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DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

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204/p

CAPITAL ASSISTANCE PAPER

Proposal and Recommendations
For the Review of the
Development Loan Committee

HAITI - SMALL FARMER IMPROVEMENT

AID-DLG/P-2029

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AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

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AID-DLC/P-2029

May 21, 1974

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: Haiti - Small Farmer Improvement

Attached for your review are the recommendations for authorization of a loan in an amount not to exceed six million United States dollars to the Republic of Haiti ("Borrower") to assist in financing the United States dollars and local currency costs (Approximately \$550,000) of a small farmer improvement project ("Project"), including the following components under the Loan: Fertilizer (Approximately \$5,000,000), Construction of Operations Centers (Approximately \$550,000), and Equipment (Approximately \$450,000).

This loan is scheduled for consideration by the Development Loan Staff Committee on Friday, May 24, 1974. Also, please note your concurrence or objection is due at the close of the meeting. If you are a voting member a poll sheet has been enclosed for your response. Please bring the poll sheet to the meeting with you.

Development Loan Committee
Office of Development
Program Review

Attachments:

Summary and Recommendations
Project Analysis
ANNEXES I - VI

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May 21, 1974

PART ONE - SUMMARY AND RECOMMENDATIONSA. BORROWER

The Borrower will be the Republic of Haiti (GOH), acting through the Department of Agriculture, Natural Resources, and Rural Development (DARNDR), the Department of Finance and Economic Affairs (DepFin), and the National Bank of the Republic of Haiti (BNRH). Responsibility for project execution will be assigned to two specialized agencies of the DARNDR, the Institut Haitien de Promotion du Cafe et des Denrees d'Exportation (IHPCADE) and the Bureau de Credit Agricole (BCA).

B. AMOUNT OF THE LOAN

The loan is not to exceed \$6,000,000, of which \$550,000 may be spent for approved local currency costs. 1/

C. TERMS

Forty years, including a grace period of ten years, at 2% interest during the grace period and 3% thereafter.

D. PURPOSE OF THE LOAN

The proposed loan is intended to assist in the execution of a five-year small farmer coffee production program. The program seeks to increase the income and standard of living of the Haitian small farmer through increased production of improved coffee. This increased production is also expected to result in significant improvements in the Balance of Payments and revenue accounts of the GOH.

The program seeks to establish a delivery system whereby a package of improved technology, fertilizer, credit, and training may be channeled to the small farmer. Complementary goals are the capitalization of a small farmer credit fund and the establishment of small farmer cooperatives.

The program represents a significant increase in the annual GOH investment into the agricultural sector.

1/ Gourde = \$0.20 U. S.

E. FINANCIAL PLAN**Consolidated Financial Plan Summary**
(US \$000)

	<u>1974-75</u>	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>	<u>1978-79</u>	<u>TOTAL</u>
GOH:						
LC	129	236	395	518	722	2,000
FX	-	-	-	-	-	-
AID:						
LC	250	300	-	-	-	550
FX	336	644	957	1,405	2,108	5,500
TOTAL	715	1,180	1,352	1,923	2,830	8,000

F. BACKGROUND

The proposal upon which this project is based was originally developed by personnel assigned to IHPCADE in 1970. The written introduction to that proposal gave emphasis to the economic importance of coffee to both the gross Haitian national product as well as to the 371,000 small producers for whom this product provides their main source of income.

The five-year plan for the agricultural sector of Haiti (1971-1976) published by CONADEP in 1971 included the IHPCADE proposal and placed the highest priority on the implementation of the project during the period covered by the plan.

The IHPCADE project apparently remained dormant until 1973, when a joint IDB/FAO project identification survey team brought it to the attention of AID in October of that year. In their opinion the coffee production proposal was the best agricultural project that the team had uncovered, and in fact the only one in the rural sector that could probably be implemented without engaging in further in-depth studies. They also expressed their belief in IHPCADE's institutional strength. IDB reported to AID that because of the sensitive nature of the commodity output of the project within the South and Latin America community, coffee had been excluded from the list of crops eligible for loan assistance. The IBRD likewise reported that for the present they had little interest in considering for financing the IHPCADE proposal.

An AID independent investigation of the project confirmed the IDB/FAO appraisal, and also confirmed the fact that the project goals were in fact oriented towards increasing small farmer income. In November 1973, USAID/Port-au-Prince presented a preliminary IRR to AID/W, which, though not approved in its original form, did bring into sharper focus the importance of the proposal and resulted in the authorization to proceed to revise the preliminary IRR.

A revised IRR was prepared in early January with the assistance of a special team from AID/W reinforced by one coffee horticulturist of Haitian nationality now resident in Costa Rica. The IRR was approved in mid-February and preparation began for the intensive review which was completed in early May. (See Annex I, IRR Cable)

This CAP includes the inputs not only of USAID/Haiti and AID/W expertise but also assistance from the International Coffee Organization (ICO), Credit Union National Association (CUNA), and the Interamerican Institute for Agricultural Sciences (IICA). It includes a major input from the GOH from beginning to end and in the final analysis still follows closely the original project design prepared by IHPCADE in 1970.

G. INTERESTS OF OTHER FINANCIAL AGENCIES

The ExIm Bank, IDB and IBRD have indicated no interest in financing this project. Other free world financing is not available on reasonable terms.

H. STATUTORY CRITERIA

All Statutory Criteria of the U. S. Foreign Assistance Act of 1961, as amended, have been met. (See Annex II)

I. COUNTRY CLEARANCES

The country team has concluded that this proposed loan is an integral part of the team's top priority in the rural development sector with its specific focus on bettering the condition of the rural poor and contributing directly to the realization of basic development objectives in Haiti.

J. ISSUES

The major issue within the program that still requires further discussion is the size of small Haitian farmer to be covered by the program. Table I provides evidence that in 1950 only 11% of the coffee farms in Haiti were over 6 ha. It is natural to assume that with the inheritance process and population pressure, this distribution has further worsened. The biggest coffee farm in Haiti, to our knowledge, is no more

than 35 ha. and only 20 or 30 farms of an estimated 371,000 are estimated to have more than 15 ha.

AID has had extensive consultation with the GOH on this issue, including a discussion at the policy level with the Ministers of Agriculture, Finance, and Commerce, and the Head of the BNRH. The clear desire was to concentrate available resources at the lower level. The subsidy program will be limited to 6 ha., i. e. no farmer will receive subsidies on more than 6 ha. of coffee. The issue remaining then is whether the program will provide credits to farmers for fertilizer, at full value, for use on any additional hectares in coffee.

The GOH is of two minds. On one side they wish to husband their resources for application to those farmers who most need the subsidy and credit assistance. On the other, they recognize that substantial gains in production can be made on the somewhat larger farms more easily.

Our discussions to-date have resulted in the compromise course of action whereby AID and the GOH will agree that, each year, at least 85% value of the loans made will go to the farmers of 6 ha. of coffee or less. It is this course of action that we suggest be used as a guideline in loan negotiations.

K. LOAN ADMINISTRATION

The local currency portions of the loan will be programmed through a special joint GOH/AID account to be managed by the BNRH. Disbursements will take place through normal GOH procedures.

The dollar portions of the loan will follow standard procurement and disbursement procedures, and all procurement will be obtained from countries included in AID Geographic Code 941.

L. RECOMMENDATIONS

On the basis of the conclusions of the Capital Assistance Committee that the program is technically, economically and financially justified, it is recommended that a loan to the Government of Haiti for an amount not to exceed \$6.0 million be authorized subject to the following terms and conditions:

1. Borrower shall repay the loan to A. I. D. in United States dollars within forty (40) years from the date of the first disbursement under the loan, including a grace period not to exceed ten (10) years. Borrower shall pay to A. I. D., in United States dollars, on the disbursed balance of the loan, interest of two percent (2%) per annum during the grace period and three percent (3%) per annum thereafter. Interest and principal will be repaid in semi-annual installments.

2. Other Terms and Conditions

A. Except for marine insurance and ocean shipping, goods and services financed under the loan shall have their source and origin in Haiti and in countries included in A. I. D. Geographic Code 941. Marine insurance financed under the loan shall have its source and origin in Haiti or in any country included in A. I. D. Geographic Code 941, provided, however, that such insurance may be financed under the loan only if it is obtained on a competitive basis and any claims thereunder are payable in convertible currencies. Ocean shipping financed under the loan shall be procured in any country included in A. I. D. Geographic Code 941.

B. The loan will be disbursed to the borrower both in U. S. dollars and Haitian Courdes, which are freely convertible with dollars and have a value of 1 Gourde = \$0.20. Up to the equivalent of \$550,000 will be made available to the Borrower by A. I. D. in Courdes.

I. CONDITIONS PRECEDENT TO DISBURSEMENTS OR THE ISSUANCE OF ANY LETTER OF COMMITMENT

The GOH will be requested to submit standard conditions precedent following signing of the Loan Agreement.

II. CONDITIONS PRECEDENT TO DISBURSEMENTS OR THE ISSUANCE OF ANY LETTERS OF COMMITMENT BEYOND \$100,000 FOR INITIAL EQUIPMENT PURCHASES FOR IHPCADE AND BCA, AND \$75,000 FOR INITIAL FERTILIZER PURCHASE

The GOH will be requested to submit:

(a) evidence of the establishment with the BNRH of a separate joint Borrower/A. I. D. account for the deposit of the Borrower's contributions and AID local currency disbursements to the project.

(b) rules and regulations concerning the function and use of the fund.

(c) evidence that the first contribution on the part of the Borrower has been deposited in the joint BNRH account in a sum no less than one half of the amount estimated to be the Borrower's contribution to the first year of the project as agreed in the program's financial plan.

(d) evidence of the establishment of a technical level committee comprised of IHPCADE, BCA, DARNDR, FAO and A. I. D. representatives, and an agreement upon its responsibilities, functions and time of meetings.

III. PRIOR TO INITIAL DISBURSEMENT OF A. I. D. FUNDS FOR THE CONSTRUCTION OF THE IHPCADE OPERATIONS CENTERS AND THE PURCHASE OF ADDITIONAL RELATED IHPCADE EQUIPMENT:

The GOH shall be requested to furnish:

(a) evidence that it has carried out an analysis based on objective criteria, indicating the most optimum location for each center to be constructed under the loan, and that land titles will be held by the Borrower.

(b) a projected implementation plan for the construction of the centers, including engineering plans, specifications, construction and procurement contracts, and projected personnel requirements for their efficient functioning and maintenance. This should include a plan and timetable for recruitment of any necessary additional personnel.

(c) evidence that IHPCADE has received a contribution from the Borrower, through the BNRH joint account, of a contribution equal to one half of the first year's estimated total contribution, as agreed in the program's financial plan.

IV. PRIOR TO THE ISSUANCE OF ADDITIONAL LETTERS OF COMMITMENT FOR THE PURCHASE OF FERTILIZER:

(a) an implementation plan outlining the procedures and regulations for the purchase, receipt, storage, transport, control, and distribution of fertilizer purchased under the program, including copies of such inventory control documents which may be deemed necessary.

(b) evidence that IHPCADE has entered into a formal institutional agreement with BCA outlining the responsibilities of IHPCADE in the program and the areas and scope of cooperation between IHPCADE and BCA. Such an agreement shall detail, to the extent necessary, the exact operating rules and regulations of the fertilizer credit program, including eligibility requirements, the amounts and terms of any subsidy program to small farmers, maximum terms and amounts of sub-loans, interest rates, and use of repayments from fertilizer credits.

(c) an implementation program for the first year of operations under the program.

V. PRIOR TO THE DISBURSEMENT OF A. I. D. FUNDS FOR THE PURCHASE OF ADDITIONAL EQUIPMENT FOR BCA:

The GOH will be requested to furnish:

(a) evidence of the establishment within BCA of a separate revolving fund to support the objectives of the program, to function and be used in a manner satisfactory to A. I. D.

(b) evidence that such fund has received a contribution from the Borrower, through the BNRH joint account, of a cash contribution equal to one half of the first year's estimated cash credit requirements, as agreed in the program's financial plan.

(c) evidence that all contributions to the fund, including repayments and interests on credits in cash and in kind, will be retained in the fund for a period of at least ten years from the date of the first repayment.

(d) evidence that BCA has entered into a formal institutional agreement with IHPCADE detailing the responsibilities of BCA in the program, and the areas and scope of cooperation between BCA and IHPCADE. Such an agreement shall detail the exact operating rules and regulations of the cash credit program, including eligibility requirements, the terms and conditions of cash sub-loans to small farmers, interest rates, and use of repayments from cash credits.

(e) an implementation plan for the first year of operations under the program.

(f) evidence that it has carried out an analysis, using objective criteria, indicating the most optimum location of BCA regional offices to support IHPCADE coffee promotion activities and the program's objectives in general.

VI. COVENANTS

In addition, the GOH will covenant with A. I. D. that, unless A. I. D. agrees in writing:

(a) All Borrower contributions to the joint BNRH account, as agreed in the financial plan, shall be in addition to those Borrower contributions already earmarked or budgeted to IHPCADE and BCA for annual, budgetary recurrent and investment expenditures.

(b) During the first five years of the program, Borrower agrees to provide IHPCADE and BCA with those annual budgetary and earmarked re-

sources which they have been receiving before the program, and in amounts equal to no less than that received by each in Borrower's fiscal year 1973-1974.

(c) During the life of the program, Borrower agrees to make semi-annual contributions to the program, through the BNRH joint account, of those sums agreed in the program's financial plan.

(d) During the first year of the program, the Borrower agrees to carry out a study of the impact of current coffee tax rates and world market prices on producer prices and the need for the establishment of a coffee price stabilization mechanism, including possible means of financing the capitalization of a coffee price stabilization fund.

(e) Borrower agrees to implement the program in such a manner as to affect the greatest number of small farmers during the period of the loan.

(f) Borrower agrees to meet periodically with A. I. D., and at least once a year from the date of the first disbursement, to formally review the progress of the program and conduct a programming of resources for the coming period from the joint BNRH account.

(g) Borrower agrees to manage the resources made available to the BCA with the aim of creating a working capital fund for agricultural credits to small farmers that will continue to capitalize itself from its own resources after the loan period.

(h) Borrower agrees to exert its best efforts to prevent the average price paid to producers from falling below 50% of the export price during the period of the loan.

M. CAPITAL ASSISTANCE COMMITTEE

Agricultural Development Officer	Leroy Rasmussen	USAID/H
Agricultural Economist	Robert Laubis	AID/W
Agricultural Advisor	James Hawes	AID/W
Agricultural Advisor	Russell Desrosiers	AID/W
Engineer	Raymond Douglass	USAID/H
Agricultural Consultant	Dr. Pierre Sylvain	IICA
Cooperative Advisor	Paul Hebert	CUNA
Systems Advisor	John Heard	AID/W
Evaluation Advisor	Gerald Schwab	AID/W
Coffee Consultant	Mark Van de Steen	ICO
Development Finance Officer	Richard Seifman	AID/W
Development Finance Officer	Ronald F. Venezia	AID/W

Approved: John T. Craig
 AID Representative (Acting)
 USAID/Haiti

(x)

P R E F A C E

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1/
The Legend

May 21, 1974

It was necessary to flee - flee the whiplash of the black commander, the swagger sticks of the white land-owner, the insults. It was time to become a fugitive. Yes, it was time to become once again a man, a man who is free, take one's wife and children away from this suffering. There is only one way --- become a fugitive. The issue is decided. This evening under cover of darkness they will leave for the verdant hills, wooded, covered with coffee trees and filled with hiding places. There they will continue the battle for liberty, without mercy.

And so they went, hiding during the day, avoiding its brightness, threading their way during darkness, the dogs, the mounted gendarmes on their heels, dodging as best they could the traps that were seeded along the way. Meanwhile the battle continued. Harass the pursuers without pity - those ferocious man-hunters. How? By burning the earth behind them, by seeding desolation on the fields cultivated by their perspiration, destroying the grand villas to the consternation of the arrogant land-owners and their wives. The cane fields burn, smoking. The long tongues of flames swirl, illuminating the plain, filling the colonialists with rage as they see their world disappear in a cloud of smoke - their fortunes they amassed with the whip. The plain turns white and cinders stain the black oxen. It is necessary to flee again or be caught. The hills covered with coffee and above them the tall shade trees, the caves, these are they only hiding places that remain. They can easily confuse the soldiers in pursuit, hide in the leaves on the branch of a tree, curl under a leafy bush. Crawling along the trees they watch the movement of the soldiers who sweat as they climb the abrupt slopes. They give the alert to their tired companions who are deep asleep. At the least suspicion the conch shell sounds, waking the fugitives who hide themselves deeper in the breast of the mountains.

Again it is in the coffee groves where they find their cover, hiding while they rest from the forced marches, the steep climbs. They find also its beverage and drink with great joy at all hours of day and night, for this liquid permits them to quiet the hunger that pulls at their guts, and to maintain their vigilance against any movement, at any moment, so that they may respond in a moment to the mournful call of the conch shell signaling danger. Though their flight is rapid the fugitives never forget to fill up their shoulder sacks with leaves and fruits of the coffee. In their journey their benefactor, coffee, accompanies them, healing their pains. The fugitives thus spread out in their hidden fields. In the farthest recesses, this plant assists, never failing to hide them with verdant leaves and white flowers even on the steepest of hills. Hidden under its cover, protected by its leaves, healed by its fruits, the numbers of fugitives increase. United by the same fatigue, the same suffering, and the same fears, the union makes the force; they return as an army for the final battle, the battle for independence.

The Independence, the highest conflict; battles without parallel, memorable heroic acts do not separate them from their coffee, which remains as before an important part of their lives, furnishing the fugitives the means to establish their heritage.

1/ Translation of a legend written by Jean Prophete, IHPCADE Acting Director

EXCERPTS FROM HISTORY OF ST. DOMINGO, ^{1/} DESCRIBING TOUSSAINT LOUVERTURE,
A LIBERATOR OF HAITI:

"One of the first objects of his care was the regular cultivation of the soil, upon which the prosperity of every country must principally depend."
... "The effects of (his) regulations were soon visible throughout the country. So great was the progress of agriculture from the time of their adoption, that notwithstanding the ravages of nearly ten year's war, and other impediments which retarded its improvement, the land produced in the next crop full one-third of the quantity of sugar and coffee which it had ever before yielded in its most prosperous season."

^{1/} First published in 1818 by Sir James Borskett

PART TWO - PROBLEM ANALYSIS AND ASSISTANCE STRATEGY

I. DESCRIPTION OF THE PROBLEM

Haiti, with a population of 4.5 million, is the only country in the Western Hemisphere included in the U. N. list of 25 least developed countries. Over 80 percent of the population lives and works in the rural areas, where the agricultural environment can only be described as hostile. Population density on the land approaches that of India and land tenure is fragmented and piecemeal. Agricultural production methods, with the possible exception of cane and some rice, rely almost exclusively on the use of the hoe and machete. Techniques such as contour plowing, crop rotation, or use of improved seeds and fertilizers are almost never practiced. Little or no credit is available (approximately 3,200 farmers received credit in 1972 - average loans totalled \$72) and the institutional base for government assistance to agriculture is generally regarded as inadequate, at best. These factors, together with low producer prices, have resulted in a steadily decreasing agricultural productivity and have contributed directly to an expansion of subsistence agriculture.

While a wide variety of food and export crops are grown, coffee is the only commodity that has maintained an important place in Haitian agriculture on a continuing basis from colonial times to the present. Its cultivation is characterized by a low level of technology as it essentially grows wild on the wetter slopes of the mountainous areas. In Haiti, less labor is presently expended on coffee per ha. than on any other crop.

Moreover, whereas agriculture is the single most important sector in the Haitian economy (47 percent of GDP in 1972) and has traditionally been the most important source of foreign exchange earnings (65% of export earnings during the past ten years - with coffee alone accounting for 40%), the return to agriculture of a significant amount of these resources has traditionally been low. In 1973, the entire budget of the Ministry of Agriculture, including agricultural credit, totalled \$2.6 million dollars, or 4 percent of GOH revenues. (This includes, besides agriculture, funds for rural elementary schools and the Bureau of Mines.)

The needs of the agricultural sector are thus substantial. An increase in producer prices, along with wider extension services, is needed to not only provide an incentive to producers to increase output, but also to adopt the use of new techniques, increased applications of fertilizer, and more intensive cultivation of agricultural products. This must include increasing the availability of agricultural credits, and in the final analysis, increasing the amount of GOH resources directed at agricultural investment and extension.

II. STRATEGY

If one were to pick a point of intervention in this panorama of needs, the role of coffee in the Haitian economy deserves special attention. Grown (or mostly gathered) by approximately 371,000 Haitian farmers, mainly small, on some 140,000 ha. of land, coffee constitutes the main cash crop, and therefore the major source of disposable income of approximately 1.7 million people. The low level of productivity (approximately 230-250 kg/ha) is susceptible to substantial increase given the adoption of a more intensive cultivation. Its role as a cash crop makes the use and repayment of agricultural credit a more likely prospect. For most of the mountainous and eroded arable land of Haiti, it is one of the few crops which can be cultivated on a regular basis. There is an established system of assembly and processing which could hopefully accommodate an opposite flow of agricultural inputs. There is an established extension network, albeit understaffed, composed of trained agronomists and administrative staff. There is a recent history of some Haitian coffee farmers joining together into pre-cooperative type groups to utilize credits, and to seek a wider role in the coffee marketing process. Finally, there is obvious and understandable concern on the part of the GOH to increase coffee production, which would assure that a coffee project for small farmers would enjoy high GOH priority.

From the point of view of AID, assistance to this sector represents a logical place to start in any long-term attempt to assist the GOH to improve its agricultural productivity. First of all, the project is a true Haitian initiative and a formal request for assistance has been received. Secondly, coffee production in Haiti has an insignificant effect on the worldwide supply/price situation (less than 1%). Also the target group is comprised almost wholly of small farmers and the institutional and financial capacity generated by the project, especially in the area of agricultural credits, would in time serve for wider application to agriculture generally, specifically in food crops. The opportunity to demonstrate the advantages of cooperative endeavor, where applicable, would serve as an important lesson to other agricultural sectors. Finally, the revenues produced would widen Haiti's base for increased agricultural investment. In sum, the provision of assistance to the coffee sector would have effects on Haitian agriculture far beyond the commodity itself. The project was conceived in this framework.

