ Principal crops are plantain, cacao, citrus, cotton and maize (1,868 ha)

Source: Project Unit and mission estimates.

April 25, 1983

Table 3

HONDURAS

THRID AGRICULTURAL CREDIT PROJECT

Summary of General Conditions of Credit and Loans

	Cr 179-HO (US$2.6 million)	Cr 434-HO (US$6.6 million)	Cr 628-HO (US$14.0 million)	Cr 1005/Ln 1833-HO (US$25.0 million)	Proposed Project (US$45.0 million)
I. Interest Rates (%)					
IDA/IBRD to Government	0.75	0.75	0.75	0.75; 8.25	Flexible rate
Government to Central Bank	4.5	2.0	2.0	0.75; 8.25	Flexible rate
Central Bank to:					
Financial intermediaries	5.0	5.0	6.0	12.0	Bank's rate + 1.5
Municipalities	-	9.0	-	-	-
Financial intermediaries to farmers	9.0	9.0	11.0	16.0	Bank's rate + 5.5
2. Period of Repayment (Years)					
IDA/IBRD to Governments:					
Grace period	10	10	10	5, 10	5
Total period	50	50	50	20, 50	20
Government to Central Bank:					
Grace period	10	10	10	5, 10	5
Total period	16	20	18	20, 30	20
Central Bank to financial intermediaries					
Grace period	3, 5	2, 5	2, 5	Maximum 5	Maximum 5
Total period	8, 12	9, 12	6, 12	Maximum 12	Maximum 12
Financial Intermediaries to farmers					
Grace period	3, 5	2, 5	2, 5	Maximum 5	Maximum 5
Total period	8, 12	9, 12	6, 12	Maximum 12	Maximum 12
3. Rediscount Rates (%)					
Central Bank to financial intermediaries:	75	-	70	-	-
small scale	-	90	-	85	85
other (including large scale)	-	75	-	80	80
4. Investments Percentages Financed					
Financial intermediaries to farmers	80	-	80, 90	-	-
small scale	-	90	-	90	90
other	-	80	-	80	80
large scale	-	-	-	-	70

Source: Mission estimates

April 25, 1983

Table 4

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Credit Component

Items	Year 1 (L'000)	Year 2 (L'000)	Year 3 (L'000)	Total Cost (L'000)	Total Cost (US$'000)	Foreign Exchange (%)	Foreign Exchange (L'000)	Foreign Exchange (US$'000)
Capital Investment								
Small farmers	9,994	11,899	14,899	36,792	18,396	36	13,245	6,623
Other farmers	18,527	23,818	20,191	62,536	31,268	33	20,636	10,318
Small rural industries	1,134	1,219	1,305	3,658	1,829	76	2,781	1,390
Subtotal	29,655	36,936	36,395	102,986	51,493	36	36,662	18,331
Short Term Credit								
Small farmers	4,410	5,567	7,195	17,172	8,586	33	5,667	2,834
Other farmers	5,472	5,990	6,778	18,240	9,120	22	4,013	2,006
Small rural industries	511	587	665	1,763	882	10	176	88
Subtotal	10,393	12,144	14,638	37,175	18,588	27	9,856	4,928
Total	40,048	49,080	51,033	140,161	70,081	33	46,518	23,259

Explanatory Footnote: The credit component was estimated on the basis of the experience gained under the ongoing Second Agricultural Credit Project. The appraisal estimate for the number of subloans was based on the estimates of the five Project Unit Regional Chiefs. The estimate for the size of average investments per subborrower was based on 600 subloan files taking account the category of subborrowers, not the type of investment. Yearly allowances were made for inflation, both domestic and international. During negotiations, the category of large-scale farmers was created, cost adjustments were made assuming that 15% of the investments originally earmarked for other farmers would now include the category of large farmers.

Source: Mission estimates.

April 25, 1983

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Project Unit Component

Items	Unit	Unit Cost (L'000)	Year 1 No. of Units	Year 1 Cost (L'000)	Year 2 No. of Units	Year 2 Cost (L'000)	Year 3 No.of Units	Year 3 Cost (L'000)	Total Cost (L'000)	Total Cost (US$'000)	Foreign Exchange (%)	Foreign Exchange (L'000)	Foreign Exchange (US$'000)
Incrementral Project Staff													
Project subdirector	man/years	54	1	54	1	54	1	54	162	81	-	-	-
Training coordinator	man/years	48	1	48	1	48	1	48	144	72	-	-	-
Extension specialist	man/years	48	1	48	1	48	1	48	144	72	-	-	-
Benefits 1/	-	-	-	600	-	600	-	600	1,800	900	-	-	-
Subtotal				750		750		750	2,250	1,125	-	-	-
Consultant services													
Chattel mortgage study	man/months	24	20	480	-	-	-	-	482	241	100	482	241
BANADESA	man/months	18	4	72	4	72	4	72	216	108	100	216	108
Various 2/	man/months	18	6	108	6	108	6	108	324	162	100	324	162
Subtotal				660		180		180	1,022	511	100	1,022	511
Extension Support Fund 3/	-	-	-	128	-	166	-	265	559	280	25	140	70
Vehicles and equipment													
Vehicles	unit	24	3	72	4	96	3	72	240	120	80	192	96
Computer	unit	300	1	300	-	-	-	-	300	150	80	240	120
Subtotal				372	-	96	-	72	540	270	-	432	216
Juticalpa office 4/	-	-	-	42	-	42	-	42	126	63	-	-	-
Total				1,952	-	1,234	-	1,309	4,497	2,249	35	1,594	797