Institutionally, the success of the Small Farmer Development Loan in achieving its objectives will depend in large measure on the capability of the GOH institutions to perform their respective functions as required. The capability of the existing institutional infrastructure has been recognized by many foreign as well as Haitian observers as being very limited. Among the recognized weaknesses are limited numbers of trained personnel, their level of training, inadequate budgets in general, low salaries, limited funds for operations of programs, lack of transportation and other facilities, poor morale and lack of experience in project development and program planning and implementation.

Of the many GOH institutions, the Institut Haitien de Promotion du Cafe et des Denrees d'Exportation (IHPCADE), the principal implementor of the coffee promotion program, appears to be one of the most capable at the present time. Because of the importance of coffee to the economy of Haiti it has received some budgetary support through the relatively high coffee tax system to allow it to acquire a rather large staff, by Haitian standards, of trained personnel, who have been recruited and hired on the basis of their professional qualifications or potential. IHPCADE has been active in recent years in conducting a modest program in coffee improvement. One of the purposes of the AID loan is to assist IHPCADE in strengthening its capabilities and providing additional resources to help achieve a part of the coffee production goals established in its five-year plan.

The Bureau of Agricultural Credit (BCA) will be responsible for management of the credit portfolio through which the coffee promotion program will be implemented. Recent analysis shows that its present deficiencies are subject to substantial improvement through the provision of capital and technical assistance, and that as the program unfolds, BCA's capacity to manage its credit requirements will keep pace.

PART THREE - DESCRIPTION OF THE PROJECT

A. Overall Goals of Program

1. Increase small farmer income and standard of living through increased production.
2. Increase the quality and quantity of coffee produced in Haiti.
3. Improve the GOH Balance of Payments through increased exports.
4. Increase GOH revenues generally.
5. Capitalize and support an agricultural credit system.
6. Seek to establish a network of coffee producer cooperatives.
7. Seek to increase GOH investment into agricultural development activities.

B. Specific Objectives

1. Increase the average yield of coffee per hectare from the present 250 kgs/ha. to 750 kgs/ha. on new and rehabilitated plantings on 12,778 hectares. (1100 kg/ha on new plantings)
2. Increase the exportable annual production of coffee by Haiti from present levels of 350,000 to 500,000 sacks (60 kgs) by the end of 10 years.
3. Improve the Balance of Payments of Haiti by adding an increased cumulative \$50 million of exports over 10 years.
4. Establish six regional IHPCADE centers for coffee research, fertilizer and credit distribution, production of nursery stock, etc.
5. Establish pre-cooperative groups serving approximately 12,000 farmers which will channel fertilizer and complementary cash credits for a total of \$26 million at the end of 10 years.
6. Increase GOH general budgetary revenues by at least one million dollars annually over expected amounts by the end of ten years.
7. Raise the level of GOH investment of their own resources into the coffee sector to at least 4% of the value of the annual export crop by the end of five years.

C. Project Design

The project design is built upon the introduction to the small Haitian coffee farmer of two technological packages representing two levels of coffee production intensity. The two levels are described as (1) the establishment of new plantings or total regeneration, and (2) the rehabilitation of existing groves. Of the two levels, total regeneration involves the higher order of intensity and also the greater potential long-term reward. The inclusion of two packages within the same program is dictated by the need to maintain farmer income at near normal levels while at the same time taking land out of production.

Both of the packages above include the requirements for control of the shade canopy common to coffee groves, correct spacing of the trees, the use of chemical fertilizers, annual pruning, weed control, disease and insect control, and improved methods of harvesting and

processing the coffee fruit. In addition, the total regeneration package includes criteria regarding site selection for new plantings, and of course, the introduction of improved varieties since the genetic potential of the trees is of great importance if maximum efficiency is to be gained from the associated practices.

All of the factors involved in the two technological equations pale in comparative significance when measured against the single factor of fertilizer. The proper use of commercial fertilizers has in fact, become the heart and soul of the project, with eighty percent of the loan funding from AID committed in advance for the purchase of this one commodity.

A complete discussion of the need for and the function of fertilizers in a coffee production program will be found in Section B, Part IV of this paper.

The improved technology, of which fertilizer is the most important part, cannot be significantly modified (i.e. less fertilizer) without compromising the macro- as well as the micro-economics of production. What can be modified is the rate at which a combination of the two intensities of production can be applied to a farmers holdings and the subsequent cost of capital inputs. The high cost of the inorganic plant nutrients required for trees that are not yet in production creates a reverse flow of capital in the short term, of a magnitude that can only be tolerated by peasant farmers under certain conditions.

One of these conditions, the cost of the nutrients, will be modified by the GOH policy which permits participants in the coffee production program to purchase their fertilizer on credit terms and at half-price during the first two years following the establishment of their coffee orchards or following coffee orchard rehabilitation; and for seventy-five percent of the real cost in years three and four. Under these conditions it is supposed that the use of fertilizers will present sufficient economic reward to become readily accepted by small coffee farmers. The rate at which varying degrees of the two levels of production intensity may be applied and the economic effect on short and long term income levels of farmer-participants can be found in Section E Part IV; (Micro-Economics of Production.)

Generally speaking it has been assumed that the rehabilitation of coffee orchards with it's relatively short-term rewards will have greater appeal than the establishment of new plantings; or it may be assumed that individual farmers will on the average apply some proportion of both levels of production intensity to their lands in order to keep production (and of course income) levels as high as possible while replanting a portion of their lands for longer term gains.

Table 2 demonstrates then how the major portion of the AID loan will be utilized. Fertilizer application on new plantings will be at the rate of 165 kgs per hectare the first year of establishment, followed by 375 kgs/ha the second, and thereafter at 500 kgs per year. On rehabilitated orchards the application rates begin at 375/ha in year 1, followed by 400/kgs/ha in year two and thereafter at the optimum rate of 500 kgs. ha/yr.

The delivered price of fertilizer is based on current world market price plus ocean freight and internal delivery costs for year one. Thereafter, an annual increase of eight percent (8%) has been applied to current prices, as a measure of future prices. In summation then, the loan proposal foresees the application of 14,015 tons of chemical fertilizers on a total of 12,778 hectares over a five year period. The cost of this essential input has been calculated at slightly more than \$5.0 million.

In effect, Table 2 provides the parameters of the project in terms of hectares of coffee to be affected. This, in turn allows an estimate of numbers of farmers to be affected. If we assume that on the average one hectare equals one farmer we can assume that the program may affect approximately 12,000 farmers. Table 1 below provides the most recent data on coffee farm size in Haiti.

TABLE 1
Coffee Farms, by Farm Size (Hectares)-Haiti

<u>Farm size, Ha.</u>	<u>No. of Farms</u>	<u>Percent</u>	<u>Cumulative percent</u>
up to 0.6	57,600	15	15
0.6 to 1.3	74,496	19.4	34.4
1.3 to 2.6	117,504	30.6	65.0
2.6 to 6.0	91,776	23.9	88.9
6.0 and over	42,624	11.1	100
Total	384,000	100	

Source: Table VI, National Coffee Plan, Haiti, 1969-70 / 1975-76
1950 census

D. Time Frame

AID financing for this project will span five years. This time frame is based upon several considerations, the most important of which is the growth and production cycle of the coffee tree. New plantings begin their existence in tree nurseries where seed is germinated and where the young trees must remain for approximately one year. After the trees have been transplanted in the farmers fields, a minimum of two years are required before even limited production begins, and it is not until the third and fourth years following transplanting that yields will reach significant levels.

TABLE 2

Fertilizer Requirements by Tons

Years	New Plantings					Ha	Total
	1	2	3	4	5		
1	105	239	319	319	319	638	
2		210	479	639	639	1278	
3			210	479	639	1278	
4				210	479	1278	
5					215	1278	
Tons	105	449	1008	1647	2291	5750	5,500 TN
Years	Regeneration					Ha	Total
	1	2	3	4	5		
1	479	512	639	639	639	1279	
2		479	512	639	639	1279	
3			479	512	639	1279	
4				479	512	1279	
5					717	1912	
Tons	479	991	1630	2269	3146	7028	8,515 TN
Total Tons	584	1440	2638	3916	5437	12778	14,015 TN
Price	\$ 285	\$ 307.80	\$ 332.42	\$ 359.01	\$ 387.74		
Total Value	\$166,440	\$443,232	\$ 876,924	\$ 1,405,883	\$2,108,142		\$ 5,000,621
Ha	1917	2557 (4474)	2557 (7031)	2557 (9588)	3190 (12778)	=	12,778

In the first two years of project life, planting materials will come from existing nurseries. The expansion of these nurseries is included in the establishment of the regional operations centers, which will barely become operational in the first and second years. Thus there is no-way that larger numbers of farmers, who will be included in the program in years three, four and five, could be incorporated into the project in a shorter period. A lesser consideration, but still one of major proportion is the preparation that BCA and IHPCADE (to a lesser degree) must make to effectively manage their expanded operations. This includes the training and re-training of personnel, the establishment of procedures and other activities such as educational activities with cooperatives and pre-cooperatives in anticipation of the accelerating requirements of the program. These activities are to be undertaken and largely accomplished in years one and two in order that management capabilities will stay abreast of the availability of planting materials and of course, increasing numbers of farmer-participants, etc. The program is then deliberately paced to allow this gear-up.

E. The Delivery System

The specific manner in which the technological package reaches the farmer involves the expansion of coffee extension activities through the construction of regional operating centers, and the strengthening of a viable and dynamic rural credit system. Through this channel, complemented by improvement of rural farm roads and farmer training, will pass the fertilizer (in-kind) and complementary cash credit which the farmer will need to successfully adopt the new techniques. Specifically the program's delivery system will include:

1. Construction of six operational centers in the major coffee producing areas. Each center will consist of about 15 acres of land for nurseries, seed production, demonstration farming and research, living facilities for the Director and Farm Manager, offices, class rooms and work room for technical, administrative and credit staff, a warehouse for storage of fertilizer and coffee, provision for drying and depulping coffee and a facility for training groups of up to 30 farmers in programs of up to two weeks. A total of 10,200 square feet of buildings are estimated for each center.

Construction or improvement of approximately 100 miles of rural roads is included in the project to connect the operational centers to the existing road network and to the most important coffee producing communities.

Procurement of vehicles required to assure transport of central office and operational personnel is included, as is procurement of office and special equipment required for the functioning of the centers.

The proposed program will assist in financing the dollar and local costs of consulting services, construction contracts, and procurement of equipment materials and hand tools.

AID will finance approximately \$1,000,000 of the costs of the above program. The GOH will contribute approximately \$1,050,000 as a cash contribution to the support of these activities over the five years of the program. In addition, the GOH will continue to make available the present recurrent budgetary resources now provided to IHPCADE.

2. The strengthening and capitalization of a rural credit system; using the value of the fertilizer as an initial capitalization, plus annual GOH cash contributions, a revolving fund will be created within the Bureau of Agricultural Credit (BCA).

AID will finance approximately \$5,100,000 of the costs of this program. The GOH will contribute approximately \$950,000 towards the capitalization and expanded operations of the BCA, in addition to the present GOH budgetary resources now provided BCA annually.

Following the pace of the fertilizer program requirements shown in Table 2, total credits of \$26million are estimated to be made over the next ~~ten~~ years. (see Table 3)

A complete description of the credit system proposed is contained in Section H-3 Part Four (Implementation Plan)

Procurement of vehicles required to assure mobility of BCA central office and regional offices is included, as is procurement of office and special equipment required for the proper functioning of a nationwide credit system.

F. Farmer Training

This element of the project will seek to involve farmers in training courses at the regional operations centers in the subject matter of coffee technology and cooperative formation and management. Transportation and daily living expenses will be paid to the participants. No firm estimate is available as to how many farmers will be directly reached by these courses, but it is anticipated to be at least 5,000 over the life of the project.

The GOH will contribute approximately \$86,000 to this activity.

G. Price Stabilization

An important element of the program involves the provision of a mechanism to assist the farmer in marketing his product at a fair price. The need for a stabilization fund, and an appropriate mechanism to both capitalize and operate such a system. was investigated thoroughly in the intensive review. (See Section A, Part IV) The conclusion

TABLE 3

TOTAL CREDITS - 10 YEARS

<u>Years</u>	<u>Total Credits</u> <u>\$</u>	<u>Total Farmers Covered</u> <u>Ea. Yr.</u> <u>(1 Farmer/</u> <u>1 ha.)</u>	<u>Est. No. of</u> <u>Groups (cumulative)</u> <u>(15 ea.)</u>	<u>Average Size of Loan</u>	
				<u>Farmer \$</u>	<u>Group \$</u>
1	108,186	1917	128	56	845
2	332,781	4474	298	75	1116
3	852,784	7031	468	121	1822
4	1,694,755	9588	639	176	2652
5	3,084,755	12778	851	241	3624
Sub-					
Total	6,073,261	NA	NA	NA	NA
6	2,675,939	12778	851	209	3144
7	3,604,311	12778	851	282	4235
8	3,892,612	12778	851	304	4574
9	4,567,454	12778	851	357	5367
10	5,193,493	12778	851	406	6102
Sub-					
Total	19,933,809				
<hr/>					
Ten-Year Totals:					
<u>26,007,070 12778</u>					

reached was that such a system was desirable, but that insufficient information existed at this time to warrant inclusion in the financial plan. The need for a more elaborate study on the subject during the first year of the program, leading to specific recommendations, has been included as a covenant for action in the first year's activities under the loan. The GOH has agreed, and indeed welcomed the suggestion, to carry out this study. Suggested terms of reference are included as Annex IV.

H. GOH Contribution

The GOH contribution to the project will be in the form of annual cash contributions to a special joint GOH/AID counterpart fund account in the Banque Nationale des Republique d'Haiti (BNRH). These funds will be programmed, on an annual basis, to support the objectives of the project. Section F-2 Part Four (Financial Analysis) provides a more complete description of the proposed operations of this fund.

I. Relationship of Program to Haitian Goals

The National Planning Agency (CONADEP) proposes in their current development plan (1972-1976), a detailed five-year plan designed to increase the quantity and quality of coffee produced in the Republic. This project is designed to assist in the implementation of their plan.

J. Assumptions on Future World Coffee Prices

World market prices which declined almost continuously from the mid 50's to the early 60's have recovered somewhat in the late 60's and increased dramatically since mid - 1972. (See Graph I). This reversal in the trend of declining prices is closely associated with the changed statistical position of the supply of coffee. The chronic over-production and over-supply of coffee which depressed the markets up to the mid 60's, has given way to a situation where most of the surplus stocks have been drawn down to a level which the trade views as being barely adequate to compensate for possible deficient crops. World production in crop year 1973/74 is expected to be almost exactly the same as the average production for the 1964-65-1968-69 years taken as an average. Over the last 10 years production has actually fluctuated considerably. A recent frost occurred in Brazil in 1972 and the possibility of another frost hitting Brazil before that country is able to restore its full production capacity can not be excluded. The uncertainty of supply over the following 4 to 5 years together with the recent world-wide rate of inflation appear to be sufficiently good indicators to permit the assumption that the likelihood of a serious decline in world market prices is not likely in the immediate future. On the contrary, were the coming harvest of coffee insufficient to meet world demand, for example the result of a frost in July/August

1974 or 1975, there appears every likelihood that prices would continue to rise. It should be noted in passing, that to date the rise of coffee prices on the world market has been less dramatic than for a good many other agricultural commodities such as cocoa, cotton, soy beans, rubber, palm oil, sugar, etc. In terms of unit value, US imports of Haitian coffee in 1973 were 48.8 cents per pound, as compared to 42 cents per pound in 1960.

Current (April 1974) export prices for coffee from Haiti fluctuate between 84 and 90 US dollars per 60 kilos (equivalent to 65 cents and 68 cents/lb) depending on quality. Although it is, for obvious reasons, extremely difficult to predict prices for the next 10 years with any degree of accuracy, it might be considered that given the current and medium terms supply/demand positions as well as the continuous inflationary trend in world commodities, a valid working hypothesis for projecting export prices of Haitian coffee up to the mid-80's may consist in assuming that yearly average prices will be equal to the current (Jan-April 1974) average export price of \$80 per 60 kilos. It is this assumption which has been retained for almost all calculations on the profitability and cost/benefit ratios of the project. For selected calculations in the Micro-Economics of production section, an 8% annual coffee price increase was used.

PART FOUR - PROJECT ANALYSIS

A. The Coffee Sector

1. History.- After its introduction during the eighteenth century, coffee rapidly became a crop of first importance in the then French Colony of Saint Domingue, which soon became one of the chief exporters of this commodity in the world. Towards the end of the colonial period exports reached about 640,000 sixty kilos bags per year. Following the upheaval caused by the War of Independence and the subsequent economic and political problems, coffee production declined considerably and the exports of the new state of Haiti are estimated to have dropped to 410,000 bags. This figure gradually increased to nearly 500,000 bags in the 1890's. Throughout the first half of the present century, exports have averaged less than 400,000 bags. In recent years they decreased steadily to slightly over 300,000 bags. The most recent quota allocated by the International Coffee Organization is 490,000 bags, which has never been attained. Local consumption is now estimated at about 230,000 bags, and increases annually in relation to the increase in population.

Given Haiti's location in the Caribbean, production has also historically been affected by the fact that a large part of the coffee belt is located in the normal path of hurricanes, three of which have destroyed many trees in recent years. However, the level of production, and the great fluctuations which exist from year to year are actually a direct consequence of the low level of technology employed.

2. Yields.- Yields are among the lowest in the world. They are estimated at 250/270 K/Ha, whereas in many countries they reach an average of 1000 K/Ha. The production potential of the crop is indicated by the fact that under optimum conditions yields of 3000 to 4000 K/Ha have been obtained.

The low yields of coffee in Haiti are due to a series of factors:

- a. the excessive shade used in most plantings;
- b. the lack of care given to trees due to lack of incentive as often farmers receive a very low price for their commodity; (many other countries provide price supports for coffee)
- c. the loss of soil fertility due to erosion and lack of fertilizer applications;
- d. the general use of a low producing strain of arabica coffee;

3. Marketing.- The internal and external marketing of coffee, which is carried out entirely by the private trade, is basically governed by a law first passed in 1942 called the "Coffee Code". This code has been modified on a number of occasions to meet the needs of the moment.

Traders, locally known as "speculateurs", buy the coffee directly from the producer in authorized market places. They are licensed by IHPCADE after inspection by a government official of their warehouse and coffee drying facilities. The licence is valid for only one market place and one coffee year (1). Buying of coffee is only authorized during daylight in approved markets. Most of the coffee is sold by the producer in the form of hulled but ungraded green bean, known as café "pillé" or "maison". Few farmers sell their coffee as dry cherry, i.e. before removal of the dried outer skin.

In places where pulping stations are operated, farmers may sell their coffee in the form of fresh cherry. Because of the dead weight of fresh cherries (approximately 6kg fresh cherries are equivalent to 1kg of clean coffee), such deliveries are only made to nearby pulperies which are either operated by licenced traders, exporters or by cooperatives. Special licences are required to operate pulping centers. Washed coffee represents only between 14 and 18 percent of exports.

Traders often advance money on the harvest and so act as suppliers of credit between producers and exporters. Rates of interests are said to be very high (2). 815 "Speculators" were licensed in coffee year 1972 - 73. An unknown but reportedly growing number of producers are organized in small groups of pre-coops and cooperatives whose main aim is to produce washed coffee. Cooperatives endeavour to sell most of their crop directly to exporters.

During the main harvesting season competition is generally fierce and prices paid to producers generally exceed the recommended minimum price set by IHPCADE. The minimum price is transmitted almost daily to the market inspectors and field staff. In between seasons, however, competition is reduced considerably with the consequence that producers are not always able to sell their coffee at the minimum price recommended by IHPCADE. Market inspectors of IHPCADE are responsible for collecting and transmitting to the Port-au-Prince headquarters monthly data on quantities bought and sold as well as on prices paid to producers and prices received by traders. The 110 inspectors of IHPCADE also supervise the movement of coffee from the buying centers to the exporters. Special authorizations are needed by the trader to move his coffee to the export centers. The financing for the crop is provided by private banks through exporters. Lending by exporters to traders is generally carried out without interest.

(1) Harvesting starts in September and extends to December/January. The main buying season takes place between October and March.

(2) Up to two percent per week.

In 1972/73 the number of licensed exporters numbered 26 of whom the first three most important shared almost 50 percent of the market. Most of the large exporters are also owners of coffee mills. Coffee "pillé" or "maison" purchased from the farmer through the trade often needs to be redried on patios prior to cleaning and grading. Quality and grades are regulated by law and are controlled prior to shipment by the staff of a specialized department of the IHPCADE. Exports are controlled by IHPCADE. Between 1 October, 1963 and 30 September, 1973, exports were subject to quota restrictions as imposed by the International Coffee Organization of which HAITI is a member. Due to the declining trend in production, Haiti has not been able to fill its quota. Total shortfalls over the period amounted to just under 800,000 bags representing approx. 20 percent of the cumulative quotas covering the period 1963/64 to 1971/72. Presently exports are not subject to quotas. Exporters are under the obligation to register their sales contract with the IHPCADE prior to export. If the contract price is considered too low, IHPCADE has the authority to resell the coffee to a higher bidder for and on account of the exporter.

Export prices follow world market prices and are directly influenced by the "C" Contract on the N. Y. future market and by the Arabica London terminal market.

About two thirds of the coffee exported by Haiti is imported by EEC countries. The US, however, has recently become the largest single buyer, importing between 25 and 33 percent of Haiti's crop.

4. Land tenure and size of holdings.- Land tenure patterns are hard to establish due to the fact that many people who occupy the land do not possess legal titles of property. However, according to the 1950 Census about 85 percent of Haitian farmers owned the land on which they worked whereas the remaining were tenants, overseers, or share-croppers. No figure is available for coffee producers only but it is thought that the percentage of ownership may be slightly lower in this sector.

The coffee farms are exceedingly small. According to the 1950 Census 15 percent of the farms were less than 0,6 ha, 19,4 percent from 0,6 to 1,3 ha, 30,6 percent from 1.3 to 2,6 ha, and 23,9 percent from 2.6 to 6.0 ha. Only 11.1 percent had more than 6 ha. It should be stressed that coffee farms in this context mean farms where coffee is grown in substantial amounts but where some of the land may still be occupied by other crops or trees.

Due to division of properties following death of the owners, it may be assumed that the size of the farms is significantly lower in 1974 than in 1950.

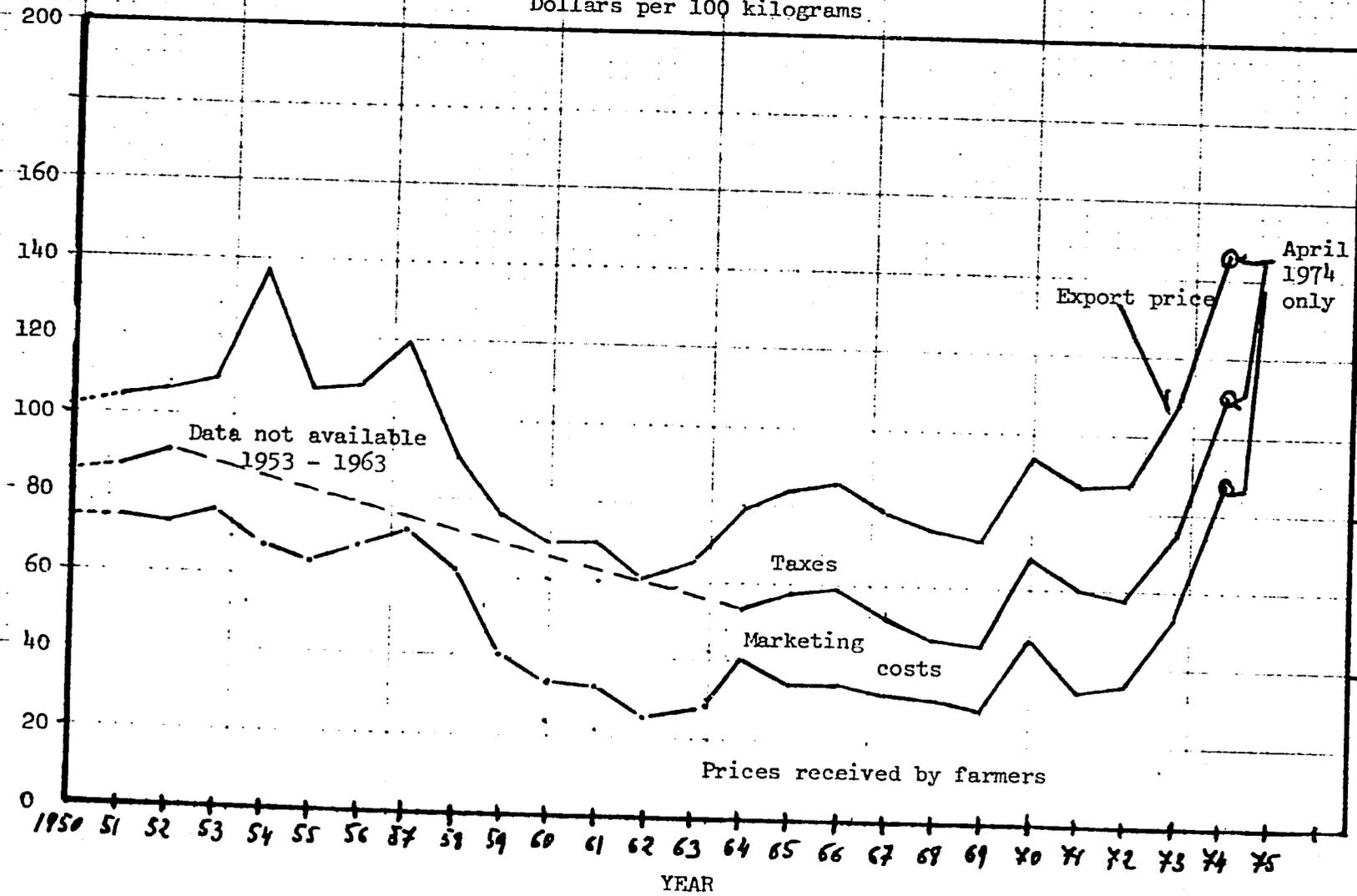
5. Analysis of Export and Producers Prices.- Because the marketing of coffee in Haiti both for export and domestic trade is carried out under a free market system through private traders and exporters, prices paid to producers have been affected not only by fluctuations of the price of coffee on the world markets but also by internal factors such as taxes levied on coffee, marketing costs, and profit margins of the trade. Thus, whereas world market prices declined by 42 percent from 47.1 cents per pound in 1952 to 27.2 cents in 1961, prices paid to producers declined from 33.5 cents to 10.0 cents over the same period representing a fall of over 70 percent. Export prices again declined between 1970 and 1971 by 10 percent whereas producers prices declined by as much as 34 percent. The proportionally higher decline for producers prices in comparison with export prices is partly due to the fact that until August 1973, the Government was levying a specific tax on coffee, irrespective of its export value. In addition, because traders margins are largely made up of fixed costs such as transport, grading and buying costs, the traders' share increases as world coffee prices decline. The long term interaction of export prices, taxes, and margins of traders on producer prices is shown in Table 3-A as well as in supporting Graphs I and II. (Note: The intermediaries share has been calculated as a residual and thus it contains any "errors and omissions".)

GRAPH I

HAITI: COFFEE PRICES RECEIVED BY FARMERS, MARKETING COSTS AND TAXES, SELECTED YEARS.

Dollars
200

Dollars per 100 kilograms

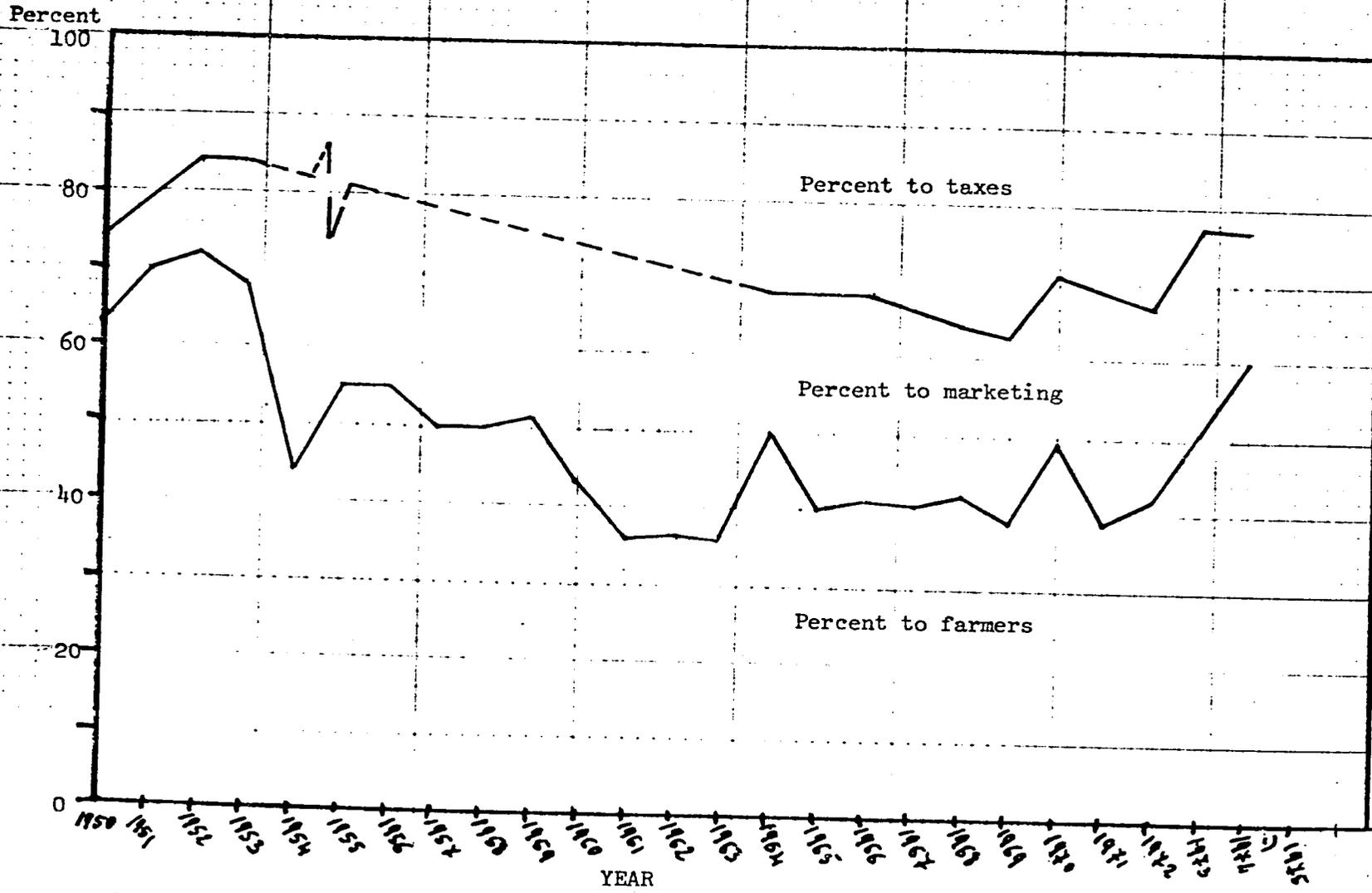


Source: IIPC/CADE

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GRAPH II -

HAITI: PERCENT OF COFFEE EXPORT PRICE TO FARMERS,
MARKETING, AND TAXES, SELECTED YEARS.



Source: IHPCADE

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Table 3-A. Distribution of returns from Coffee exports
(in U.S. cents per pound)

Calendar Years	Export Price Fob (1)	Taxes		Intermediaries <u>1/</u>		Producers	
		Amount (2)	Share (3)	Amount (4)	Share (5)	Amount (6)	Share (7)
1950	46.2	7.4	16	5.3	12	33.5	72
1951
1952	47.1	7.6	16	6.0	13	33.5	71
1953	48.9	7.9	16	8.0	16	33.0	67
1962	27.2	11.7	43	5.5	20	10.0	37
1963	29.0	11.7	40	5.9	20	11.4	40
1964	36.3	11.7	32	6.4	18	18.2	50
1965	38.1	12.1	32	10.5	28	15.5	40
1966	38.5	12.1	32	10.5	27	15.9	41
1967	35.8	12.1	34	9.1	25	14.6	41
1968	33.5	12.1	36	7.3	22	14.1	42
1969	32.5	12.0	37	8.0	24	12.8	39
1970	43.5	12.3	29	9.7	22	21.5	49
1971	39.4	12.3	31	13.0	33	14.1	36
1972	39.9	12.4	31	11.0	27	16.5	42
1973	48.9	13.2	27	10.9	22	24.8	51
1974 <u>2/</u>	63.4	15.4	24	10.3	16	37.7	60

1/ Exporters and dealers

2/ January - April 74

Source: Plan Caf  ier National - updated by the intensive review team.

This Table and its supporting graphs confirm that in periods of low world market prices the producers' margins tend to be reduced proportionally more than the export price. Thus in the early 50's when prices were relatively high, producers received over 70 percent of the export price, whereas in the period of low prices of the early 60's their share declined to 36 percent. As export prices rose in the late 60's and in the early 70's, the producers share again improved substantially. At today's prices (May 1974) producers receive approximately 60 percent of the export price, a share which is their highest in 20 years.

As shown in the summary table below, the combination of export prices and factors affecting trade margins and taxes have had a disturbing influence on producers prices in the last 24 years:

<u>Producers Prices</u>		
(in US \$/lb)		
<u>Selected Years</u>	<u>Producers Price</u>	<u>Index 1950 = 100</u>
1950	33.5	100
1962	10.0	30
1964	18.4	55
1966	15.9	48
1968	14.1	42
1970	21.5	64
1972	16.9	50
1974	37.7	113

During the early 60's the producer price was less than 1/3 that of the early 50's. In the mid 60's prices represented, on an average, 50 percent of those prevailing in the early 50's, while today they exceed the latter by 13 percent. The wide fluctuations in prices of coffee at farm level have resulted during the late 50's and the whole of the 60's, in unstable and generally declining farm revenues. This in turn has acted as a disincentive to farmers to improve and expand production. As a result of this factor and the continued expansion of locally consumed coffee as population has increased, there was a declining trend of exports between 1951/52 - 1954/55 and 1967/68 - 1970/71.

Four Year Average Exports (in 000 bags)

		<u>Index</u>
		(1951-54 = 100)
1951/52 - 1954/55	441.3	100.0
1955/56 - 1958/59	416.2	94.3
1959/60 - 1962/63	429.8	97.3
1963/64 - 1966/67	359.4	81.4
1967/68 - 1970/71	316.6	71.7
1971/72 - 1972/73 (1)	360.7	81.7

A comparison of annual exports from 1963/64 to 1972/73 shows that the total shortfalls for the 9 years during which quotas were enforced by the ICO amounted to just under 800,000 bags, representing 20 percent of Haiti's permitted exports (see Table 4). This amount represents a value of \$41.0 million US dollars.

The paragraphs which follow review in more detail the behaviour of export prices, taxes, and marketing costs and their effect on the producers prices.

The analysis demonstrates that variations in world market prices constitute the most important single factor affecting prices received by growers for their product. Haiti's share in total world exports being only 0.8 percent, the country obviously is not in a position to support world market prices. This task can only be organized at the international level. Although member countries of the International Coffee Agreements of 1962 and 1968 endeavoured to stabilize prices at a level which is fair to producer and consumers alike, market forces and speculative positions taken by world coffee traders still generate important year to year and intra-seasonal fluctuations. Table 5 compares the average annual export prices for the coffees of the "Other Milds Group" (in which the coffee of Haiti is classified) with average annual price for coffee exports of Haiti. The Table shows that

(1) 2 year average.

Table 4

HAITI
COMPARISON OF REPORTED EXPORTS TO QUOTA MARKETS
AND EFFECTIVE QUOTA
(60-kilo bags)

	Effective Quota	Exports	Difference
1963/64	514,836	364,182	150,654
1964/65	392,641	381,282	11,359
1965/66	411,105	407,432	3,673
1966/67	386,548	282,783	103,765
1967/68	442,983	324,972	118,011
1968/69	409,142	308,156	100,986
1969/70	452,684	274,801	177,883
1970/71	420,948	358,438	62,510
1971/72	463,581	397,899	65,682
1972/73	--	323,445	--

Source: International Coffee Organization

Table 5.- Average annual unit value of coffee exports (Fob) 1/ of exporting members of the "OTHER MILDS" group of the ICO* and of Haiti (in US cents per pound)

Coffee Year	OTHER MILDS		HAITI	
	Unit Value (1)	Percentage variation over previous year (2)	Unit Value (3)	Percentage variation over previous year (4)
1963/1964	38.97	-	35.61	-
1964/1965	43.55	+ 11.8	39.82	+ 11.8
1965/1966	41.53	- 4.7	39.04	- 2.0
1966/1967	38.30	- 7.2	35.71	- 9.5
1967/1968	34.42	- 10.2	33.34	- 6.6
1968/1969	34.81	+ 1.2	32.78	- 1.7
1969/1970	45.94	+ 31.9	43.41	+ 32.3
1970/1971	42.75	- 6.2	39.56	- 8.8
1971/1972	41.04	- 4.1	39.71	+ 0.4
1972/1973	na		48.92	+ 23.2
1973/1974	na		56.60 ²⁾	+ 15.7

* International Coffee Organization

1) All forms to all destinations

2) average October 73 - December 73 (provisional)

Note: The unit values shown in this Table differ slightly from those given in Table 3-A. The differences are due to the fact that the values in Table 3-A refer to calendar whereas those shown in Column (3) above refer to coffee-year.

during the period 1963/64 - 1972/73, coffee export prices of Haiti have closely followed world prices. During that period, prices have fluctuated by as much as 30 percent between years, while quarterly variations of over 25 percent have also been recorded (see Table 6). As already stated, fluctuations in world market prices appear to constitute the single largest factor responsible for the wide variations in producer prices. However, taxes and marketing margins also influence prices as is demonstrated below.

6. Taxation.- Until August 1973, coffee taxes were levied on a fixed specific basis. Such a tax had a regressive effect as is shown in the table below:

Tax Schedule Applied Prior to 3 August 1973

Fob Price		Specific Tax ¹⁾	Value after tax	Tax as percent of F.O.B.
US \$/lb	G/60 kilo			
30	200	87.1 (2)	112.9	43.5
37 ½	250	87.1	162.9	34.8
45	300	87.1	212.9	29.0
52 ½	350	87.1	262.9	24.9
60	400	87.1	312.9	21.7
67 ½	450	87.1	362.9	19.4
75	500	87.1	412.9	17.4

During the period of declining export prices of the 60's, taxes levied by the GOH had a considerable regressive effect on producers prices. Taxes increased from 32 percent of the export price in 1962 to 37 percent in 1969. Since August 1973 however, the GOH has adopted a new tax schedule. The new tax is a combination of specific and ad valorem taxes, and its weight as a percentage of the export price increases in the middle range of prices (\$45 to \$60) and then declines. (see Table 8). Between \$45 and \$60, taxes levied on unwashed coffees rise from approximately 18 to 30 percent of the export price, whereas from \$60 to \$75 taxes as a percentage of the export price decline from approximately 30 to 24 percent. All coffee exported at a price in excess of \$75 is taxed at a uniform rate of either 19 or 24 percent, depending on the quality of the coffee. Washed coffees are taxed at a lower rate than unwashed coffees or broken as an incentive to export the best qualities and to consume locally the lower grades.

(1) as at January 1973

(2) equivalent to 13.1 cents per pound

Table 6

HAITI: Quarterly unit values of coffee exports
(in US cents per pound)

Coffee Year Quarters	1969/1970	1970/1971	1971/1972	1972/1973	1973/1974
Oct - Dec	39.2	43.0	37.2	46.7	54.2 ¹⁾
Jan - Mar	42.3	40.2	38.6	47.7	60 ¹⁾
Apr - June	46.8	38.7	39.9	51.7	
Jul - Sept	49.2	37.2	45.1	54.2	
Average Oct - Sept	43.4	39.6	39.7	48.9	56.3 ²⁾
INDEX					
(First Quarter of each coffee year = 100)					
Oct - Dec	100.0	100.0	100.0	100.0	100.0
Jan - Mar	107.9	93.5	103.8	102.1	119.7
Apr - June	119.4	90.0	107.2	110.7	
Jul - Sept	125.5	86.5	121.2	116.0	

1) provisional

2) average Oct. 73 - March 74

Source: International Coffee Organization

Under the previous tax schedule the GOH was guaranteed a fixed revenue of 13.2 cents per pound, irrespective of the export price. Under the current system the revenue is directly related to the value of exports (see Table 5).

Table 9 gives a comparison of the weight of the coffee tax in relation to the export price for the old (specific) tax and new (prorata) tax schedules. The Table shows that at the lower range of export prices (30¢ per pound) the ad valorem tax is half the tax which was levied under the old (specific) tax schedule. At the higher range of prices (above 50¢ per pound) the ad valorem tax is generating more revenue than the specific tax would have raised. Thus, while the change over from the specific tax to the ad valorem tax system constitutes an important step taken by the GOH towards reducing the tax burden of growers at the lower prices range, the new ad valorem tax has at the level of 60¢ per pound the effect of moderating the increases in producers prices while at the same time generating government revenues higher than those it would have received under the specific tax system as is shown below:

Export Value		Tax levied in G per 60 kilo bag		
US ¢/lb (1)	G/bag (2)	Specific tax (3)	Ad valorem tax (4)	Additional tax per bag (4) - (3)
45.75	300	87.1	90.0	2.9
60.60	400	87.1	96.0	8.9
75.75	600	87.1	120.0	32.9

On the assumption that the average annual unit value of coffee exports during coffee-year 1973/74 will be .60¢ per pound, the additional revenue generated by the new coffee tax in comparison with the revenue which would have been levied if the old (specific) tax schedule had still been in force, can be estimated at \$667,500 for exports

Table 7 - Revised Coffee Tax Schedule (as from 3 August 1973)
 - in US\$ per 60 kilos -

Export Price	Tax Rates	
	Washed	Unwashed and Broken
Less than 45.00	US \$4.6	US \$8.6
From 45.01 to 46.00	" - 1%	" - 1%
46.01 to 47.00	" - 2%	" - 2%
47.01 to 48.00	" - 3%	" - 3%
48.01 to 49.00	" - 4%	" - 4%
49.01 to 50.00	" - 5%	" - 5%
50.01 to 51.00	" - 6%	" - 6%
51.01 to 52.00	" - 7%	" - 7%
52.01 to 53.00	" - 8%	" - 8%
53.01 to 54.00	" - 9%	" - 9%
54.01 to 55.00	" - 10%	" - 10%
55.01 to 56.00	" - 11%	" - 11%
56.01 to 57.00	" - 12%	" - 12%
57.01 to 58.00	" - 13%	" - 13%
58.01 to 59.00	" - 14%	" - 14%
59.01 to 60.00	" - 15%	" - 15%
60.01 to 75.00	14 US\$	18 US \$
over 75	19% of export value	24% of export value

Table 8 - Current Coffee Tax on Natural (unwashed) Coffee
(in US \$ per 60 kilos and in percent)

Export Price (Fob)	Tax levied (in dollars)	Tax as Percent of Export price
45.00	8.60	18.2
47.50	10.03	21.1
50.00	11.10	22.2
52.50	12.80	24.4
55.00	14.10	25.6
57.50	16.08	27.9
60.00	17.60	29.3
62.50	18.00	28.3
65.00	18.00	27.7
67.50	18.00	26.6
70.00	18.00	25.7
75.00	18.00	24.0
80.00	19.20	24.0
Over 85.00	20.40	24.0

Table 9 - Comparison between tax levied prior to 3 August 1973 and current tax on natural coffee (in US ¢ per pound)

Export Price US ¢/lb	Tax levied 1/		Tax as percent of export price	
	prior to 3-8-73	current tax	prior to 3-8-73	current tax
30	13.2	6.5	44.0	21.6
40	13.2	9.7	33.0	24.2
50	13.2	13.6	26.4	27.2
60	13.2	14.4	22.0	24.0
70	13.2	16.8	18.8	24.0
80	13.2	19.2	15.4	24.0

1/ washed coffee was and is still taxed at a slightly lower rate.

estimated at 375,000 bags. Part of this additional revenue might be usefully earmarked for re-investment in coffee for the modernization and rationalization of the coffee industry and/or for the capitalization of a coffee price stabilization fund. Under the current tax allocation system, a fixed amount of 1.2¢ per pound is returned to the coffee sector (see Table 10). At the going price of approximately 65¢ per pound (April 1974), this represents less than 2 percent of the export value. It appears not unreasonable to suggest, therefore, to the GOH that the tax refund to the coffee sector -- or allocations of government revenue -- be increased in value and the proceeds thereof be set aside and directed towards improvement of the industry, and/or the stabilization of coffee prices in the internal market, and/or the strengthening of IHPCADE and BCA.