1/ Incremental benefits to provide PU staff with compensation equal to BCH staff.
2/ Short-term consultants to be selected by PU as needed; most likely specialists are for computers, livestock, crops, marketing, cooperative financing and rural industries.
3/ Funds to be used by PU as petty cash fund mostly to pay per diems and fuel to help extension services of other agencies, mostly MRN.
4/ Operating costs of small office to be opened in Juticalpa.

Source: Mission estimates.

April 25, 1983

Table 6

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Training Component

Items	Unit	Unit Cost	Year 1 No. of Units	Year 1 Cost (L'000)	Year 2 No. of Units	Year 2 Cost (L'000)	Year 3 No. of Units	Year 3 Cost (L'000)	Total Cost (L'000)	Total Cost (US$'000)	Foreign Exchange (%)	Foreign Exchange (L'000)	Foreign Exchange (US$'000)
PU Staff and BCH's Banking Superintendency													
Courses: Management	participant	20.0	1	20.0	1	20.0	-	-	40.0	20.0	100	40.0	20.0
Agricultural banking	participant	10.0	5	50.0	5	50.0	-	-	100.0	50.0	100	100.0	50.0
Finance	participant	8.0	-	-	5	40.0	5	40.0	80.0	40.0	100	80.0	40.0
Auditing	participant	20.0	1	20.0	1	20.0	1	20.0	60.0	30.0	100	60.0	30.0
Credit analysis	participant	.1	45	4.5	-	-	-	-	4.5	2.3	20	.9	.5
Project appraisal	participant	1.0	6	6.0	6	6.0	6	6.0	18.0	9.0	20	3.6	1.8
Use of computers	participant	1.0	2	2.0	2	2.0	-	-	4.0	2.0	20	.8	.4
Extension	participant	5.0	2	10.0	2	10.0	2	10.0	30.0	15.0	100	30.0	15.0
Training	participant	10.0	1	10.0	-	-	-	-	10.0	5.0	100	10.0	5.0
Study tours	participant	2.0	6	12.0	6	12.0	6	12.0	36.0	18.0	100	36.0	18.0
Subtotal				134.5		160.0		88.0	382.5	191.3	94	361.3	180.7
Financial Intermediaries' Staff 1/													
Courses: Credit analysis	participant	.1	15	1.5	15	1.5	15	1.5	4.5	2.3	20	.9	.5
Project appraisal	participant	1.0	15	15.0	15	15.0	15	15.0	45.0	22.5	20	9.0	4.5
Subtotal				16.5		16.5		16.5	49.5	24.8	20	9.9	5.0
BANADESA Staff													
Courses: Credit analysis 1/	participant	.1	30	3.0	30	3.0	30	3.0	9.0	4.5	20	1.8	.9
Project appraisal 1/	participant	1.0	30	30.0	30	30.0	30	30.0	90.0	45.0	20	18.0	9.0
Loan collection 1/	participant	.1	30	3.0	30	3.0	30	3.0	9.0	4.5	20	1.8	.9
General banking 2/	participant	2.0	30	60.0	30	60.0	30	60.0	180.0	90.0	20	36.0	18.0
Subtotal				96.0		96.0		96.0	288.0	144.0	20	57.6	28.8
Farmers' Groups													
Courses: Basic 3/	course	.5	303	151.5	337	168.5	326	163.0	483.0	241.5	20	96.6	48.3
Intermediate 4/	course	7.8	21	163.8	24	187.2	23	179.4	530.4	265.2	20	106.1	53.1
Advanced 5/	course	120.0	1	120.0	1	120.0	1	120.0	360.0	180.0	20	72.0	36.0
Subtotal				435.3		475.7		462.4	1,373.4	686.7	20	274.7	137.4
Total				682.3		748.2		662.9	2,093.4	1,046.8	34	703.5	351.9

1/ Courses for agricultural loan officers.
2/ Courses for branch managers.
3/ Courses for first tier cooperatives in bookkeeping and credit management.
4/ Courses for selected members of first tier cooperatives in administration, accounting and management.
5/ Courses for selected managers of second and third tier cooperatives in cooperative management.

Source: Project Unit and mission estimates.