7. Margins of Intermediaries.-- According to the figures shown in column (4) of Table 3-A the trade margin has fluctuated considerably in the period 1962 to 1974, varying from a low of 5.5¢ or 20 percent of the export value in 1962 to 13.0¢, or 33 percent of the export price in 1971. On an average, traders' margins account for 20 to 25 percent of the export price. For 1974 however, the trade margin is provisionally estimated at 16 percent. Attention should be drawn, however, to the fact that the marketing costs and profit margins of intermediaries are derived figures obtained by deducting from the export price the sum of taxes and prices paid to producers and are, therefore, subject to serious reservations. No satisfactory explanation appears to exist for the substantial increases in marketing costs between 1965 and 1966, on the one hand, and between 1970 and 1971, on the other. More detailed analysis of the distribution of coffee income between the various sectors involved will be required before meaningful conclusions can be reached on the real cost of marketing and on the appropriateness of the costs charged by the private trade for their services. It was impossible to obtain basic information from the GOH coffee authorities on past and current breakdown of average marketing costs and profits from farmers to the point of export. In this connection it is important that the GOH give consideration to strengthening the department of marketing of IHPCADE by establishing an economic research unit which would inter alia carry out periodic reviews of the various factors affecting the prices paid to producers. This would enable the GOH to have available all pertinent facts prior to the implementation of measures to ensure that farmers receive a fair share of the export price.

Table 10

Current Distribution of the Proceeds of the Coffee Tax on Natural Coffee
(in gourdes per 60 kilo bags)

1. Fob Value (¢/lbs)	<u>30.30</u>	<u>45.75</u>	<u>60.60</u>	<u>75.75</u>
" " (\$ per bag)	40	60	80	100
" " (G per bag)	200	300	400	500
2. Tax due	43.00	90.00	96.00	120.00
Tax in percent of Fob value	21.5	30.0	24.0	24.0
3. Distribution of Coffee Tax:				
3.1 Special allocations coffee sector	<u>6.80</u>	<u>7.80</u>	<u>7.80</u>	<u>7.80</u>
2)				
- IHPCADE	5.25	5.25	5.25	5.25
- Coffee development fund	1.00	2.00	2.00	2.00
- international contri- butions	0.55	0.55	0.55	0.55
3.2 Other special allocations	<u>36.20</u>	<u>37.45</u>	<u>37.45</u>	<u>37.45</u>
3)				
- BNRH	20.00	20.00	20.00	20.00
- Public debt sinking fund	15.00	15.00	15.00	15.00
- "Electricité Périlieu" 4)	-	1.25	1.25	1.25
- ONAAC	1.20	1.20	1.20	1.20
3.3 Total special allocations (3.1 - 3.2)	<u>43.00</u>	<u>45.25</u>	<u>45.25</u>	<u>45.25</u>
3.4 Balance to GOH - net fiscal revenue	0	44.75	50.75	74.75

Source: Worksheets

- 1) Natural coffee represents between 83 to 87 percent of total exports.
- 2) Institut Haitien de Promotion de Café et d'Autres Denrées d'Exportation.
- 3) Banque Nationale de la République d'Haiti.
- 4) Office National d'Alphabétisation et d'Action Communautaire.

8. Intraseasonal Fluctuations of Producers Prices.- Annual averages at producer prices conceal important month to month variations. An analysis of monthly prices paid to producers is therefore in order. Table 11 gives monthly prices for Cap-Haitien 1/. The range between which price have fluctuated in Cap-Haitien since 1967/1968 is shown below together with the annual percentage variation:

<u>Monthly Producers Prices</u> (in G per pound)				
<u>Coffee Year</u>	<u>Average</u> (1)	<u>High</u> (2)	<u>Low</u> (3)	<u>Percent of</u> (3) to (2)
1967-68	0.77	0.98	0.60	63.6
1968-69	0.71	0.81	0.62	30.6
1969-70	1.22	1.50	0.98	53.0
1970-71	0.80	1.10	0.65	69.2
1971-72	0.96	1.15	0.82	40.2
1972-73	1.37	1.71	1.12	52.7
1973-74 <u>2/</u>	1.76	2.00	1.50	33.3

Thus, the low price for a year compared with the price for that some year has ranged from 31 to 69 percent. These figures should, however, not be taken at their face value because the marketing of coffee is concentrated during a period of 4 to 5 months. Although insufficient data have been analyzed to reach definite conclusions as to the real impact on producers income of fluctuating monthly prices, it appears that because of the lack of competition at the beginning and at the end of the harvest seasons prices paid by traders are somewhat lower during the opening and closing stages of the marketing season. This may account for the wide variations in monthly prices paid, variations which can not be directly related to changes in export prices as is shown in Table 12 and in Graphs III and IV.

In an attempt to prevent producers from selling their coffee to traders at prices below the normal market value, IHPCADE operates a system of recommended prices based on world market quotations. These prices are given wide publicity through IHPCADE's network of district offices. IHPCADE has, however, not applied the provision _____ of its statute which gives it the authority to fix, in agreement with the Ministry of Commerce and Industry, compulsory minimum prices to producers. It is evident, however, that any attempt

1/ Cap-Haitien is the largest market representing on an average 36 percent of all coffee purchases in Haiti.

2/ 6 months only.

Table 11

1)
Average monthly prices paid to producers in the district of CAP-HAITIEN
 (in gourdes per pound)

Oct/Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average Oct/Sep	Range	
														High	Low
1967/68	0.67	0.73	0.75	0.77	0.85	0.95	<u>0.98</u>	0.82	0.80	0.72	<u>0.60</u>	0.70	0.77	0.98	0.60
1968/69	0.71	0.75	0.75	<u>0.81</u>	0.80	0.80	0.70	0.63	0.70	0.70	0.62	<u>0.62</u>	0.71	0.81	0.62
1969/70	<u>0.98</u>	1.00	0.98	1.16	1.25	1.36	1.45	1.40	<u>1.50</u>	1.40	1.05	1.12	1.22	1.50	0.98
1970/71	<u>1.10</u>	0.85	0.75	0.76	0.80	0.80	0.80	0.81	0.82	0.75	<u>0.65</u>	0.76	0.80	1.10	0.65
1971/72	0.85	0.83	0.86	<u>0.82</u>	0.87	0.95	0.96	1.00	1.04	1.11	1.10	<u>1.15</u>	0.96	1.15	0.82
1972/73	<u>1.12</u>	1.21	1.28	1.27	1.31	1.70	1.68	1.22	1.70	<u>1.71</u>	1.63	1.63	1.37	1.71	1.12
1973/74	<u>1.50</u>	1.62	1.75	1.80 ^{c)}	1.90 ^{c)}	2.00 ^{c)}							1.76 ²⁾	2.00	1.50

Source: IHPCADE

- c) estimates by Mission
- 1) for ungraded unwashed coffee
- 2) 6 months average

Table 12. Monthly Distribution of Coffee Income, 1970/71 to Dec. 1973 - in US\$ per 60 kg bags

Month	1970/71				1971/72				1972/73				1973/74			
	Export price fob	Tax	Marketing margin 1)	Prod. Price	Export price fob	Tax	Marketing Margin 1)	Prod. Price	Export Price fob	Tax	Marketing Margin 1)	Prod. Price	Export price fob	Tax	Marketing Margin	Prod. Price
October	63.5	17.4	20.2	25.9	48.0	17.4	11.4	19.2	61.1	17.4	17.3	26.4	70.5	18.0	15.8	36.7
November	59.8	17.4	22.5	19.9	50.0	17.4	12.2	20.4	61.5	17.4	15.5	28.6	71.8	18.0	15.7	38.2
December	56.0	17.4	21.1	17.5	49.2	17.4	10.0	21.8	61.7	17.4	16.0	28.3	72.7	18.0	14.9	39.9
January	53.6	17.4	17.7	18.5	49.9	17.4	11.9	20.6	62.0	17.4	13.9	30.7				
Feb.	53.6	17.4	17.8	18.5	53.0	17.4	14.7	20.9	62.5	17.4	12.0	33.1				
March	52.6	17.4	16.0	19.2	50.7	17.4	8.8	24.5	65.2	17.4	11.6	36.2				
April	53.1	17.4	15.8	19.9	52.0	17.4	11.1	23.5	65.0	17.4	11.9	35.7				
May	50.5	17.4	12.9	20.2	52.6	17.4	12.0	23.3	68.6	17.4	15.6	35.5				
June	50.9	17.4	13.0	20.4	54.1	17.4	13.1	23.5	71.4	17.4	18.8	35.2				
July	49.1	17.4	14.2	17.5	55.3	17.4	15.1	22.8	72.1	17.0	19.5	35.2				
August	49.1	17.4	15.6	16.1	57.8	17.4	15.9	24.5	70.8	18.0	16.1	36.7				
Sept.	50.5	17.4	15.1	18.0	64.2	17.4	20.9	25.9	71.6	18.0	17.6	36.0				
								In Percent								
October	100	27	32	41	100	36	24	40	100	29	28	43	100	26	22	52
November	100	29	38	33	100	35	24	41	100	29	25	47	100	25	22	53
December	100	21	38	31	100	35	20	45	100	28	26	46	100	25	20	55
January	100	32	33	35	100	35	24	41	100	28	22	50				
Feb.	100	33	33	34	100	33	28	39	100	28	19	53				
March	100	33	30	37	100	34	18	48	100	27	18	55				
April	100	33	30	37	100	33	27	45	100	27	18	55				
May	100	34	26	40	100	33	23	44	100	25	23	52				
June	100	34	26	40	100	32	24	44	100	24	26	50				
July	100	35	29	36	100	32	27	41	100	24	27	49				
August	100	35	32	33	100	30	28	42	100	25	23	52				
Sept.	100	35	30	36	100	27	33	40	100	25	25	50				

1) derived by deducting reported producers' prices and taxes from average Fob export prices.

GRAPH III -

COFFEE PRICES RECEIVED BY FARMERS, MARKETING COSTS
AND TAXES, MONTHLY AVERAGE PRICES, OCTOBER 1970
THROUGH DECEMBER 1973, HAITI

Dollars

(Dollars per 60 kilograms)

Cents
per pound
15.8

100

80

60

40

20

0

Export price

Taxes

Marketing costs

Prices received by farmers

60.6

45.4

30.3

15.2

-35-

10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12
 1970-71 1971-72 1972-73 1973-74
 MONTHS MONTHS MONTHS MONTHS

GRAPH IV -

PERCENT OF COFFEE EXPORT PRICE TO FARMERS,
MARKETING, AND TAXES, MONTHLY AVERAGE PRICES, OCTOBER 1970
THROUGH DECEMBER 1973, HAITI

Percent

100

80

60

40

20

0

Percent to taxes

Percent to marketing

Percent to farmers

1970-71

1971-72

1972-73

1973-74

Source: IHPCADE

Coffee Year

to fix minimum prices would require on the spot supervision of market transactions. It is doubtful that IHPCADE could successfully carry out such a task under present conditions. Further study of the current marketing system and of the supervisory capacity of the IHPCADE is needed prior to determining whether or not the fixing of compulsory minimum prices would result in reducing seasonal price fluctuations at producer level.

9. Price Stabilization.- The GOH introduced in January 1966 a "coffee price stabilization tax" of \$0.33 per 60 kilo bag and made provisions for the setting up of a Coffee Price Stabilization Fund for the purpose of "taking any action required to avoid fluctuations of the export and domestic prices of coffee". The Fund, however, never became operational and the proceeds of the tax appear to have been directed to the special investment budget for coffee rehabilitation by IHPCADE. The new tax schedule introduced in August 1973 does not provide for a coffee price stabilization tax.

The fact that the GOH introduced a coffee price stabilization tax for the purpose of stabilizing both internal and external market prices does indicate that the GOH is fully aware of the need to protect producers prices in periods of low prices. It can be assumed that such stabilizing action has not been initiated for lack of adequate mechanisms and means to achieve that goal. At current market prices there is little need to support producer prices except as a measure to ensure that farmers have the possibility of selling their produce at a price commensurate with its real market value. A possible solution is that a special tax be instituted for price stabilization purposes. The table below shows the estimated annual revenues which would accrue to a fund at various levels of taxation and of exports.

Volume of Exports (000 bags)	Taxes levied at:				
	\$1 bag	\$1.50 bag	\$2 bag	\$2.58 bag	\$3 bag
350	350 000	525 000	700 000	875 000	1 050 000
375	375 000	562 500	750 000	937 500	1 125 000
400	400 000	600 000	800 000	1 000 000	1 200 000
450	450 000	675 000	900 000	1 125 000	1 350 000
500	500 000	750 000	1 000 000	1 250 000	1 500 000

It is premature to calculate the financial requirements of the fund at this early stage, since they will be a direct function of the model selected for stabilizing prices (indirect support or direct intervention), the level at which price support will be initiated and the volumes of coffee to be purchased or for which price support is required.

Considering the current market situation and the likelihood of sustained prices for the next two or three years, it may be assumed that internal price supports to compensate for declining world market prices will not be needed in the near future. However, a stand-by price support system of a marketing nature to protect farmers' revenues against restrictive practices of the trade may be needed in the near future. A decision should be taken on this matter following the completion of a comprehensive study of the current marketing structure and of all factors relevant to the operation of a mechanism for the support of prices as suggested below.

10. Considerations Regarding the Establishment of a Coffee Price Stabilization Fund.- As stated above, price and income instability appear to have been amongst the major causes of the decline of production and export of coffee in Haiti. It is therefore essential that, along with the efforts that the GOH is undertaking to revitalize the production of coffee by aiding producers to renovate and rehabilitate their coffee farms and gradual improvement of the cultivation techniques - including the use of fertilizers - steps be taken simultaneously to study means of guaranteeing coffee farmers stable and remunerative prices. It has been shown that as long as producers prices are directly linked with export prices, price stability will be difficult to achieve even if measures are taken to ensure that at all stages of the marketing process fair margins are applied. To break this link will require the establishment of a mechanism through which internal prices are isolated from or at least not directly related to world market prices.

A good many coffee producing countries are implementing pricing schemes which guarantee stable prices to their producers. The Ivory Coast, Cameroun, Togo, Malagasy Republic, Uganda and several others have established marketing boards which handle the entire crop on behalf of their governments. Coffee is purchased at minimum guaranteed prices set at the beginning of each buying season for the duration of that particular marketing year (Ivory Coast, Cameroun, Togo, Malagasy) or to be revised on an ad hoc basis (Uganda). Coffee is collected

through appointed buying agents who operate on a fee basis. Whereas some of the marketing boards are sole exporters (Uganda), others operate through the established trade. Differences between support and export prices are financed from the Board's resources. In Brazil where the coffee trade is mostly in the hand of private enterprises the Coffee Institute protects the farmer from sharp declining prices by posting a minimum guaranteed price at which level the Institute begins offering to buy any quantity which producers, traders and/or exporters are willing to sell. A similar system is operated by Colombia, Mexico, Angola, etc. Price stabilization funds are capitalized either by means of a special tax or by marketing profits. All schemes have the prime purpose of guaranteeing stable prices and adequate revenues to their coffee farmers.

Price Stabilization at Farmers Level in Haiti

This might be achieved mainly in two ways: by fixing a compulsory minimum price at which traders and exporters are under the obligation to purchase the coffee from the farmer, or by setting up in the main market places buying centers operated by or on account of IHPCADE in direct competition with the established traders. In the first case, government intervention - through IHPCADE - would be limited to refunding to the exporter the difference between the fob equivalent of the compulsory buying price and of the export price each time the latter is lower than the former. This system has the advantage of being relatively easy and simple to operate provided adequate safeguards exist to assure that coffee purchased at the time when the fob equivalent of the minimum guaranteed price is equal or above the export prices is not included in the volume of coffee qualifying for refunds by the stabilization fund. This will require daily monitoring of (a) the quantities of coffee purchased from farmers by traders and exporters and (b) of the world market prices on the basis of which the amount of the subsidy will be calculated. The system briefly outlined above only requires small amounts of manpower and budgetary funds - since stabilization is achieved by simply making compensating payments to the exporters for those coffees purchased at the compulsory minimum price exceeding free market prices. The possible alternative system of direct IHPCADE purchase will require the establishment, staffing and funding of buying centers in main market places. The choice of the system will depend on a great number of factors and considerations, including the size of funds available for stabilization purposes, the availability of experienced and well qualified personnel, investment and operating costs. In either

case, indirect purchase or direct subsidization, one of the crucial points on which high level decisions will be required relates to the setting of the floor price. In dealing with this matter consideration will need to be given to cost of production, the equilibrium price, size of the crop and medium and long term market price trends. It is clear that prior to the implementation of the price stabilization scheme, detailed studies and surveys will be necessary to assemble all data and information of technical and other nature required to facilitate the decision-making process. Detailed studies will also be needed of all legal, financial, administrative and technical aspects related to the establishment of a stabilization scheme. IHPCADE might be given a legal mandate from the Government authorizing it to buy and sell coffee in periods of crises or depressed market prices, and to finance such operations by means of the reserves accumulated in the stabilization fund. Among other technical points which deserve mention is the need to make a choice between a uniform guaranteed price applicable nationwide, irrespective of its location in relation to the main export ports, and a minimum guaranteed price which would be a function of the estimated transport costs between the point of purchase and the port of export. Consideration will also need to be given to quality, especially if IHPCADE were to operate directly on the market. Problems of logistics, such as the availability of adequate drying, warehousing and transport facilities, will also require resolution prior to implementing any scheme.

Given the complexity of the subject, and the lack of adequate knowledge about many of the points mentioned in the preceding paragraphs, it is recommended that a detailed study of the marketing sector for coffee be initiated as soon as possible. Such a study would not only review the existing structure and identify areas of constraint but would put forward recommendations on the feasibility of operating an effective scheme for the stabilization of coffee prices at farm level. A suggested terms of reference for the study may be found in Annex IV.

B. AGRICULTURAL FACTORS OF COFFEE PRODUCTION

1. Cultivation

Coffee culture in Haiti has been pursued for more than 200 years. The coffee is of the Arabica type and is predominantly "wild" in character. Existing plantings consist largely of naturally seeded stands which are a result of seed drop, natural germination and a minimum of cultural attention. These stands are characterized by overly dense, thin, spindly trees with trunks averaging about 1/2 inch in diameter. Many of these stands are probably the natural result of the widescale destruction of the older coffee plantings by the hurricanes of 1963, 1964 and 1966. Even though of relative young age (8 years or so) these plantings are extremely low yielding and are in dire need of improvement. The principal factors causing low yields are low levels of the major and minor nutritional elements, excessive plant populations, lack of pruning, excessive shade and the poor yielding potential of the genetic material. In most plantings farmers are only involved in cutting some weeds once a year and in harvesting the crop. Few attempts have been made by most farmers to employ improved cultural practices to increase yields except in recent months. Farmers are reported to be encouraged by increasing coffee prices and are now busily engaged in improvements of coffee plantings to the extent of their financial and physical capabilities. These efforts in most cases are limited to providing their own labor for cutting weeds, pruning and some minor reduction of shade. This will have some slight effect upon increasing yields by perhaps 50-100 kg. per hectare the first year or two but will not significantly affect the major cause of low yields (the low level of fertility - principally nitrogen).

2. Need for Fertilizer

Yields of coffee are almost exclusively a function of the physiological condition of the plant. The importance of fertility of the soil, as it affects the physiological state of the coffee plants, is demonstrated by the phenomena of the extreme variability in the biennial cycle of coffee production in Haiti in past years. In general, coffee plants produce high yields to the extent of their genetic capacity if they have an adequate source of major and minor nutrients supplied at balanced levels appropriate to the environment in which the coffee is grown. The level of nitrogen is an extremely important factor for determining yields since the level of this nutrient affects the level and uniformity of production between years. The coffee plants grown under a given light intensity (whether full sunlight, reduced light caused by clouds, reduced light caused by shade trees or tall interplanted crops such as bananas, plantains, rubber trees, fruit trees, etc.) require an appropriate level of nitrogen to provide for a balance

between nitrogen and carbohydrates (sugar, starches, etc.) within the plants. If the balance and levels of nitrogen and carbohydrates are adequate, $\frac{1}{N}$ plants will be vigorous, fully vegetative and will readily bear large numbers of flowers each year and will produce a high yield of coffee. If plants are grown under dense shade (reduced sunlight), the level of carbohydrates produced by the photosynthesis process is low. Therefore, the plant's nitrogen requirements to provide a balance between carbohydrates and nitrogen is also low. Plants grown under these conditions are representative of much of the coffee grown in Haiti. Such plants are small, with limited foliage area, possess small trunks, lack vigor, produce a limited number of flowers and a resulting low yield. While still in the physiological condition Class III $\frac{C}{N}$,

for yield is very low. If shade on these trees is increased (light is reduced) through the natural process of lack of attention to pruning of shade trees, the physiological condition may change to Class I $\frac{C}{N}$,

where the plants will produce only few flowers and yield only an insignificant yield. Much Haitian coffee falls into this classification.