April 25, 1983

Table 7

Table 8

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Disbursement Schedule

Fiscal Year(FY) and Semester	Cumulative Disbursements of the Proposed Loan at the End of the Period		Comparator 1/
	US$ Millions	% of the Loan	% of the Loan
1984			
1	1.6	4	-
2	5.0	11	2
1985			
1	12.1	27	7
2	19.2	43	15
1986			
1	28.5	63	26
2	36.5	81	37
1987			
1	41.0	91	49
2	45.0	100	61
1988			
1			71
2			80
1989			
1			87
2			93
1990			
1			97
2			100

1/ The comparator's profile was constructed using historical data from 13 IBRD agricultural credit operations in the Latin America and Caribbean Region covering the period FY70-80.

April 25, 1983

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Projected Cash Flow
(L millions)

Cash Inflow	Project Years 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Totals
1. Withdrawal from Bank's Loan																					
Long-term credit program	6.9	20.9	26.0	12.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66.2
Short-term credit program	1.7	5.6	7.3	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.6
Technical assistance and training	1.8	1.4	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.6
Subtotal	10.4	27.9	34.7	16.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89.4
2. BCH Counterpart Funds																					
Long-term credit program	0.3	1.5	1.8	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5
Short-term credit program	1.7	5.6	7.3	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.6
Technical assistance and training	0.8	0.6	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0
Subtotal	2.8	7.7	9.7	4.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.1
3. Debt Service from Financial Intermediaries																					
Long-term credit (principal) 1/	-	-	-	1.4	5.8	11.4	14.1	14.2	12.8	8.3	2.7	-	-	-	-	-	-	-	-	-	70.7
Short-term credit (principal)	-	3.4	14.6	29.2	37.2	37.2	34.7	32.2	29.7	27.2	24.7	22.2	19.7	17.2	14.7	12.2	9.7	7.2	4.7	2.2	379.9
Long-term credit (interest) 2/	-	0.9	3.7	7.2	8.7	7.9	6.5	4.8	3.0	1.4	0.3	-	-	-	-	-	-	-	-	-	44.4
Short-term credit (interest) 2/	-	0.4	1.8	3.7	4.7	4.7	4.3	4.0	3.7	3.4	3.1	2.8	2.5	2.2	1.8	1.5	1.2	0.9	0.6	0.3	47.6
Subtotal	-	4.7	20.1	41.5	56.4	61.2	59.6	55.2	49.2	40.3	30.8	25.0	22.2	19.4	16.5	13.7	10.9	8.1	5.3	2.5	542.6
4. Interest on previous year's cumulative surplus 3/	-	(0.1)	(0.1)	(0.1)	0.1	0.9	1.8	3.1	4.4	5.5	6.0	5.8	5.3	4.8	4.3	3.7	3.2	2.6	2.0	1.5	54.7
Total Inflow	13.2	40.2	64.4	62.7	56.5	62.1	61.4	58.3	53.6	45.8	36.8	30.8	27.5	24.2	20.8	17.4	14.1	10.7	7.3	4.0	711.8
Cash Outflow																					
1. Rediscounts to Financial Intermediaries																					
Long-term credit program	7.2	22.4	27.8	13.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70.7
Short-term credit program 4/	3.4	14.6	29.2	37.2	37.2	34.7	32.2	29.7	27.2	24.7	22.2	19.7	17.2	14.7	12.2	9.7	7.2	4.7	2.2	-	379.9
Subtotal	10.6	37.0	57.0	50.5	37.2	34.7	32.2	29.7	27.2	24.7	22.2	19.7	17.2	14.7	12.2	9.7	7.2	4.7	2.2	-	450.6
2. Technical Assistance and Training 5/	2.6	2.0	2.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	25.3
3. Debt Service on Bank's Loans																					
Commitment fee 6/	0.6	0.4	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1
Interest 7/	-	1.1	4.2	8.0	9.9	9.9	9.2	8.6	7.9	7.2	6.6	5.9	5.2	4.6	3.9	3.3	2.6	2.0	1.3	0.7	102.1
Principal	-	-	-	-	-	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	90.0
Subtotal	0.6	1.5	4.3	8.0	9.9	15.9	15.2	14.6	13.9	13.2	12.6	11.9	11.2	10.6	9.9	9.3	8.6	8.0	7.3	6.7	193.2
4. Debt Service on BCH's Loan																					
Short-term interest 8/	-	0.2	0.7	1.5	1.9	1.7	1.6	1.5	1.3	1.2	1.0	1.0	0.8	0.7	0.6	0.4	0.3	0.2	0.1	-	16.7
Short-term principal	-	-	-	-	-	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.4	18.6
Subtotal	-	0.2	0.7	1.5	1.9	3.0	2.9	2.8	2.6	2.5	2.3	2.3	2.1	2.0	1.9	1.7	1.6	1.5	1.4	0.4	35.3
Total Outflow	13.8	40.7	64.0	61.1	50.1	54.7	51.4	48.2	44.8	41.5	38.2	35.0	31.6	28.4	25.1	21.8	18.5	15.3	12.0	8.2	704.4
Net Cash Flow - annual	(0.6)	(0.5)	0.4	1.6	6.4	7.4	10.0	10.1	8.8	4.3	(1.4)	(4.2)	(4.1)	(4.2)	(4.3)	(4.4)	(4.4)	(4.6)	(4.7)	(4.2)	7.4
- cumulative	(0.6)	(1.1)	(0.7)	0.9	7.3	14.7	24.7	34.8	43.6	47.9	46.5	42.3	38.2	34.0	29.7	25.3	20.9	16.3	11.6	7.4	-

1/ Average subloan assumed to have eight year maturity including three years grace period.
2/ 12.5% per annum.
3/ 10.0% per annum paid out on negative cumulative balance of previous year; 12.5% per annum paid in on positive cumulative balance of previous years.
4/ Reduced after year 6 in accordance with pay-back of principal to BCH and Bank.
5/ After year 3, only incremental operating costs are maintained (salaries, technical assistance and new office).
6/ 0.75% per annum on undisbursed balanced.

7/ 10.97% per annum.
8/ 10.0% per annum.

Source: Mission estimates.

April 25, 1983

Table 9

Table 10

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Milk Collection and Refrigeration Center Investment Model (12,000 liters)

Investment Analysis and Cash Flow Projection
(L'000)

Items	Years 1	2	3	4	5	6	7	8	9	10
INFLOW										
Sales	646	1,432	1,552	1,671	1,790	1,910	2,029	2,148	2,387	2,387
Residual value										
- Working capital	-	-	-	-	-	-	-	-	-	186
- Investment costs 1/	-	-	-	-	-	-	-	-	-	48
Total Inflow	646	1,432	1,552	1,671	1,790	1,910	2,029	2,148	2,387	2,621
OUTFLOW										
Investment costs	233	-	-	-	-	-	-	-	-	-
Incremental working capital	51	62	9	9	10	9	9	9	18	-
Operating costs	615	1,354	1,466	1,574	1,689	1,795	1,909	2,016	2,237	2,237
Total Outflow	899	1,416	1,475	1,583	1,699	1,804	1,918	2,025	2,255	2,237
Cash Flow Before Financing	(253)	16	77	88	91	106	111	123	132	384
Financial Rate of Return = 30% 2/										
FINANCING										
Inflow										
- Owner's share 3/	47	-	-	-	-	-	-	-	-	-
- Loan receipts										
- Long-term 4/	186	-	-	-	-	-	-	-	-	-
- Short-term 5/	20	38	-	-	-	-	-	-	-	-
Outflow										
Debt service										
- Long-term principal	-	-	-	27	27	27	27	27	27	24
- Long-term interest	-	31	31	31	26	22	17	13	8	4
- Short-term principal	-	20	38	-	-	-	-	-	-	-
- Short-term interest	-	3	6	-	-	-	-	-	-	-
Net Financing	253	(16)	(75)	(58)	(53)	(49)	(44)	(40)	(35)	(28)
Deflation Factors 6/	-	1.09	1.1718	1.2538	1.3290	1.4087	1.4933	1.5829	1.6778	1.7785
Net Financing Deflated	253	(15)	(64)	(46)	(40)	(35)	(29)	(25)	(21)	(16)
Net Benefit After Financing	-	1	13	42	51	71	82	98	111	368

1/ Includes 100% of land value, 50% of buildings and 10% of the remaining costs.
2/ Reflects financial return to all resources used in project.
3/ 20% of total investment costs.
4/ 80% of total investment costs, 16.5% interest repayable in nine years with two years grace.
5/ 16.5% interest.
6/ 9% in year 2; 7-1/2% in year 3; 7% in year 4 and 6% thereafter.

Source: Mission.

April 25, 1983

Table 11

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Tobacco and Maize Investment Model (10 ha)

Investment Analysis and Cash Flow Projection
(L)

	Without Project	With Project							
		Years							
		1	2 1/	3	4	5	6	7 2/	8
INFLOW									
Tobacco sales	-	-	73,150	75,240	75,240	77,330	79,420	79,420	79,420
Maize sales	3,850	3,850	5,600	7,000	7,700	9,100	9,800	9,800	9,800
Home consumption - Maize	700	700	700	700	700	700	700	700	700
Residual value 3/	-	-	-	-	-	-	-	-	37,352
Total Inflow	4,550	4,550	79,450	82,940	83,640	87,130	89,920	89,920	127,272
OUTFLOW									
Investment cost 4/	-	50,000	-	-	-	-	-	20,000	-
Incremental working capital 4/	-	20,764	776	300	384	128	-	-	-
Operating cost-tobacco	-	-	51,730	51,730	51,730	51,730	51,730	51,730	51,730
Operating cost - maize	3,710	3,710	3,890	5,830	6,580	7,540	7,860	7,860	7,860
Total Outflow	3,710	74,474	56,396	57,860	58,694	59,398	59,590	79,590	59,590
Total Net Benefit Before Financing	840	(69,924)	23,054	25,080	24,946	27,732	30,330	10,330	67,682
Incremental	-	(70,764)	22,214	24,240	24,106	26,892	29,490	9,490	66,842
Financial Rate of Return = 31%									
FINANCING									
Inflow									
Producer's contribution 5/	-	5,000	-	-	-	-	-	-	-
Loan receipt	-	-	-	-	-	-	-	-	-
- Long-term 6/	-	45,000	-	-	-	-	-	-	-
- Short-term	-	20,764	9,401	-	-	-	-	2,480	-
Outflow									
Debt Service									
- Long-term principal 7/	-	-	-	-	9,000	9,000	9,000	9,000	9,000
- Long-term interest 8/	-	-	7,425	7,425	7,425	5,940	4,455	2,970	1,485
- Short-term principal	-	-	20,764	9,401	-	-	-	-	2,480
- Short-term interest 8/	-	-	3,426	1,551	-	-	-	-	409
Net Financing	-	70,764	(22,214)	(18,377)	(16,425)	(14,940)	(13,455)	(9,490)	(13,374)
Deflation Factors 9/	-		1.09	1.1718	1.2538	1.3290	1.4087	1.4933	1.5829
Net Financing Deflated		70,764	(20,380)	(15,683)	(13,100)	(11,242)	(9,551)	(6,355)	(8,449)
Total Net Benefit After Financing	840	840	2,674	9,397	11,846	16,490	20,779	3,975	59,233
Incremental	-	-	1,834	8,557	13,006	15,650	19,939	3,135	58,393