If shade is reduced for traditionally grown coffee without nitrogen fertilizer application, the carbohydrates produced within the plants become excessive in relation to the nitrogen. This physiological condition is recognized in Class IV $\frac{C}{n}$. Such plants are characterized as having

achieved senescence. Such plants flower profusely, they lack vegetative vigor, the stems become hard, leaves exhibit water and nitrogen stress—turning yellow or brown, leaves and coffee berries drop off, tree branches dry, turn brown, and die and at times the trees completely die. Plants in Class IV may be rescued from disaster if shade is increased (low intensity type of production) or if nitrogen in balance with other nutrients is applied to the trees (higher level of cultural intensity). In either case, yield becomes almost a direct function of carbohydrate production of the plant which must be balanced with the nitrogen. The achievement of increased coffee production in Haiti is thus almost entirely dependent upon the use of fertilizer. Without fertilizer on the existing plantings, significant production increases per hectare are impossible. With any new planting of coffee, high yields are likewise impossible without application of a moderate level of intensity of cultural practices. While it is theoretically possible to produce very high yields of coffee under more intensive systems, i. e. growing coffee in hedgerows in full sunlight with high fertilizer application, the cul-

1/ Identified as being in Kraus & Krabill Physiological State
Class III $\frac{C}{N}$

tural methods proposed for this project are expected to be of low to intermediate intensity. Commensurate yields of 750-1100 kg./ha. are anticipated. The application of expensive inputs such as fertilizer at a low level of intensity is usually considered by agro-economists to provide the highest benefit/cost ratio. Chart A demonstrates an example of the range of yields that can be expected. While this response curve is hypothetical, it represents the type of response possible from varying levels of fertilizer application to both new plantings and rehabilitated plantings of coffee in Haiti when commensurate levels of other agronomic practices are also applied.

Along with fertilizer application, other cultural practices of a more intensive nature than practiced at present should be employed. Trees should be topped to induce lateral branching; shade should be reduced to approximately 1/4 to 1/2 sunlight; weeding should be performed three times per year; trees need to be properly spaced in rows; the use of manures and plant material mulches of many types is desirable; pests and diseases need to be controlled by use of fungicides and insecticides; and soil and water conservation practices of varying types should be encouraged. The above cultural practices represent the types of inputs that can be performed by farmers with little or no cash outlay. While these practices represent important parts of a package of improved techniques that can help to increase production significantly, they cannot individually replace the major need for adequate soil nutrients, especially nitrogen.

An interesting phenomenon which demonstrates the importance of nitrogen fertilizer for increasing yields is that of the alternate year-bearing cycle of coffee. Table 13 shows the levels of variation of export of coffee from 1952-53 to 1968-69. Since internal consumption demand most likely has not varied significantly from one year to the next, variations in the export figures probably represent the degree of production variation by year. It can be observed that a definite cyclic trend exists with one year of high production followed by one year of low production. This variation is uniform except for the years 1963-1964 and 1967 when hurricanes caused a disruption of the cycle. What is significant about the production-export data is that they show that much of the traditional coffee has been grown under physiological stress conditions wherein the coffee plants lacking nitrogen at the proper time have moved from Class III to Class IV condition mentioned above and then back again to Class III the following year. This tends to produce an above average crop in one year and a below average crop the next. This bi-yearly cycle of production is also a phenomenon of other types of plants (apples, oranges, etc.) when unattended and not fertilized. Table 13

shows that the yearly variations have been as high as 90% (290,000 sacks of 60 kg. in 1956/57 followed by 550,000 sacks in 1957/58). . . Hurricanes have had the effect of reducing shade and defoliating trees thus slightly increasing yields the following year and leveling out the cyclic variation in the low average yield base. There have been no significant long-term increases in yield from such natural phenomena, however.

In conclusion, what is required to raise the average production level and at the same time to minimize the variation in yield from year to year is to use fertilizer judiciously as part of a cultural package of techniques.

CHART A. TYPICAL YIELD RESPONSE CURVE COFFEE PRODUCTION PER HECTARE AS RESULT OF APPLICATION OF FOUR LEVELS FERTILIZER (20-5-15)

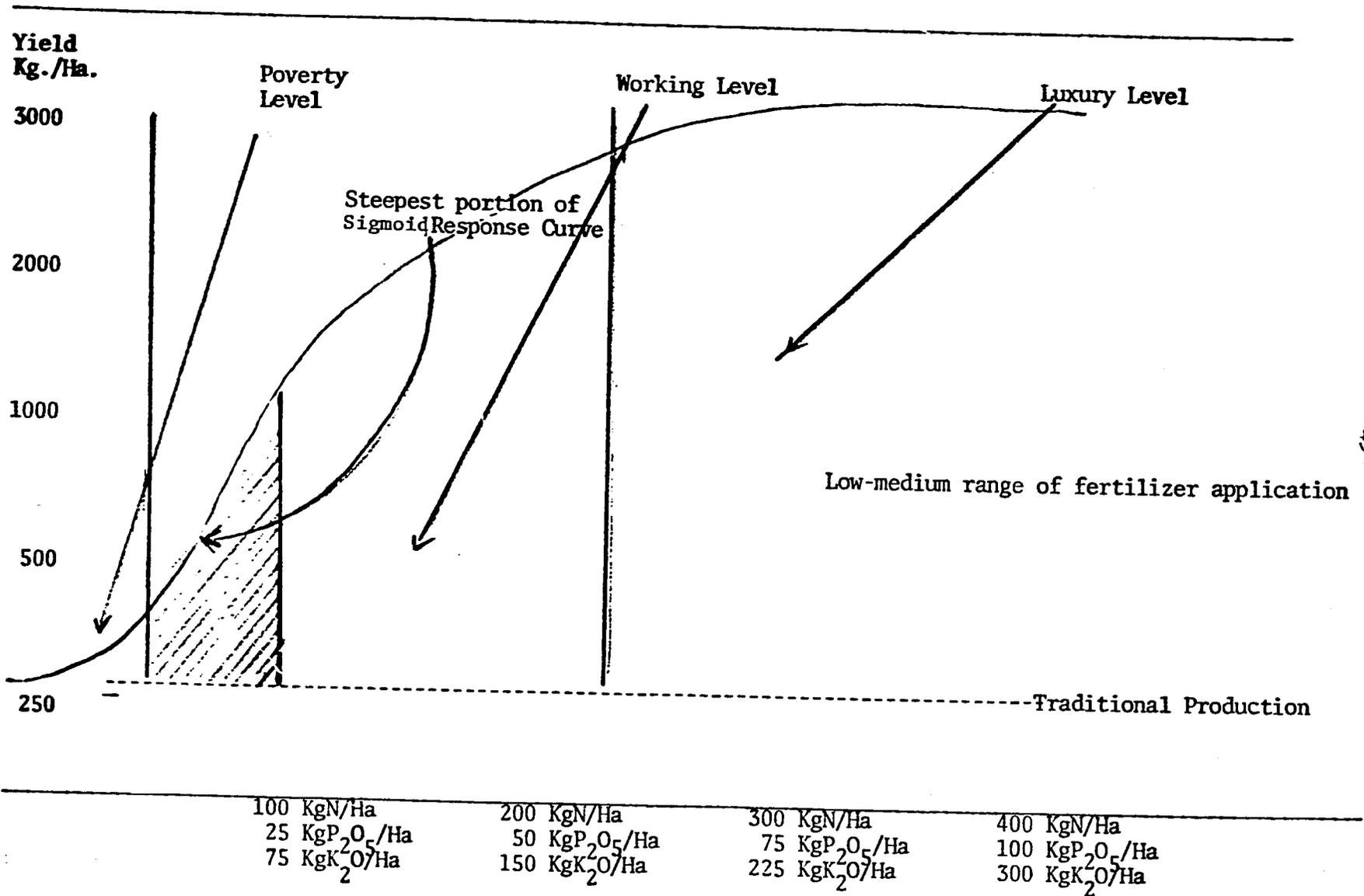


Table 11

VARIATION IN COFFEE EXPORTS (1951-1974) - SACKS OF 60 LBS.

<u>YEAR</u>	<u>EXPORTS</u>	<u>OBSERVATIONS</u>
1951-52	522,017	High
1952-53	385,388	Low
1953-54	539,887	High
1954-55	327,672	Low
1955-56	519,472	High
1957-57	290,301	Low
1957-58	576,399	High
1958-59	278,384	Low
1959-60	476,068	High
1960-61	273,455	Low
1961-62	544,560	High
1962-63	424,965	Low
1963-64	364,182	Hurricane Year
1964-65	381,282	Hurricane Year
1965-66	407,432	High
1966-67	282,783	Low
1967-68	324,972	Hurricane Year
1968-69	308,156	Year after hurricane
1969-70	274,801	Low
1970-71	358,438	High
1971-72	397,899	High
1972-73	323,445	Low
1973-74 (Est.)	375,000	High

Source: IHPCADE Data

3. Need for Operational Centers

The need for a system of operational centers is justified on the basis of the desirability of providing government services and resources to a selected part of the coffee sub-sector. While a beginning has been made by DARNDR and IHPCADE to promote more intensive coffee production in some areas of Haiti, the magnitude of the program has been limited due to the lack of funding for these activities. This project, by establishing new centers of operation for IHPCADE in coffee-growing areas, will allow these activities to proceed at a more rapid pace and with adequate financial support. The philosophy of the effort will be to provide information and means to the small coffee farmers so that they can modernize their coffee production techniques. The program will rely largely on showing the farmers what is possible by demonstration of new technology. The centers will serve as the principal facility and headquarters in the coffee-growing areas for all aspects of the development program. The centers will serve as the central point for marshalling of inputs and for disseminating market information on coffee. Technical personnel will be assigned to conduct the program of work for the centers as well as the promotion activities in areas as far as 20 miles away served by the centers. Credit activities related to coffee will operate from the centers outward into the production areas and be an integral part of the promotion program. DARNDR-related activities and services in crops other than coffee will also emanate from the centers where appropriate.

Field tests and demonstrations will be conducted at the centers with new varieties, pruning techniques, planting densities, shade reduction, and use of chemical fertilizers, mulches, soil amendments, disease and insect control, etc. Cost of production data will be compiled to assist in developing the most economic set of practices and recommendations. Demonstrations of the best practices will be made by agents in outlying areas on the land of cooperating farmers. This type of change by "demonstrating" and "doing" is essential if the traditional coffee grower is to accept fertilizer use in association with other practices, many of which he is already familiar to some degree.

The centers will be expected to furnish immediate and long-range future needs of the coffee sub-sector by introduction, selection, testing and multiplication, and distribution of rust-resistant plant material. Varieties of coffee resistant to leaf rust have already been introduced and are being multiplied. Additional resistant material will be introduced as it becomes available. The occurrence of diseases and insects will be monitored by field agents with a view towards minimizing such problems before they become epiphytotic.

Soil and fertility problems will be researched to determine the most economic recommendations for use of chemical fertilizers by type, time, method of application and rate on the various soil types. It is anticipated that future work in this area may be assisted by the North Carolina State University Regional Project sponsored under LA Bureau Regional Funding. Assistance could consist of defining the magnitude of soil problems in coffee areas of Haiti and providing aid in establishing laboratory facilities for conducting soil and leaf analyses in coffee.

The centers will serve as locations for farmer field days, short courses, farmer meetings, DARNDR, IHPCADE and BCA technician training in research, extension and credit techniques and procedures. The training facilities envisaged will be able to accommodate 30 trainees at a time for periods as long as desirable. The facilities could equally serve as guest quarters for visiting officials and other visitors. BCA personnel will be officed in the operational centers to perform the group lending functions described in another part of this proposal. Stocks of fertilizers and other input needs will be maintained under inventory control for direct distribution to coffee farmers under credit or cash purchase arrangements described elsewhere. To the greatest extent possible credit is expected to be accompanied by information, technical assistance and supervision to assure that use of fertilizer, for example, is judicious and is an integral part of the management techniques of coffee culture.

The other functions of IHPCADE such as data gathering, providing market information, implementing government quality control regulations, government control of speculators, control of minimum prices, stabilization of market prices and other miscellaneous activities relating to coffee will also be part of the operation center's program of work. The centers will be expected to report program activities to DARNDR/IHPCADE Regional Bureaus in the nearby major towns or cities which in turn report to the central headquarters in Port-au-Prince. The centers thus serve as an extension of an existing mechanism to provide to coffee farmers the vital services, information and resources which have heretofore been lacking.

C. IHPCADE

1. History

A review of GOH institutional history indicates that a National Coffee Office was created in 1946. This institution received autonomy in 1958. A decree on August 19, 1968 created in its place the Haitian Institute of Coffee Promotion and Export Products (IHPCADE). By a law of September 13, 1971, IHPCADE became integrated into the Department of Agriculture and Natural Resources and Rural Development (DARNDR) as a special entity of this Ministry.

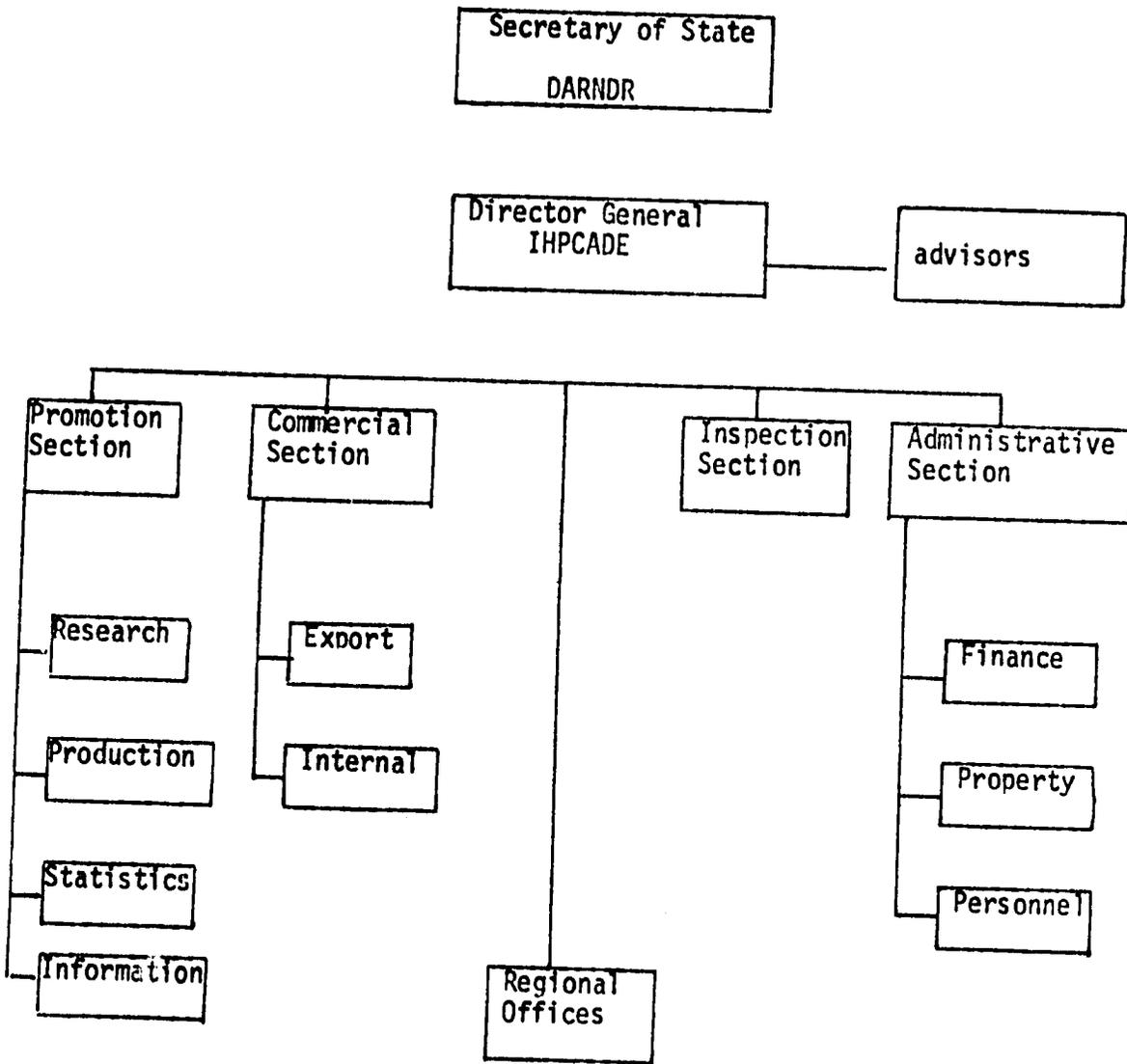
2. Functions

The functional responsibility assigned to IHPCADE under the Organic Law for IHPCADE was the increase of coffee production and the standardization, industrialization, marketing and control of coffee and other export products. IHPCADE is headed by a Director General appointed by the President upon recommendation of the Secretary of State for Agriculture to whom he directly reports. IHPCADE is thus an integral part of the DARNDR. While having responsibility only for coffee in the agricultural sector, some of its responsibilities relate to other sectors as well (commerce, industry, transportation). Figure I illustrates the organizational structure of IHPCADE as it relates to DARNDR. The Director General is required to be a technical specialist with an academic degree in agricultural science. He is responsible for organizing, planning and coordinating the activities of the different sections of IHPCADE. He prepares and submits an annual program and budget request to the Secretary of State of DARNDR. These administrative operations are conducted in the national headquarters office in Port-au-Prince.

The authorities of IHPCADE, as provided under the Organic Law of September 5, 1971 are as follows: IHPCADE can:

- finance and participate in coffee improvement activities of various types.
- establish coffee processing plants.
- participate in coffee processing, treatment operations.
- construct penetration roads into coffee production areas.
- sell coffee.
- recommend and guarantee loans to credit institutions.
- in agreement with the Department of Commerce and Industry, fix minimum unit prices for coffee.
- take all necessary measures to control the marketing of coffee.
- regulate and organize internal and external marketing of coffee by various means (i. e. use of contingency funds, establish warehouses, warranty systems, etc.)
- enforce the control of prices and sales of coffee by exporters through various means.

Figure I



IHPCADE is required by law to provide the Secretary of State for Agriculture with reports regarding price and market forecasts for coffee. Quarterly reports are to be submitted on activities to the Secretary of State for Agriculture. IHPCADE is required to prepare periodic bulletins of a technical and historical character on the commerce of coffee and other export products.

Various structural entities exist within IHPCADE to assist the Director General in performing the various functions of IHPCADE. A Secretary General assists in the general administration of the program, i. e. prepares reports of the activities of the various sections and prepares correspondence for the Director General. A General Counsel's office is provided to perform various legal services, i. e. to represent IHPCADE's legal interests and to safeguard its well-being.

A Consultative Council of nine members is appointed to assist the Director General in achieving the objectives of IHPCADE. It is composed of:

- 2 representatives of the coffee exporters ^{1/}
- 2 representatives of the coffee producers ^{1/}
- 1 representative of the Department of Commerce and Industry
- 1 representative of the CONADEP
- 1 representative of the National Bank (BNRH)
- 1 representative of the Bureau of Agricultural Credit
- 1 representative of the Director General of Agriculture

This Consultative Council meets each three months at the calling of the Director General of IHPCADE. Its role is to assist the Director General by:

- studying the work plan and policies of IHPCADE with the Director General.
- serving as liaison with the various organizations which the Consultative Council members represent.
- providing recommendations to the Director General for improving the IHPCADE program.

1/ appointed by the Secretary of State for Agriculture

The four divisions of IHPCADE each have distinct responsibilities for the program.

1. The Promotion Division performs studies and research to seek ways to promote the formation or renovation of agricultural, industrial and commercial enterprises and other interests in coffee. It develops and executes coffee promotion projects in collaboration with other services of the Department of Agriculture. This Division gathers, compiles and evaluates statistics on coffee prices, production and marketing. It is responsible for information gathering and dissemination relating to coffee.

2. The Division of Commercialization and Control of Export Products undertakes responsibilities regarding internal and external marketing. The Division:

- approves and registers all contracts of sale of the exporters.
- provides authorization to export.
- provides certificates of origin (in conjunction with the customs service).
- verifies that grades and standards of export products are complied with according to law.
- concerns itself with both global and individual aspects of coffee-related IHPCADE responsibilities.
- oversees the application of laws relating to internal markets.
- makes marketing analyses of coffee commerce necessary to establish policies relating to coffee.

3. The principal responsibilities of the Inspection and Evaluation Division are to:

- evaluate all projects and programs carried out by the Promotion Division, both those in progress and those already executed.
- draw from the present or past programs the norms for establishment of a dynamic coffee policy.
- assist the Director General in the supervision of the activities of the IHPCADE.

4. The Administrative Division of IHPCADE has three sections:

- the controller and auditing section which makes payments and maintains records.
- the general services section which is responsible for purchase, maintenance and inventory of materials, supplies and equipment of IHPCADE.
- the Personnel Service section responsible for all personnel matters.

5. Regional Offices of IHPCADE have been established in the principal coffee-producing regions of the country. Technical programs are carried out in the agricultural districts delineated by the DARNDR. Each district is directed by a Chief of the District, who is an agronomist and is aided by assistant agronomists (adjoint technique), by a Chief of Agricultural Agents, by agricultural agents and by accountants for the control of other products. IHPCADE regional personnel are usually officed in regional offices of DARNDR and are expected to coordinate their activities and cooperate with those of the DARNDR Extension Service, Research Service, Administrative Service, etc. IHPCADE calls upon other personnel of DARNDR to assist in its program where appropriate.

3. Staffing

At the present time the IHPCADE has personnel stationed in the various offices throughout the country as indicated in Table 14. In certain districts, personnel are very limited in numbers. IHPCADE will nominate additional qualified agents to conduct the program of work as planned. Where possible, these new agents will be recruited in the coffee production areas and be trained prior to assuming their responsibilities. Knowledge of the areas and the people in the areas will facilitate their working directly with the coffee farmer groups.