1/ Sales and operating costs start only in year 2, to correctly time the inflows and outflows for discounting purposes.
2/ Additional investment costs equivalent to 40% of initial investment will be incurred in year 7.
3/ 100% of incremental working capital and 75% of investment costs incurred in year 7.
4/ 40% of incremental operating costs.
5/ 10% of total investment cost.
6/ 90% of total investment cost.
7/ Repayable over eight years, including three years of grace.
8/ 16.5% interest.
9/ 9% in year 2; 7.5% in year 3; 7% in year 4; and 6% thereafter.

Source: Mission.

April 25, 1983

Table 12

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Melon and Maize Investment Model (4.2 ha)

Investment Analysis and Cash Flow Projection
(L)

	Without Project	With Project									
		Years									
		1	2 1/	3	4	5	6	7 2/	8	9	10
INFLOW											
Melon sales	-	-	14,910	15,265	15,620	16,470	18,592	19,726	19,726	19,726	19,726
Maize sales	2,808	2,808	2,847	3,175	3,175	3,515	3,663	3,663	3,663	3,663	3,663
Home consumption-maize	360	360	360	365	365	370	370	370	370	370	370
Residual value 3/	-										4,836
Total Inflow	3,168	3,168	18,117	18,805	19,160	20,350	22,625	23,759	23,759	23,759	28,595
OUTFLOW											
Investment cost	-	8,370	-	-	-	-	-	3,000	-	-	-
Incremental working capital 4/	-	4,576	15	156	6	33	50	-	-	-	-
Operating cost-melon	-	-	11,404	11,404	11,404	11,404	11,404	11,404	11,404	11,404	11,404
Operating costs-maize	2,029	2,029	2,066	2,155	2,171	2,253	2,379	2,379	2,379	2,379	2,379
Total Outflow	2,029	14,975	13,485	13,715	13,581	13,690	13,833	16,783	13,783	13,783	13,783
Before financing											
Total	1,139	(11,807)	4,632	5,090	5,579	6,660	8,792	6,976	9,976	9,976	14,812
Incremental		(12,946)	3,493	3,951	4,440	5,521	7,653	5,837	8,837	8,837	13,673
Financial Rate of Return = 37%											
FINANCING											
Inflow											
Producer's contribution 5/		837	-	-	-	-	-	-	-		
Loan receipts											
- Long-term 6/		7,533	-	-	-	-	-	-	-		
- Short-term		4,576	3,081	881	-	-	-	-	-		
Outflow											
Debt service											
- Long-term principal 7/		-	-	-	1,506	1,506	1,507	1,507	1,507		
- Long-term interest 8/			1,243	1,243	1,243	994	746	497	249		
- Short-term principal			4,576	3,081	881	-	-	-	-		
- Short-term interest 8/			755	508	145	-	-	-	-		
Net Financing		12,946	(3,493)	(3,951)	(3,775)	(2,500)	(2,253)	(2,004)	(1,756)		
Deflation factors 9/			1.09	1.1718	1.2538	1.3290	1.4087	1.4933	1.5829		
Net Financing Deflated			(3,205)	(3,372)	(3,011)	(1,881)	(1,599)	(1,342)	(1,109)		
Net Benefit after Financing											
Total	1,139	1,139	1,427	1,718	2,568	4,779	7,193	5,634	8,867	9,976	14,812
Incremental		-	288	579	1,429	3,640	6,054	4,495	7,728	8,837	13,673

1/ Sales and operating costs start in year 2, to correctly time the inflows and outflows for discounting purposes.
2/ Additional investment costs equivalent to 36% of initial investment will be incurred in year 7.
3/ 100% of incremental working capital.
4/ 40% of incremental operating costs.
5/ 10% of total investment cost.
6/ 90% of total investment cost.
7/ Repayable over eight years, including three years of grace.
8/ 16.5% interest.
9/ 9% in year 2; 7.5% in year 3; 7% in year 4; and 6% thereafter.

Source: Mission.

April 25, 1983

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Dual-purpose Cattle Investment Model (200 ha)

Investment Analysis and Cash Flow Projection
(L)

	Without Project	With Project													
		Years													
		1	2 8/	3	4	5	6	7	8	9	10	11	12	13-19	20
Inflow															
Total production															
Sales	19,785	19,785	22,162	29,930	38,178	47,412	49,572	53,772	54,492	54,492	53,772	53,772	54,492	54,492	54,492
Home consumption - milk	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420
Residual value 1/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95,552
Total Inflow	20,205	20,205	22,582	30,350	38,598	47,832	49,992	54,192	54,912	54,912	54,192	54,192	54,912	54,912	150,464
Outflow															
Investment costs	-	47,350	36,200	-	-	-	-	-	-	-	-	-	-	-	-
Incremental working capital 2/	-	2,052	1,852	4,302	642	192	210	36	-	-	-	-	-	-	-
Operating costs	13,223	13,223	15,274	17,126	21,428	22,070	22,262	22,472	22,508	22,508	22,472	22,472	22,508	22,508	22,508
Total Outflow	13,223	62,625	53,326	21,428	22,070	22,262	22,472	22,508	22,508	22,508	22,472	22,472	22,508	22,508	22,508
Net Benefit Before Financing															
Total	6,982	(42,420)	(30,744)	8,922	16,528	25,570	27,520	31,684	32,404	32,404	31,720	31,720	32,404	32,404	127,956
Incremental		(49,402)	(37,726)	1,940	9,546	18,588	20,538	24,702	25,422	25,422	24,738	24,738	25,422	25,422	120,974
Financial Rate of Return = 19%															
FINANCING															
Inflow															
Producer contribution 3/	-	9,470	7,240	-	-	-	-	-	-	-	-	-	-	-	-
Loan Receipts															
- Long-term 4/	-	37,880	28,960	-	-	-	-	-	-	-	-	-	-	-	-
- Short-term	-	2,052	10,166	20,932	25,869	32,126	35,890	34,536	30,662	24,574	16,591	5,719	-	-	-
Outflow															
Debt Service															
- Long-term principal 5/	-	-	-	-	-	9,548	9,548	9,548	9,548	9,548	9,548	9,552	-	-	-
- Long-term interest 6/	-	-	6,250	11,029	11,029	11,029	9,453	7,878	6,302	4,727	3,152	1,576	-	-	-
- Short-term principal	-	-	2,052	10,166	20,932	25,869	32,126	35,890	34,536	30,662	24,574	16,591	5,719	-	-
- Short-term interest 6/	-	-	339	1,677	3,454	4,268	5,301	5,922	5,698	5,059	4,055	2,738	944	-	-
Net Financing	-	49,402	37,725	(1,940)	(9,546)	(18,588)	(20,538)	(24,702)	(25,422)	(25,422)	(24,738)	(24,738)	(6,663)	-	-
Deflation Factors 7/	-	-	1.09	1.1718	1.2538	1.3290	1.4087	1.4933	1.5829	1.6778	1.7785	1.8852	1.998	-	-
Net Financing Deflated	-	49,402	34,610	(1,656)	(7,613)	(13,986)	(14,579)	(16,542)	(16,060)	(15,152)	(13,909)	(13,122)	(3,335)	-	-
Net Benefit After Financing															
Total	6,982	6,982	3,867	7,316	8,915	11,584	12,941	15,142	16,344	17,252	17,811	18,598	29,069	32,404	127,956
Incremental	-	-	(3,115)	334	1,933	4,602	5,959	8,160	9,362	10,270	10,829	11,616	22,087	25,422	120,974

1/ Herd increment L 86,100 and 100% of incremental working capital L 9,452.
2/ 100% of incremental operating costs.
3/ 20% of total investment cost.
4/ 80% of total investment cost.
5/ Repayable over 10 years with three years of grace.
6/ 16.5% interest.
7/ 9% in year 2; 7-1/2% in year 3; 7% in year 4 and 6% thereafter.
8/ Sales and operating costs start in Year 2 to correctly time the inflows and outflows for discounting purposes.

Source: Mission.