Table 14

Assignment of Agronomist and Agents of IHPCADE
 1)
by geographic location

<u>District</u>	<u>Agronomists</u>	<u>Agents</u>	<u>Total</u>
* Cap-Haitien	3	32	35
* Sub districts/frontier zones	3	29	32
Hinche	2	4	6
* Port-de-Paix	2	10	12
Saint-Marc	2	4	6
Belladère	2	8	10
* Port-au-Prince	3	20	23
* Jacmel	2	11	13
Petit-Goave	1	5	6
Miragoane	1	9	10
* Les Cayes	2	10	12
* Jérémie	<u>2</u>	<u>10</u>	<u>12</u>
Total	25	152	177

* Areas considered as most appropriate for intensified programs because of the favorable agro-economic conditions which exist.

1) Source: "Analyse Institutionnelle de l'Institut Haitien de Promotion du Café et des Denrées d'Exportation," IHPCADE, 1973.

4. Budget

The most recent ordinary budget of IHPCADE (1973-74) indicates a total of 1,896,509 Gourdes (\$379,301). It was derived from a contribution of 5.25 Gourdes (\$1.05) for every 60-kilogram sack of coffee exported. An additional 106,000 Gourdes were derived from 1972-73 balance carryovers and other sources. A summary of major investment budgetary line items is presented in Table 15.

Table 15 - IHPCADE Ordinary Budget 1973 - 74

Salaries	Gdes.	1,448,400
Fixed subsidies relating to salaries	Gdes.	141,009
Representation	Gdes.	16,800
Materials and supplies	Gdes.	104,400
Transportation	Gdes.	68,000
Rent and Communication	Gdes.	23,300
Contract Services	Gdes.	21,600
Equipment, Vehicles	Gdes.	25,000
Contributions and subsidies	Gdes.	25,000
Repairs, maintenance	Gdes.	11,000
Other operational costs	Gdes.	<u>13,000</u>
TOTAL	Gdes.	1,896,509

In addition to the ordinary budget, an extraordinary budget is derived from a surtax of \$.40 per 60-kilo sack. Under authorized revenue sources, the total budget of IHPCADE should be in the magnitude of 2.9 million Gdes., or \$580,000. This varies, however, from year to year.

In the 1972-73 GOH fiscal year there was no investment budget available. In the 1971-72 year the investment budget totalled Gdes. 600,000 which was not all utilized, with the unutilized portion returning to the Treasury.

It is considered that present budgetary resources are not adequate when compared to the magnitude of the task to be performed. Approximately 55% of the total budget went to salaries in 1973-74. Other line items of considerable magnitude were fertilizer purchases of 510 metric tons which were sold at 50% subsidy, plastic bags for use in nurseries and POL.

There have been apparently no attempts to consolidate the budget of the IHPCADE or the DARNDR. Sources of revenue have varied from year to year, coming largely from varying coffee tax collections on exports.

5. Present Activities

Since 1958, IHPCADE has conducted a program of coffee improvement utilizing its limited budget, personnel and other resources. These activities, because of resource limitations, had been confined to demonstrations and small projects in a few coffee-producing areas only. Since 1964-65, a more significant program has been launched. The results of the program measured in terms of inputs has been quite significant. Table 16 indicates that from 1964-71 more than 7 million plants have been distributed and planted, 1,300 tons of fertilizers have been distributed and applied to coffee, of which 3,295,000 plants are improved varieties, and 2,352 hectares of coffee have been rehabilitated.

The introduction of new high-yielding varieties of Caturra, Bourdon, Salvedoreno and others will allow gradual replacement of the typical "Arabica" coffee grown in Haiti. The introduction of 500 kilograms of seed of the variety "Geisha" which is resistant to the leaf rust disease (*Hemileia Vastatrix*) represents a major step to prepare for future use of this variety. The transmittance of this coffee disease from Brazil to Central America and the coffee-producing Caribbean countries may well occur sometime in the future.

Table 16

Resume of IHPCADE Activities
1964 - 1971

	<u>No. Coffee Plants Distr. (000's)</u>	<u>Of which Improved Varieties (000's)</u>	<u>Fertilizer Used Tons</u>	<u>Areas Rehabilitated (Has.)</u>
1964-65	625	90	125	207
1965-66	1,125	110	200	375
1966-67	825	150	200	275
1967-68	1,100	170	310	365
1968-69	1,050	650	375	350
1969-70	1,145	1,025	25	380
1970-71	<u>1,192</u>	<u>1,100</u>	<u>140</u>	<u>400</u>
Total	7,062	3,295	1,300	2,352

The IHPCADE program has resulted in the introduction of improved plant materials and modern technology comparable to that existing in some of the major coffee-producing countries of Central America. In the area of Thiotte, for example, several areas of coffee have been observed by AID Agriculturalists under excellent management systems. Improved varieties have been planted, plants were spaced in terraces, mulched, pruned, fertilized with approximately one pound of 10-5-20-1 analysis fertilizer per tree per year, provided with one-half or more light intensity by control of the shade tree cover and were sprayed with copper fungicides and malathion and chlorodane insecticides. Such culture was reported to yield 3,000 pounds of dried coffee per hectare (1,363 kg./ha.). While adequate facilities existed for processing washed coffee, most coffee in the area was of the sun-dried category because of the difficulty in transporting the cherry coffee to the processing plants.

The institutional capacity of IHPCADE to conduct a production program has been demonstrated by its past efforts.

D. AGRICULTURAL CREDIT

1. Brief History of Agricultural Credit

For more than a century following independence, no financial institution in Haiti provided commercial or agricultural credit, and farmers depended on private sources such as speculators, local businessmen and well-to-do farmers. This informal system of credit operated without legal constraints, and excessive interest rates were charged in order to cover high risks and losses. The natural result was perpetual indebtedness for the farmer, including the pledging of crops for indefinite periods of time. When family emergencies arose, farmers were forced to sell their crops at unfavorable prices and mortgage their small parcels of land. This usurious type of credit has been one cause of the perpetual poverty of the Haitian farmer and has been one cause of stagnation in the agricultural sector.

In efforts to remedy the situation, from 1910 to 1917 special loan windows were opened in existing banks to serve the agricultural and commercial credit needs. These failed because of administrative difficulties and the lack of trained technical personnel.

During the 1930's, the agricultural extension service of the Department of Agriculture started a loan program to provide seeds to farmers to be repaid in kind at harvest time and in 1948 a credit program was started to provide tools to small farmers. These programs were not successful as the credit recipients tended to accept such help as "donations" from the Government. In 1951, the Haitian Institute for Agricultural and Industrial Credit (IHCAI) was created to make credit more accessible to farmers. In practice, however, small farmers could not qualify for credit under IHCAI's traditional banking criteria. In 1961, IHCAI was replaced by the Institute for Agricultural and Industrial Development (IDAI) with a more flexible policy for reaching small farmers than its predecessor, but in practice the Institute has turned in large part to the financing of larger commercial enterprises - both rural and urban. It finally became evident that a financial institution was needed which could make credit available to small farmers while at the same time safeguarding its funds, and in September, 1956, the Department of Agriculture introduced a system of supervised credit as a pilot project. The program was financed by the Haitian Government and U. S. Point IV. The U. S. contributed \$100,000 to be used as a loan fund along with a Haitian counterpart contribution of approximately \$80,000. One of the fundamental points of the program was to prove the feasibility of a rural supervised credit organization in order to gain the support of private financial institutions. The Bureau of Supervised Rural Credit (BCRS) was set up to develop this program among small farmers in Marfrane (Southwest), Borgne (North), Fonds-des-Negres (South). Between 1956 and 1959 progress under the program proved to the Haitians that such an institution could be viable and additional staff was added for expansion of the program to new areas.

In June 1959, the Bureau of Supervised Rural Credit (BCRS) was reorganized and the Bureau of Agricultural Credit (BCA) emerged. Its objectives were broadened to include financing agricultural cooperatives, irrigation projects and other agricultural programs, and to accept the savings of individual farmers and cooperatives. At the time (1959-1962) BCA received U. S. assistance totalling slightly over US \$1 million for agricultural credit and some \$40,000 for office equipment and vehicles. The Haitian counterpart contribution was \$185,000, mainly in salaries.

On the private sector side, some rural credit unions have been organized but the minimal funds which they mobilized were insufficient for any measurable impact.

From 1961 to the present, only minimal rural credit activity has occurred in a relatively stagnant small farm program. (See following Section on BCA for illustrative figures.)

2. Bureau of Agricultural Credit (BCA)

(a) Organization and Current Status

The BCA is a "semi-autonomous" financial bureau in the Department of Agriculture, Natural Resources and Rural Development (DANRRD) and is administered by a seven-man government board of directors as follows:

- | | | |
|--|---|----------------|
| 1. Minister of Agriculture | - | President |
| 2. Director General of Agriculture | - | Vice President |
| 3. Director of BCA | - | Secretary |
| 4. Department of Commerce and Industry | | |
| 5. Department of Finance and Economic Affairs | | |
| 6. National Bank of the Republic of Haiti | | |
| 7. Institute of Agricultural and Industrial Development (IDAI) | | |

BCA initiated operations in 1959 with headquarters in Port-au-Prince (now in the Ministry of Agriculture building in Damien) and ten regional offices. By 1965 regional offices had decreased to 7, located in Port-au-Prince, Jacmel, Cap-Haitien, Jeremie, Gonaives, Borel and Cayes. (The office at Cayes was opened in 1964 to backstop a project funded by the United Nations.) In 1973 there were still 7 regional offices but some had changed locations. Currently offices are in Port-au-Prince, Jacmel, Cap-Haitien, Jeremie, Gonaives, St. Marc and Hinche.

To illustrate the relative growth (or lack thereof) trend in BCA operations, in 1965 the organization had 30 professional employees, \$632,748 in outstanding loans, a capitalization of \$1,058,056 and \$1,108,353 in assets. By 1973 these indicators had fallen slightly to 26 full-time and 8 part-time employees, with outstanding loans of \$659,103, capitalization of \$977,000 and \$1,090,949 in assets reflecting a decade of relative stagnation. Of loans outstanding, a large percentage (20%) are overdue on loans made since 1968.

The distribution of regional offices and staffing for 1965 and 1973 are as follows:

	<u>1965</u>	<u>1973</u>
Head Office (Damien) Personnel	13	12 + 1 part time
Jacmel	1	1 + 1 "
Cap-Haitien	8	9 + 4 "
Jeremie	2	1
Gonaives	1	1 + 1 "
St. Marc	Not open	1 + 1 "
Hinche	"	1
Borel	4	Not open
Cayes	<u>1</u>	<u>Not open</u>
Total	30	26 + 8 part time

An examination of BCA's balance sheets for the period 1965 and 1973 also shows a stagnated business situation - almost at a standstill. All key indicators were about the same and a \$6,641 operating loss was reported for 1973.

(b) Credit Policy

General

The BCA must adhere to the general practices of the Ministry of Agriculture which encourages increased production of basic food crops as well as exportable cash crops, which serve to improve the country's foreign exchange position. (BCA loans, thus far have been heavily weighted on the side of basic food crops. However, in 1973, coffee loans were made through three agricultural credit societies of very small farmers in the Jacmel region.)

All loan applications submitted to the BCA are reviewed against the following criteria: (i) capacity to repay, (ii) marketability of the crop at reasonable prices, and (iii) collateral of the applicant. In practice, this comes down to an assessment of the honesty, character, good faith and ability of the small Haitian farmer who has few, if any, tangible goods and must depend totally on farm work for income. In case of default, the only recourse of the BCA is to deny future credit to the defaulting borrower.

Almost all actual and potential borrowers from the BCA are small relative to AID's criteria in other countries of Latin America, with almost no access to institutional credit or technical assistance. Credit in the rural areas is available in limited amounts from informal sources at exorbitant rates of interest, and many farmers are in constant debt. It is common for the small farmer to sell his crop at unfavorable prices to the same money lenders. BCA by regulation is specifically to serve these small farmers and larger borrowers are referred to other financial institutions. Priority is given to loans of \$2,000 or less and no loan can be made in excess of \$5,000 without approval of the Board of Directors. In 1965, BCA reported to its Board of Directors that with its reduced staff, it would have been impossible to control the thousands of small loans made to small farmers if it had not worked closely in the field with the Department of Agriculture's Extension Service. BCA has viewed the role of the extension agent as that of insuring that loan funds are properly utilized by the farmer.

Repayments

Repayment terms depend on the reason for the loan and on the harvest cycle. Farmers waiting for more favorable prices for their crop are given payment extensions for reasonable periods of time. Short-term credit for foodstuff crops are to be paid in one year. Loans to agricultural cooperatives for capital and equipment improvements are made for up to 15 years.

Interest Rates

Maximum interest rates on all loans is 8% per annum. Loans to coffee growers for capital and equipment improvements only are charged 4% per annum and loans to members of "Clubs de Jeunesse Rurale" are 6% per annum. Interest is collected at the time of repayment.

Savings and Capitalization

Although BCA capitalizes 5% of each loan, no dividend or interest payments are made on these accumulated funds. While this provides the base for building a viable, farmer-owned rural credit system, incentives will have to be provided to encourage voluntary regular savings as a norm for the small farm borrower member.

(c) Financing of BCA Operations

BCA is financed in two ways: (1) interest income and (2) budget support from the national treasury. (BCA officials state that since their mandate is to serve as a public sector instrument of development for small farmers and not a commercial enterprise, public funds are needed to support its budget.)

Interest income is not sufficient to support Bureau operations. For the period 1962-1965 loan interest income covered only 14% of total operational costs. This has improved over time and recently the Haitian government has been supporting somewhere between 43 and 64% of BCA's budget. Some income is received from CONADEP, the national planning agency, for the management of their small farmer loan program. (See Section 3(c)) The 1974 operating budget is approximately \$100,000.

3. Other Institutions as they relate to the BCA and Agricultural Credit for the Small Farmer - Except IHPCADE (covered in Section IV-C)

(a) National and Commercial Banking

The national banking system in Haiti consists of the National Bank of the Republic and a network of 9 branches located in principal commercial centers of the nation. The bank serves as the Central Bank of the country and is engaged exclusively in commercial credit and traditional banking operations. In addition, there are several foreign banking offices in Port-au-Prince such as the First National Bank of Boston, the Royal Bank of Canada, the Bank of Nova Scotia and the First National City Bank of New York. Some of these are planning to open suburban branches near Port-au-Prince. (One banker stated that his bank was considering an expansion of its banking facilities but there was no intent to enter into agricultural credit.) Most of the portfolios of these banks reflect commercial, industrial and export-import banking business. Their expansion to the suburban areas of Port-au-Prince reflect plans to open short-term consumer and construction credit windows and attract greater amounts of local savings.

(b) The Institute for Agricultural and Industrial Development

IDAI was established in 1961 and absorbed the former Haitian Institute of Agricultural and Industrial Credit. It is located in the Ministry of Agriculture and is governed by a five-man Board of Directors much in the same fashion and organizational capacity as the BCA. Approximately 30% of IDAI's operating budget is covered by the National Treasury.

Loan statistics for the period 1962-1969 indicate that an average of 2,576 loans were made at an average level of \$163.00. With an interest charge of 12% per annum, the annual gross income of \$19.56 per loan is low when compared to the operating costs of IDAI and the level of effort from its 85 technicians. In addition, it is estimated that 30% of the loan portfolio is delinquent.

In 1961 IDAI received a loan from the IDB, of which approximately \$2.1 million has been disbursed. Past loan disbursements include \$800,000 for a cotton plant at Gonaives, \$360,000 for a light plant in Les Cayes and \$357,136 of credit to approximately 21,897 farmers during the last seven years, all of whom are located in the areas of Les Cayes, Jacmel, Miragoane and Mirebalais-Thomonde. The credit was "supervised" to the extent possible.

The earlier fairly low average loan level notwithstanding, currently IDAI has turned almost entirely to large scale agricultural and commercial lending and no longer has any significant relevance to small farm production activities or programs.

(c) The National Council of Development and Planning (CONADEP)

CONADEP was established in January 1965 to monitor and supervise all planning, economic and social development in Haiti. The council has channeled loans to farmers of cotton, rice and cacao through the BCA, and agricultural extension agents at the local level attempt to insure that loan funds are properly used and repayments made. For their financial services BCA is paid a 10% administrative fee by CONADEP. Little relevance was found in this activity to the proposed project, except the importance of the budget support to the BCA. CONADEP is treated elsewhere with respect to its relationship to IHPCADE, the Ministry of Agriculture, and the overall project.

(d) Voluntary Agencies

Haiti has a great number of voluntary agencies involved in rural development programs of one kind or another. There are, for example, CARE, Catholic Relief Services (CRS), Church World Services (CWS), and many others. All of these organizations are working at the community level in the field of health care, family planning, school feeding, road construction, and food-for-work. Several voluntary agencies have established credit programs. These efforts, however, are not integrated or even coordinated in any structured way. All of the organizations support the small farmer credit idea and point out the critical need for implementing a meaningful program as soon as possible. Both at the national and local levels these agencies will be brought into the development of group "outreach" aspects of the project to the extent possible.

4. Agricultural Credit Societies "Societes de Credit Agricole" (SAC)

Since 1967 approximately 180 small farmer groups have been organized and set up by field personnel from IHPCADE, ONAAC, BCA and the cooperative office located in the Department of Agriculture. Objectives for establishing these small groups have involved a variety of attempts to work with people at the lowest levels of the rural sector in order to upgrade literacy, channel agricultural credit, and in general promote community development.

In some respects, the SAC's are cooperative organizations and registered as such in the cooperative office of the Ministry of Agriculture, although they are not legal entities. In the past the group has had to have at least 7 members and no more than 15 at any one time. New enabling legislation of February 1974, however, fixes no maximum number. The membership elects its own president and secretary-treasurer who also serve as the credit committee for the group.

(a) SAC Credit Operations

The credit committee of the SAC prepares loan applications to the BCA with the assistance of extension agents and BCA personnel. Each SAC member is listed in the application by name. The purpose of the loan, the amount and date of repayment, and funds are sub-loaned to each participant in the project. The application has a "joint and several" guarantee provision which requires the SAC to repay the loan of any member failing to do so.

(i) Credit Terms at SAC Level

The loan is made to the SAC by BCA at 8% per annum (the maximum rate which BCA can charge by law) and the group sublends to its members at 12%. The 4% spread remains on deposit in the BCA for the benefit of the SAC and represents capitalization of the unit. No interest is paid on the deposit, however.

(ii) BCA Lending to SAC's

BCA lending to SAC's has been substantial in numbers but relatively little in amount. Repayment records have been better than for individual loans and SAC credits have been much cheaper to administer. During 1973 BCA reported having made 285 loans to SAC's in the amount of \$43,781, or an average of \$150 per SAC and approximately \$20 per member.

Each BCA regional director has the authority to approve and disburse loans not exceeding \$100, requests over that amount requiring headquarters approval in Port-au-Prince. Within policy limitations, BCA's regional director writes a loan check payable to the SAC's president, secretary/treasurer or to himself. The check is then cashed at a regional bank, disbursed to each member in accordance with his requested share. If credit in kind is utilized, a coupon is issued to exchange for fertilizer or other farm supplies. All transactions are recorded in the member's passbook, the SAC's records and at the BCA.

In order to deal effectively with SAC's, the BCA has developed several very basic written instructions and forms. These include:

1. An abbreviated set of bylaws which the president and secretary/treasurer sign.
2. An abbreviated "do-it-yourself" type of agenda for meetings of the SAC.
3. A loan application.
4. A loan note which binds the SAC to BCA for the loan.
5. A sub-loan note binding the member to the SAC.
6. Simplified instructions for the accounting of money and deposit funds.
7. A ledger record reflecting transactions between the SAC and BCA.
8. A member passbook showing transactions with his SAC.
9. A permanent individual ledger record maintained by the SAC showing transactions between the SAC and its members.

(b) Advantages and Disadvantages of the SAC with respect to the Project and as Overall Rural Development Vehicle

(i) Advantages

1. Popular participation and grassroots involvement at the most basic level attainable in Haiti.
2. Non-formal education in the handling of money and general problem solving.
3. Information vehicle. (Members become aware of available assistance and resources, i. e. family planning, health, literacy, etc.)

4. Savings generation through group borrowing and repayment.
5. Local Leadership development.
6. The lower relative cost of lending to SAC's and more efficient provision of complementary supplies and services.

(ii) Disadvantages

1. SAC's are too small to achieve viability (up to 15 members) on their own.
2. They are not organized into any networks or federations - either regionally or nationally - which could serve to effect real economies of scale in productive activity.

(c) A strategy for Small Farm Development through SAC's

The SAC's need to be linked eventually to strong member-owned institutions which can represent their interests and respond effectively to their needs both regionally and nationally. The SAC's should really be a transitory vehicle to a more permanent and viable rural organization structure which will draw resources both from within and externally on a growing-concern basis. A tentative course of action which fits well with the loan project to arrive at such a structure involves the following:

1. Organize more SAC's in the rural sector as pre-cooperative production, study and educational groups. (This will be essential if BCA is expected to reach approximately 12,000 farmers in the fifth year of the project.)
2. Promote the expansion of membership in the existing groups. The 15-member maximum limit has now been lifted.
3. Where possible, merge successful SAC's operating in the same areas in order to gain a greater base of operations, productivity and economy.
4. Campaign to mobilize local savings and incorporate the system as an integral part of BCA's capitalization and credit program.
5. Liberalize the authority of BCA regional director so that they approve most SAC credits directly in the regions.
6. Establish formal permanent linkage of SAC's and other cooperatives in the country, credit unions and "caisses populaires", for example to the BCA.
7. Encourage and assist the BCA in a long-range program of gradual conversion to a member-owned and supported cooperative financial organization offering a complete line of credit services to its client members - such as, in addition to credit itself, account, legal, auditing, inspection, bonding, training, organizational development and promotional services.