April 25, 1983

Table 14

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Prices Used in Project Appraisal

Item	Unit	Financial Price 1/	Economic Price 1/
Outputs			
Beef liveweight 2/	L/kg	1.31	126
Heifers	L/head	600	588
Milk			
- Raw unrefrigerated milk	L/liter	0.42	0.41
- Refrigerated	L/liter	0.545	0.53
Maize 3/	L/kg	0.35, 0.36	0.37
Tobacco	L/kg	4.18	4.27
Melon			
- Export	L/box	17.50	18.25
- Domestic market	L/box	7	6.9
Inputs			
Unskilled farm labor 4/	L/day	5,6	4.05, 4.86
Milk 5/	L/liter	0.49	0.48
Tractor time	L/ha	170	161.5
Fertilizer	L/lb	0.35	0.33
Insecticide 6/	L/lb	4.16	3,72, 14.88
Fungicide 6/	L/lb	2.30	1,86, 27.9
Fuel	L/gal	2.42	1.91
Others			
Standard Conversion Factor			98%
Opportunity Cost of Capital		16.5%	11%

1/ Prices at year of full development.
2/ Only bulls, cows and steers are sold as beef; including heifers, the financial price is 1.46 L/kg.
3/ Financial price depends on region it is produced.
4/ Fluctuates according to season and area of the country. L 5 is the legal minimum wage.
5/ As an input to the milk collection and refrigeration center investment model; in efficiency terms, milk already produced in the area without the project is valued at 0.44 L/liter; incremental milk at 0.48 L/l.
6/ Prices vary according to the insecticide or fungicide used.

Source: Mission estimate.

April 25, 1983

Table 15

HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Sensitivity Analysis

Investment Model	Economic Rate of Return (Base Rate)	Switching Values 1/ Benefits	Switching Values 1/ Total Operating Costs
	(%)		
Milk collection and refrigeration center	33	55	
Tobacco and maize farm	45	-26	+40
Melon and maize farm	49	-28	+43
Dual-purpose cattle farm	26	-22	+64

1/ The variables chosen for the analysis of the switching value of the benefits are:

Milk collection and refrigeration center: the amount of milk collected at the plant;
Tobacco and maize farm: the production value of exportable tobacco;
Melon and maize farm: the production value of exportable melons; and
Dual-purpose cattle farm: the combined production value of milk and beef.

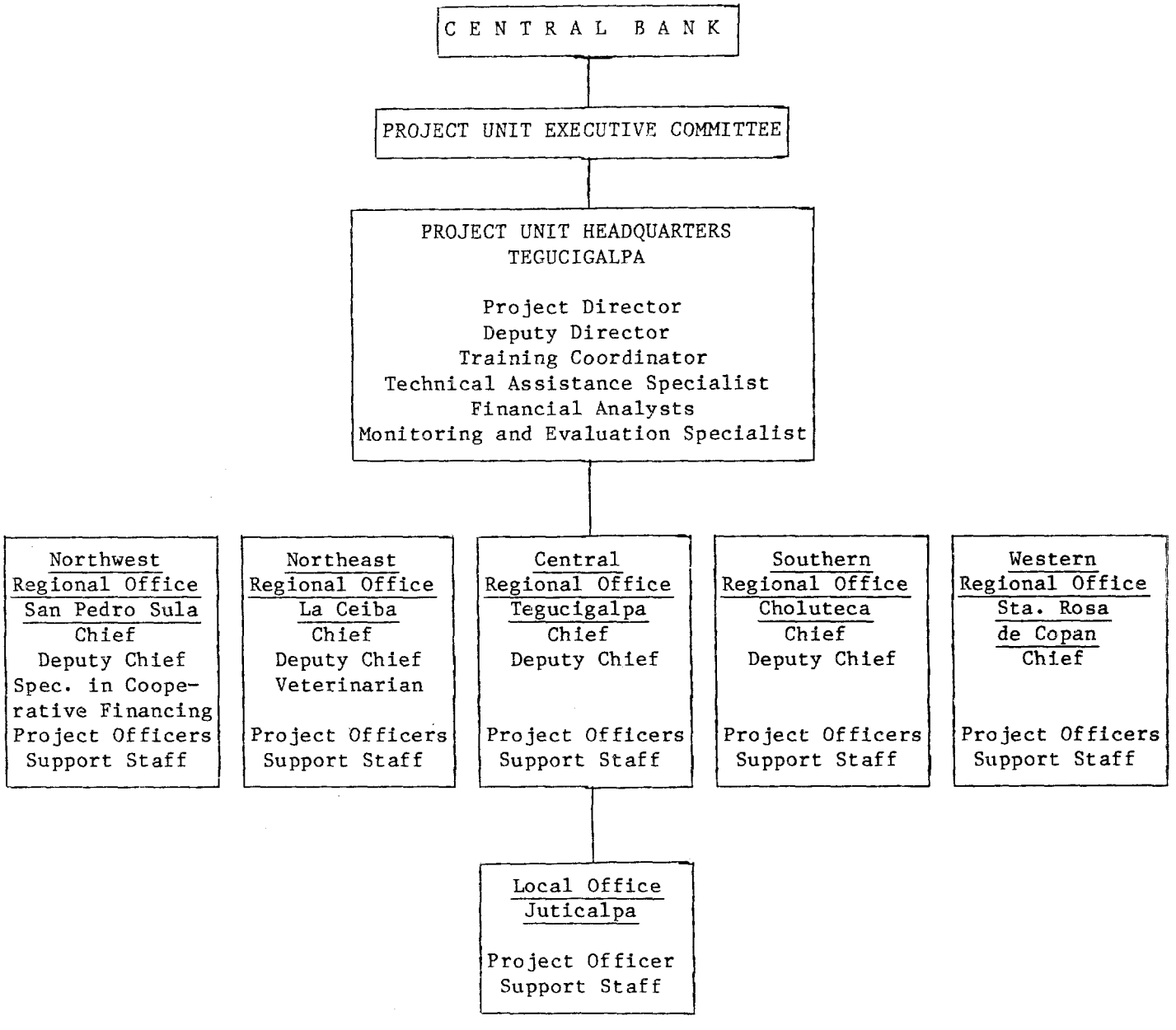
Source: Mission estimates.

April 25, 1983

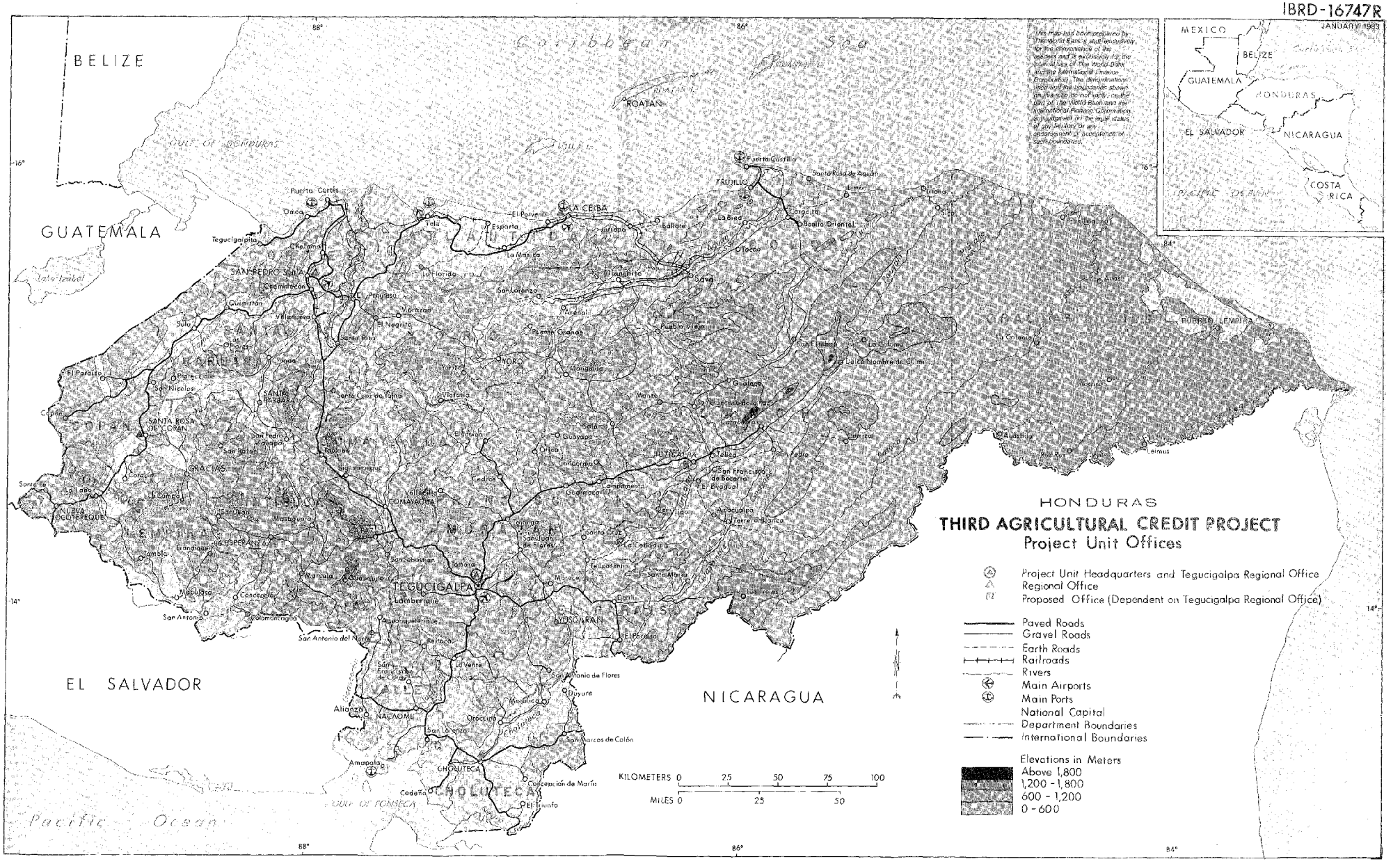
HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Project Unit Organization Chart



IBRD-16747R



HONDURAS

THIRD AGRICULTURAL CREDIT PROJECT

Project Unit Offices

JANUARY 1983

This map has been prepared by The World Bank's staff exclusively for the convenience of the readers and is exclusively for the internal use of The World Bank and the International Finance Corporation. The denominations used and the boundaries shown on this map do not imply, on the part of The World Bank and the International Finance Corporation, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.