(d) Summary Rationale for Redirected Small Farmer Credit Program through Rural Organizations: A Cooperative or Group Approach

Efforts to reach the small farmer in Haiti have not been successful on any meaningful scale. Some of the main causes for this are as follows:

1. Past programs have not been well organized, neither administratively nor economically.
2. Programs were not professionally administered or supervised.
3. Targets and goals were lacking, making evaluation almost impossible.
4. Credit and interest policies have been unrealistic, bearing no relation to the real costs of capital or program administration.
5. Poor loan control and delinquent loan follow-up and collection practices.
6. Insufficient farm extension services not coordinated adequately with lending activity.
7. Lack of small farmer identification with credit programs and the GOH.
8. Lack of educational and motivational programs for the small farmer.
9. Lack of trained personnel and technical assistance.
10. Lack of "graduation" mechanism for borrowers to allow for greater outreach of minimum resources.
11. Lack, until very recently, of a small farmer institution building processes.
12. Lack of capital, human and material resources.

A sound redirected program should treat all of the above deficiencies within a structure that will encourage the evolution in the long term (ten years at a minimum) of a viable cooperative system of credit, including a "partnership" element between government and people. This system should be able to draw, on its own account, resources from the commercial sector in addition to savings from within.

Dr. F. J. LeBeau in his sector assessment points out that there is an "apparent propensity for saving" in rural Haiti "coupled with an almost total absence of opportunity because of the lack of institutional structures". He urges "the development of groups and cooperative undertakings such as credit unions" to capitalize on the "propensity" to save and provide the "opportunity". He feels this would "make a good starting point for the development of other cooperative endeavours". (p. 73 of Sector Assessment)

In terms of developing a system or institutional structure around the channelling of credit in Haiti, it would seem that conditions and instruments exist already on both the top and the bottom of the lending chain. On the top one finds the BCA, a financial institution dedicated to small farm production and improvement almost exclusively with certain characteristics and policies of a cooperative banking nature such as the "membership" for example of individual and group clients. On the bottom one finds a substantial number of SAC's (180) in addition to a variety of other groups of community action or self-help nature, which in and of themselves are not - and never will be - viable units due to their small size (7 to 15) and lack of management skills, but which could be consolidated along regional lines to form viable "cooperative units". Exactly how large a cooperative unit has to be in Haiti to be a viable, self-capitalizing credit and service organization remains to be determined through analysis. This, of course, also depends on the functions and nature of the cooperative. In Fonds-des-Negres, for example, there is a cooperative formed from the grouping of 9 SAC's with a consolidated membership of approximately 150 families which appears to be successful and is now borrowing to expand its activities from production credit and fertilizer distribution to the initial processing and marketing of coffee, corn and vegetables.

Previous efforts to form a cooperative system in Haiti have failed almost totally due (in addition to the general factors pointed out in this section) to the complete lack of coordination of the many and diverse efforts by private and voluntary agencies aimed at the formation of community groups for one purpose or another. (HACHO, CARE, CWS, CRS, ONAAC - the National Literacy Office -, etc.) and the lack of unifying factors to bring and hold such groups together, such as savings and credit or marketing, where real economies of scale could be achieved. Of the some 450 cooperatives of all types on record in 1970, only 8 were actually functioning.

In any case, what seems to be indicated at this point is a concentrated program to not only increase the number and size of the SAC's (which makes much more sense than other groups because they are dedicated fundamentally to effective credit utilization) but even more important to group them into cooperative units which would ideally serve a membership of a thousand plus families over an area of one or two thousand hec-

tares. Such cooperative units could eventually support entirely a farmer-owned cooperative bank evolving out of the BCA which would be at the apex of an institutional structure or system with the following characteristics:

1. Farmer participation in both capital structure and policy formulation.
2. Mobilization of savings in the rural areas.
3. Timely availability of production credit.
4. A practical method for graduation of the farmer from subsidized subsistence to commercial participation and growth.
5. Promotion and organization of other cooperative organizations to meet a variety of production, marketing and consumption needs.
6. Concrete linkage of farmers to villages, towns and the capital.
7. The effective passing of information from the top down in understandable terms and the provision of accurate and forceful "feedback" from the rural mass to local and national leadership.

Recent legislation in Haiti lays the ground work for the above approach. For example, on February 5, 1974, the President signed a decree which gives new meaning and direction to a National Cooperative Council which is interested to associate cooperative development in Haiti to the Nation's development plan. Presumably this council could be utilized as an effective coordinating body provided that a competent technical secretariat could be established. More important, a second decree of February 18, 1974, redefined procedures and policy for the organization and development of "pre-cooperatives" (SAC's) as well as other types of cooperatives such as credit unions. The law specifically deals with capitalization, savings, mobilization and dividend rates, boards of directors, supervisory and credit committees, tax and import duty exemptions, legal protection, and the formation of national federations.

Haiti has over 500,000 small farmers. If only 10%, or 50,000, of these could be organized into SAC's and cooperatives, a system could be developed of substantial size and viability capable of absorbing, for example, some \$5 million in credit per year on the basis of \$100 per member.

The level of the "target man" in Haiti that can be reached through an effective rural organization system is compelling, especially in coffee. Nowhere else in the hemisphere can one realistically deal in terms of farm units of less than one hectare. By way of illustration,

a recent coffee regeneration loan through a SAC in Jacmel provides some interesting figures. In this project, the range of land holdings to be affected by the project was from approximately 1/6 ha. to slightly over 1/2 ha. Seventeen sacks (60 kilos each) of fertilizer were provided in kind along with cash for other costs to total amount for the group (15 members) of \$760.00, or an average of \$50.66 for each sub-borrower. With such levels apparently within reach through rural organizations with supervised credit and complementary services in a cash crop such as coffee, one has to conclude - at least tentatively - that in the long run this may be a practical answer for the problems of rural Haiti.

E. Micro-Economics of Production

1. Constraints to Analysis

As a generalization, coffee is grown as a cash crop in combination with food crops which may provide the family with all or most of the family food requirements. Also, due to the varying conditions and cropping systems under which coffee is produced it is virtually impossible to construct a single model typifying the small holder coffee producer. There are virtually no well conceived or generally accepted statistics on the cost of production. To acquire the little data that is available estimates were obtained from IHPCADE, and from field observations of coffee growing areas and a limited number of interviews with coffee growers.

(a) Costs

Labor

Traditional Haitian coffee production practice entails only the labor involved in harvesting the crop. This means that very little effort is expended in controlling weeds, shade, or the number of trees per hectare. The fact that family labor productivity is limited at a given point in time and competition for this labor exists between the food and coffee crops means that farms of even one hectare in size are often required to hire some non-family labor at harvesting time. During the intensive review an attempt was made to estimate non-family labor requirements and costs with respect to farm size but this was found to be virtually impossible. The minimum legal daily wage is US \$1.30 per day. In rural areas, however, daily wages are substantially lower and are said to be as low as \$0.20 to \$0.30 per day in some areas. What becomes clear from interviews, however, is that the amount of hiring of non-family labor increases as the size of farms increases, and that the level of non-family labor inputs rises to nearly 100% at a farm size faster than would be expected. Some estimates suggest that many farms of two hectares in size will hire most, if not all, labor for coffee production.

Other information suggests that the elasticity of supply of coffee with respect to farm size may be quite different from the larger farms which must hire non-family labor compared to farms where only family labor is used. Unfortunately, there is no data to support this hypothesis except from interviews.

Other Costs

Farmers interviewed in January 1974 indicated a need to acquire credit to hire labor to weed and prune their coffee plantings and to procure fertilizer. Their response was to fertilizer prices of \$50 per

ton (low formula) at the farm and coffee farm prices to producers of over 66 cents per kilogram. During the last three to four months farm prices have strengthened but fertilizer prices have also materially advanced.

The latest fertilizer price information acquired during the preparation of this document was that 20-5-10-1 formula fertilizer, F.O.B. Gulf, will cost \$250 per ton. Ocean freight rates of \$35 per ton and internal distribution costs of \$15 per ton brings total cost at the farm gate to approximately \$300 per ton. The higher analysis fertilizer will require half the bulk of the fertilizer utilized last year so on a per hectare basis (with a 50% subsidy) the cost would be \$75 per hectare this year compared to \$50 last year.

2. Price

It is virtually impossible based upon the data available to arrive at any factual net income figure for traditional coffee production, however, in terms of an average yield of 270 kilograms per hectare and current coffee farm price of around 88 cents per kilogram (April 1974), one hectare is estimated to produce a gross income of approximately \$237. Farmers interviewed, both large and small, stated that their cost of production at current prices of inputs was around 55 cents a kilogram. (This "cost of production" appears to include a "cost" of family labor since farmers have continued to produce coffee when the price paid to the farmer has been below the "cost of production.") Most Haitian farmers apparently have a reservation price below which the expenditure of additional labor and the expenditure of funds for fertilizer to improve coffee plantings normally will not be made. Based upon limited time series data this reservation price is estimated to be around the 60 cents per kilogram level. This is illustrated in Figure II.

In recent years, coffee prices at the farm level have increased from 44 to 47 cents per kilogram in late 1972 to 61 to 63 cents in late 1973 or a 36% increase. In April 1974 the price was 88 cents per kilogram or an increase of over 90% from October/November 1972 prices.

Given current prices which are seemingly at incentive levels, farmers were reported to have shown a new interest in coffee production during the 1972 - 73 coffee crop year and particularly since September 1973. Based upon such information and other calculations made during the intensive review it was concluded that the reservation price of 60 cents per kilogram was a reasonable estimate for the purposes of this analysis.

One would judge from the above that Haitian farmers are willing to expend in one form or another around \$162 to generate a gross income per hectare of around \$237 or a ratio of 1 to 1.4.

2. Program Impact at the Farm Level

(a) Assumptions

To ascertain the likely impact of the program upon coffee farmers, four models were developed:

- (i) the entire existing coffee grove (or plantation) is cleared in one single year, replanted with new trees of a high yielding variety and then intensely cultivated using modern technology, including the application of fertilizers;
- (ii) the entire existing coffee grove (or plantation) is rehabilitated in one single year, that is existing trees are maintained but correctly spaced and pruned, shade is controlled through thinning and the entire area is then intensely cultivated using the same techniques, including the use of fertilizer, as in option (1) above;
- (iii) one fifth only of the existing coffee grove (or plantation) is uprooted and replanted yearly over five consecutive years. Intensive cultivation is carried on the replanted portions only.
- (iv) one third of the existing coffee grove (or plantation) is uprooted, replanted and brought into production before the second third is uprooted, replanted and brought into production and so on. Intensive cultivation is carried on the replanted portions only.

There obviously are infinite combinations which could have been costed out, but, given the data base, this would be a questionable exercise. It is likely that if farmers respond to the program at all they will follow some combination of the above models and at different input levels than those costed out. It was necessary to develop the above models based upon a number of conservative assumptions. Some of these assumptions were:

1. Fertilizer application rates (one hectare)

	Year	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
New plantings (kg)		165	375	500	500	500
Rehabilitated (kg)		375	400	500	500	500
2. Fertilizer prices would increase at 8% per year (starting from a price of \$300/ton.)
3. Credit interest rates would be 14% for 9 months for all costs. (Actual rates will be between 8 and 12 percent with three-year term.)
4. Fertilizer prices would be subsidized at 50% years 1 and 2 and at 25% years 3 and 4, and no subsidy thereafter.
5. Input costs other than fertilizer were based on calculations made by IPHCADE and adjusted to each of the four models.

6. For selected calculations, coffee prices were increased by 8% per year to illustrate the impact of prices on net returns.

2. Projected Results

It is estimated, as indicated earlier, that a coffee farmer using traditional practice, at current price levels for coffee and production cost items, is receiving about 1.40 for each \$1.00 of input. He would receive about \$237 from 270 kilograms of coffee and his expenses (in terms of his reservation price) would amount to \$162. Most of this cost is in the form of a labor input.

As indicated elsewhere in the CAP, applications of up to 500 kilograms per hectare are recommended for the 20-5-10-1 formula fertilizer. This means, depending upon the model followed by farmers, that investment in fertilizers will become a significant production cost ranging from 36% to 60% of total calculated production costs using improved practices. It is expected that moving from a coffee production system which requires virtually no cash outlay particularly for the smaller producers and a relatively low level of cash outlay for the larger producers for hired labor may require a substantially higher return than 1.4 to 1.

Using current prices for labor, commodities and coffee, one would expect a traditional producer to have produced a cumulative income of \$1,659 over the 7 years. (Seven years was arbitrarily selected since 5 years did not permit some of the models to show response.) Table 17 shows that only the Rehabilitation Plan (II) provided a gross income greater than the income from traditional practices during the initial three years of the conversion process and that the most significant gains acquired from models occur between the fourth and the 6th year depending on the model selected. This table also illustrates the negative impact of the four models upon gross income during the earlier years of the project. It also shows that if a farmer does not have adequate capital reserves, he most likely cannot afford an extensive replanting program where portions of his land are taken out of production. When costs of producing such gross income levels (Table 17) are compared in terms of net income in Table 18 the magnitude of income shifts from early years in the implementation process to the latter years is noted. These data indicate that considerable net income is lost or foregone in the early years of the implementation process if sizeable portions of a farmer's land is taken out of production to establish new plantings. This further confirms the hypothesis that most of the early increased production will have to come from the rehabilitation of existing coffee plantings. If sizeable increases in production do take place from new plantings, it will likely have to come from coffee producers who can assume a greater level of risk over a longer period of time.

The greatest net increase in production, using a seven-year period is from rehabilitated coffee plantings, followed closely by production from new plantings. Over a longer period, the new plantings would be expected to perform better due to higher average yields from comparable inputs of fertilizers. (Tables 19 and 20). In terms of net returns $\frac{1}{}$ per kilogram of coffee produced, the following comparisons are made:

<u>Option</u>	<u>Cents per Kilogram (7 years)</u>
Traditional	28
New plantings	56
Rehabilitation	68
Replant 1/5 (5 years)	59
Replant 1/3 every fourth year	40

In the short run, rehabilitation, particularly for producers possessing some resources, provides the better opportunity to improve income. However, the producer utilizing this option will require access to credit for labor and fertilizer, assuming a traditional net income of \$75 per hectare, of almost twice his previous income. While the producer's income will increase substantially in percentage terms for the first four years, his initial capital input and risk factor (until he can observe a tangible return) will likely be the greatest inhibiting factor to participation in the program. (See Figures III and IV). Figures V and VI illustrate the same comparative statistics for new plantings. In the case of new plantings the farmer cannot expect an impact upon income until the fourth year, which means a need for capital resources outside of the coffee component of his farm during the preceeding years.

The significance of fertilizer prices relative to other calculated costs is shown in Table 20 in terms of percentages over the seven-year period. Shifting Haiti coffee production from its very low cultural level to more intensive cultivation practices is a very long investment process. Obviously, the seven-year period selected is insufficient for some options to develop their full potential. This means, among other things, that long-term cost price relationships must be consistently favorable if the capital investments are to be profitable for the farmers. Only over perhaps the past twelve months have such relationships been at levels to which farmers have voluntarily begun to respond.

The exact level of price/cost relationships at which farmers might make the necessary investment cannot be made on facts available at this time. The best estimate at this time is that farmers will need to see cash return relationships well above the 1 to 1.4 level and net returns higher than from traditional production. Based upon the calculations for rehabilitated land,

1/ Source: Worksheets

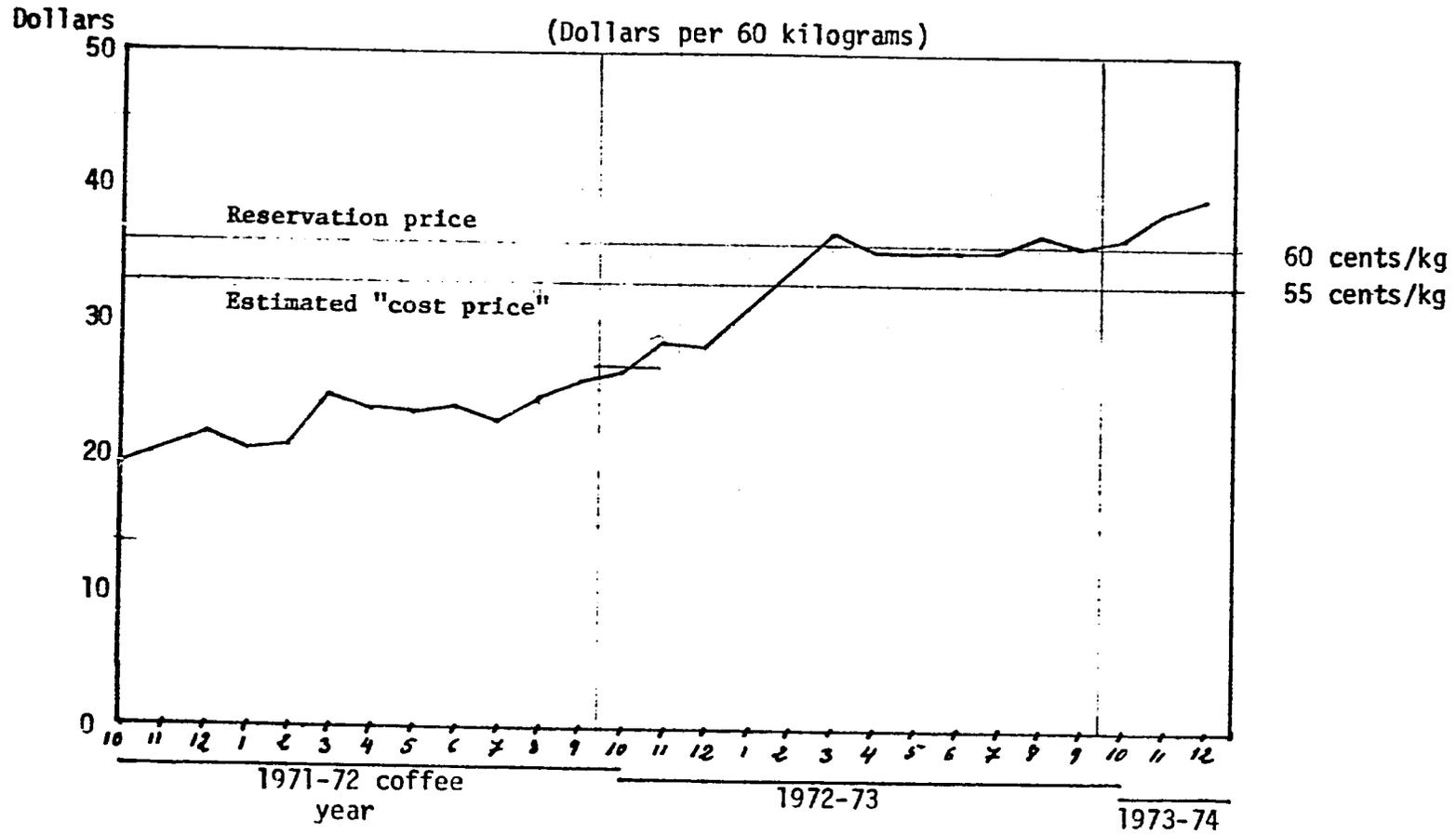
Net income may be approximately the same in the first year and double the second year. He would have an income-to-cost rate of 1.7 the first and 2.7 the second. Therefore, the farmer with limited resources would need credit for increased out-of-pocket costs.

If the very conservative assumption that a cost/income ratio of 2.5 or better is necessary for Haitian farmers to adequately respond by increasing their investments in the rejuvenation of coffee plantings, current prices in relation to costs seem to be at a critical level. Table 6 shows that over the long run (7 years), a relationship exists that would indicate a likelihood of the investments being made. The critical element is the relationship of cost to income. Should this narrow, the adoption of the program by a farmer operating at the margin is in question.

Given the assumption that in real terms the relationship between costs and returns will remain close to current levels over the next three to five years, it was felt that it would be necessary to subsidize fertilizer in the early phase of the program in order to attain a cost-income relationship near the 2.5 level as shown in Table 21. The importance of the producers' margin is well illustrated in Figure IV and Table 21. If the rate decreases to 2.0 and below it is likely that farmers will need strong motivation to participate in the program given the assumptions made for this analysis. The additional element of allowing up to three years repayment of credit extended under the program should provide additional assurance, beyond the discounted price of fertilizer, that the Haitian farmer will be induced to improve his coffee production through new technology.

FIGURE II

ESTIMATED RESERVATION PRICE OF HAITIAN COFFEE FARMERS
RELATIVE TO PRICES RECEIVED BY FARMERS



Source: IHPCADE

TABLE 17

Estimated gross income gained or (lost) as a function of moving from traditional cultural practices to a cultural system utilizing improved practices. Four options, seven-year period

HAITI

Options	DOLLARS/HECTARE							Total
	1	2	3	Years 4	5	6	7	
Income								
Traditional	237	237	237	237	237	237	237	1659
1. New Planting	237 ^{1/}	(-237)	(-27)	379	731	731	731	2545
2. Rehabilitation	9	255	291	423	423	423	423	2247
3. Replant 1/5 ha. yearly (5 years)	(-47)	(-124)	(-159)	128	273	467	660	1337
4. Replant 1/3 ha. every fourth yr.	(-79)	(-79)	(-158)	45	82	285	401	497

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Sources: Work Tables

^{1/} In Year 1 of the project, nurseries are established. Planting is carried out in Year 2

TABLE 18

Net income from traditional cultural practices and cost in terms of net income from moving from traditional practices to improve practices. Four options, seven years, HAITI

Options	One hectare - U. S. Dollars							Total
	1	2	3	4	5	6	7	
Traditional	75	75	75	75	75	75	75	525
1. New planting	^{1/} (-375)	(-186)	(199)	305	658	598	543	1344
2. Rehabilitation	40	249	223	357	265	297	297	1728
3. Replant 1/5 ha. yearly (5 years)	(- 27)	(- 73)	(- 19)	46	132	360	476	895
4. Replant 1/3 ha. every fourth yr.	(-108)	30	(-193)	66	-18	208	238	223

Source: Worksheets

^{1/} Nursery - Income earned but nursery cost incurred

TABLE 19

Net increase in production as a function of each option. Seven Years, HAITI

Options	Years							Total
	1	2	3	4	5	6	7	
Traditional (kg)	270	270	270	270	270	270	270	1890
1. New planting (kg)								
a. Actual yield	(-270)	(-270)	300	700	1100	1100	1100	4300
b. Net addition	(-270)	(-270)	30	430	830	830	830	2410
2. Rehabilitation (kg)								
a. Actual yield	280	560	600	750	750	750	750	4440
b. Net addition	10	290	330	480	480	480	480	2550
3. Replant 1/5 ha. (kg) yearly (5 years)								
a. Actual	216	129	248	414	580	800	1020	3407
b. Net addition	- 54	-141	- 22	144	310	530	750	1517
4. Replant 1/3 ha. every fourth yr. (kg)								
a. actual	180	180	90	321	363	594	726	2454
b. Net addition	- 90	- 90	-180	51	93	324	456	564

TABLE 20

Percentage distribution of income and expenses to rejuvenate one hectare of coffee trees over seven-year period, four options, HAITI

U.S. DOLLARS/HECTARE										
Options / Items	1	2	3	YEAR				Total		Dollars
				4	5	6	7	Percent	Percent	
<u>PERCENT</u>										
1. New Plantings:										
Labor & Materials	43	8	6	10	9	9	15	100	58	1046
Fertilizers		3	8	17	19	26	26	100	42	755
Total Costs	25	6	7	13	13	16	19	100	100	1801
Income	- 1/	-	7	15	26	26	26	100	X	3784
2. Rehabilitation										
Labor & Materials	11	16	15	13	19	13	13	100	40	663
Fertilizer	6	7	13	14	20	20	20	100	60	990
Total Costs	8	10	14	14	20	17	17	100	100	1653
Income	6	12	14	17	17	17	17	100	X	3906
3. Replant 1/5 ha./yr.										
Labor & Materials	16	11	13	18	16	9	17	100	55	861
Fertilizer	1	2	8	12	23	27	28	100	45	715
Total costs	9	7	10	15	19	17	23	100	100	1576
Income	6	4	7	12	17	24	30	100	X	2996
4. Replant 1/3 ha./ every 4th year										
Labor & Materials	21	5	20	9	19	10	16	100	64	906
Fertilizers	-	1	4	11	16	31	36	100	36	502
Total Costs	14	4	14	10	19	17	22	100	100	1408
Income	7	7	4	13	15	24	30	100	X	2156

Source: IHPCADE - USAID - Field Observations

1/ Nursery

TABLE 21

Income-cost ratios where coffee prices are calculated at 88 cents per kilogram and at an annual increase of 8% per year. Fertilizer price subsidized and unsubsidized. Seven-year total, by rejuvenation option, HAITI

COST	INCOME / Cost Ratio							
	New Planting		Rehabilitated		1/5 new ea.yr.		1/3 new ea. 4th yr.	
	\$.88	x.08% \$.88 Kg.	\$.88x.08%	\$.88 Kg.	\$.88x.08%	\$.88 Kg.	\$.88x.08%	\$.88 Kg.
	<u>1/</u>	<u>2/</u>						
Total cost at current prices								
a. Subsidized fert.	2.8	1.9	3.1	2.4	2.6	1.9	2.1	1.5
b. Unsubsidized fert.	2.6	1.9	2.8	2.1	2.5	1.8	2.0	1.4
Total cost plus 14% interest 9 months								
a. Subsidized fert.	2.5	1.7	2.8	2.1	2.4	1.7	1.9	1.3
b. Unsubsidized fert.	2.4	1.7	2.5	1.9	2.3	1.6	1.8	1.3

1/ price increased at .08% per year

2/ price constant

FIGURE III

II - ANNUAL COSTS AND INCOME
REHABILITATED-ONE HECTARE OF COFFEE

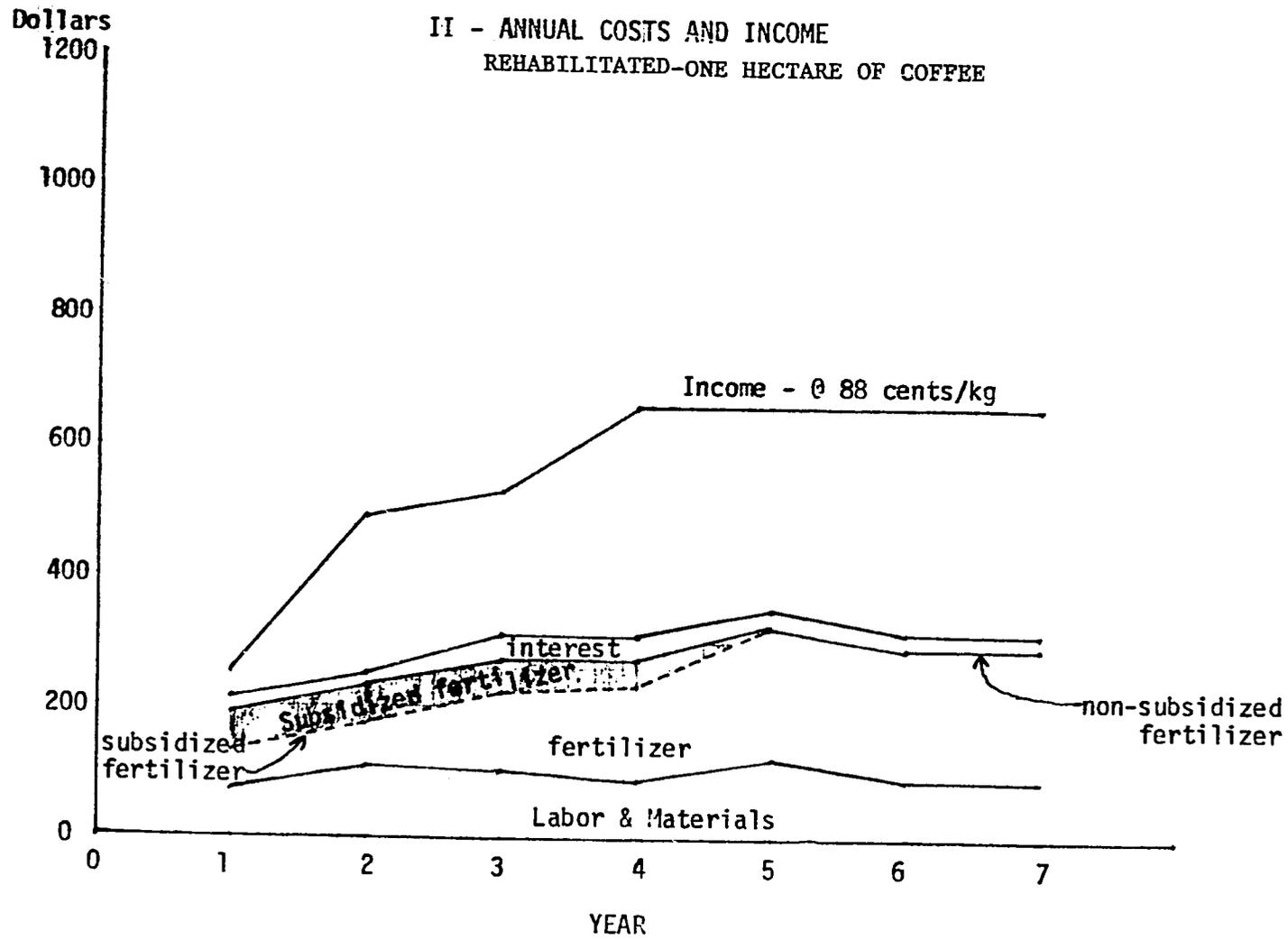


FIGURE IV

**II - CUMULATIVE COST AND INCOME AND PERCENT INCREASE IN COSTS
BETWEEN SUBSIDIZED AND NON-SUBSIDIZED FERTILIZER:
REHABILITATED ONE HECTARE OF COFFEE**

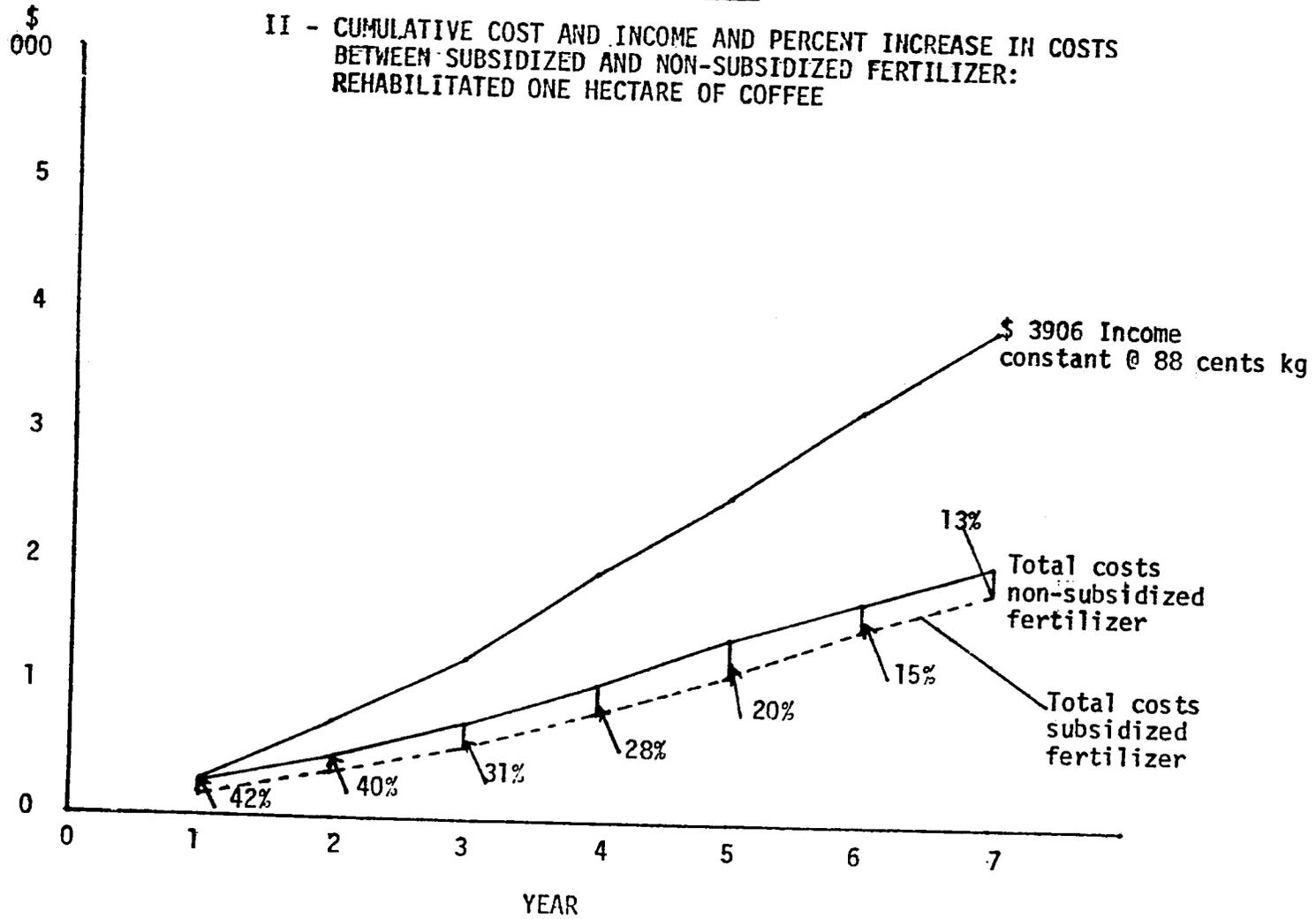


FIGURE 7

I COST AND INCOME: REPLANT ONE HECTARE OF COFFEE

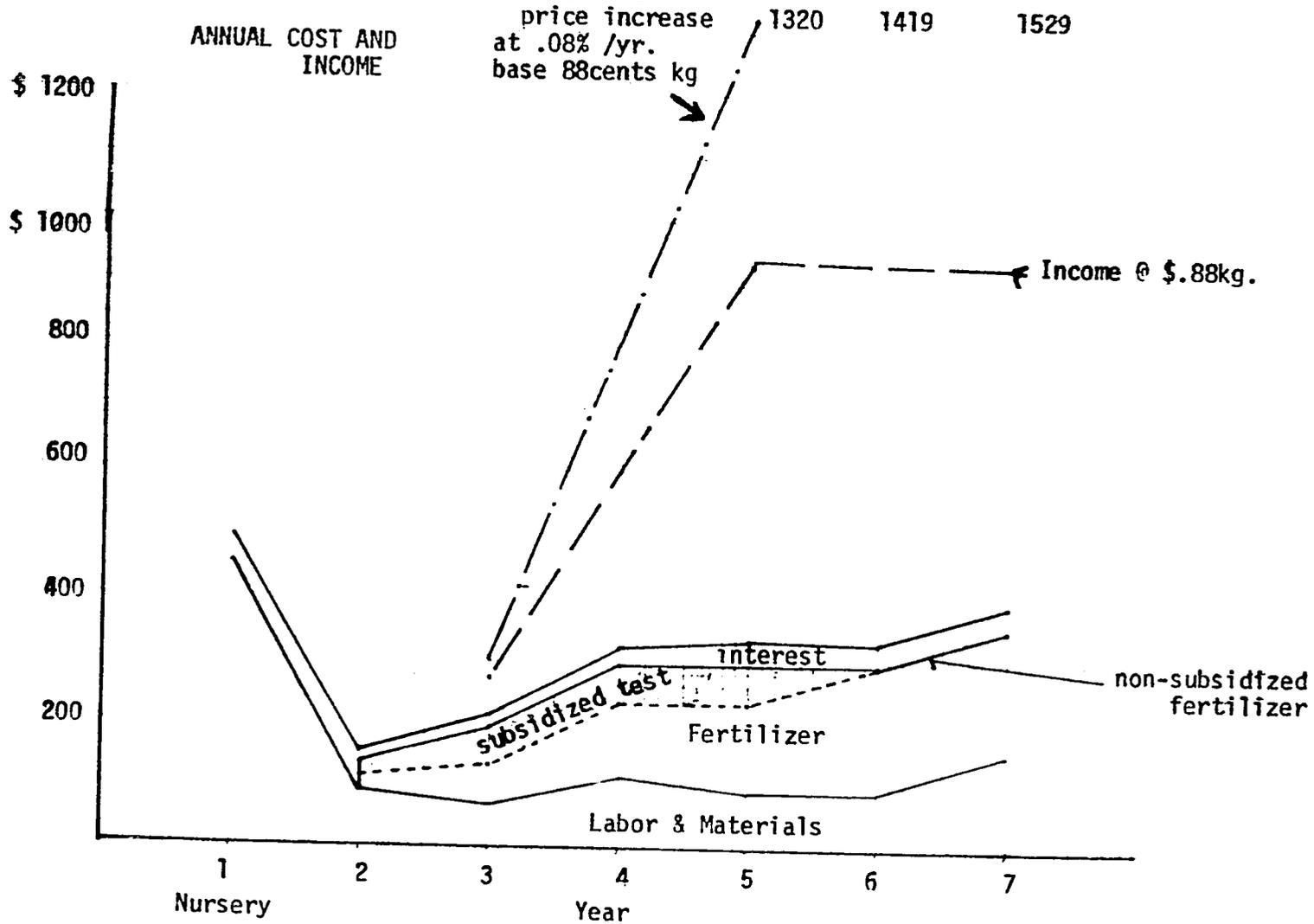
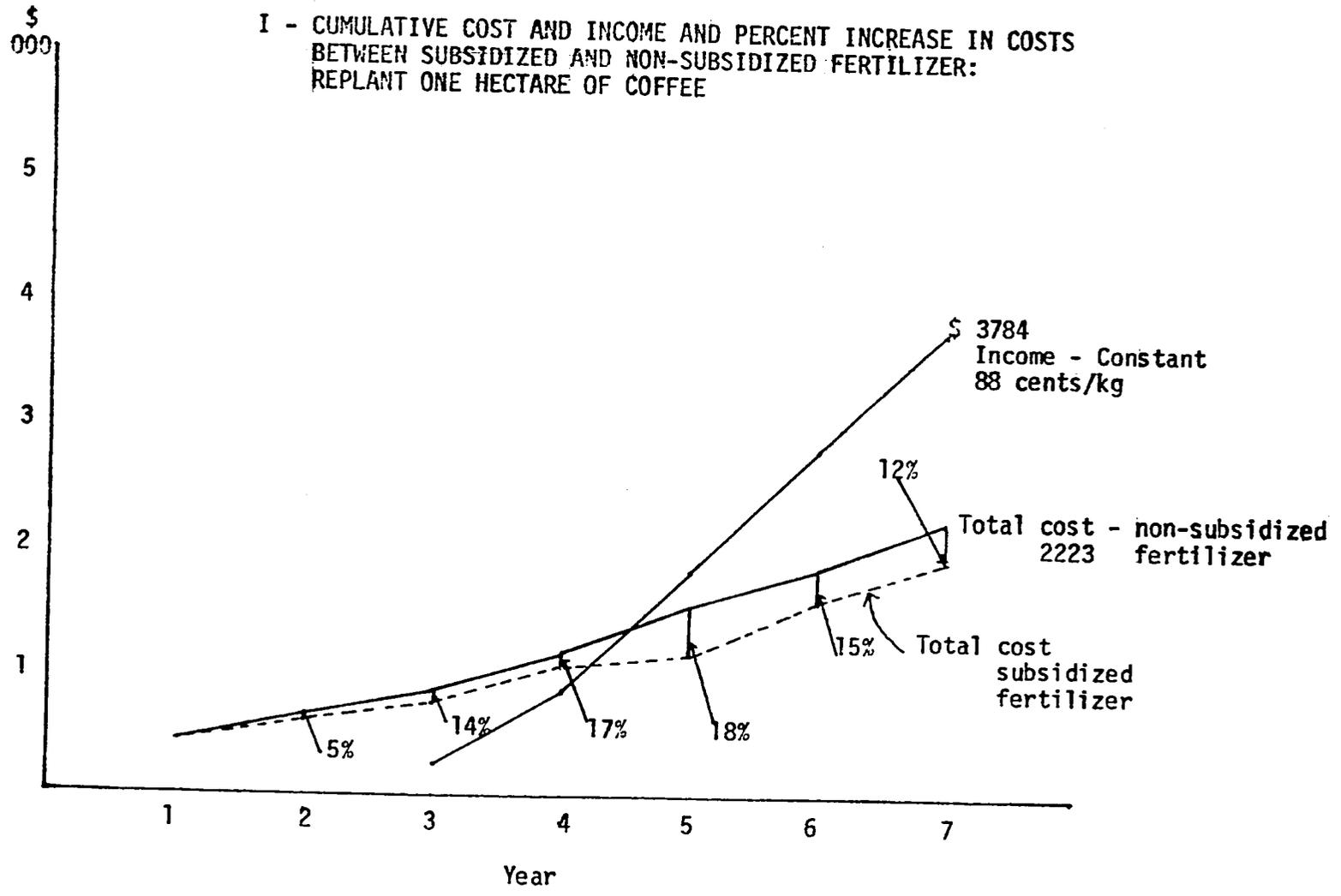


FIGURE VI

I - CUMULATIVE COST AND INCOME AND PERCENT INCREASE IN COSTS
BETWEEN SUBSIDIZED AND NON-SUBSIDIZED FERTILIZER:
REPLANT ONE HECTARE OF COFFEE



F. Financial Analysis

1. Funding Requirements

The five-year program will require a total investment of approximately \$8,000,000, with AID financing \$6,000,000 of total costs. US dollar expenditures under the program are estimated at US \$5,450,000 and expenditures in local currency (Gourdes) of US \$2,550,000. The GOH will contribute the local currency equivalent of US \$2,000,000 over the five-year period. This represents 25 percent of the total project cost directly attributable to a GOH contribution. Additional GOH expenditures in support of project activities will include ongoing recurrent costs of BCA operations, and continuance of an annual transfer of \$.40 per 60-kilo bag of coffee exported to IHPCADF for coffee promotion activities, in addition to a \$1.05 per 60-kilo bag of coffee exported for IHPCADF budgetary expenses.

Table 22 summarizes the amounts, source and application of funding requirements for the five-year disbursement period.

2. Source and Application of Funds

Requirements, by source and activity, are as follows:

AID: (a) Fertilizer - Annual requirements of fertilizer are based upon tonnages calculated to cover annual program needs. Annual world prices, and, therefore, need for foreign exchange, were based upon a fob Port-au-Prince price per ton of:

1975	\$285.00	
1976	307.80	(8% inflation)
1977	332.42	"
1978	359.01	"
1979	387.74	"

Clearly, these are estimated prices, based upon the best information available, and may be subject to some variation, although it is felt that they represent a reasonable estimate of fertilizer costs. Any variation will result in either somewhat more or less fertilizer being available over the life of the loan, but the amounts of any shortfall are not expected to be of such magnitude as to seriously affect the project's viability or timing. Up to \$75,000 of fertilizer will be purchased initially, after loan signing and meeting of standard conditions precedent, to allow for early needs of the program.

(b) IHPCADF Centers - Six operational centers, each with a 10,200 sq. ft. area, will be constructed using AID loan funds. Of the \$630,000 required \$550,000 will be in local currency costs and \$80,000, covering imported building material requirements, will be for US dollar costs. Local cost financing from loan funds is contemplated here in view of the high local cost component in any construction element, but also to assure quick implementation of this phase of the project.

TABLE - 22

SMALL FARMER IMPROVEMENT PROJECT
FINANCIAL SUMMARY

₡ = Gourdes

Years	ESTIMATED NEED FOR GOH CONTRIBUTION							AID LOAN				
	Foreign Exchange	Gourdes (\$Equiv)		IHPCA/DE Centers	Coffee Farmer Training	BCA Operations	TOTAL GOH		Fertilizer (FX)	Constr. IHPCA/DE Centers ₡(\$ Equiv.)	Equipment (FX)	TOTAL AID
		Cash Credit	Rural Roads				\$ FX	\$ Equiv. ₡				
1	0	24,966	25,000	36,500	6,000	36,500	0	128,966	166,440	250,000	170,000	586,440
2	0	57,829	75,000	47,500	7,800	47,500	0	235,629	443,232	300,000	200,000	943,232
3	0	123,083	150,000	55,000	12,400	55,000	0	395,483	876,924		80,000	956,924
4	0	182,260	175,000	68,000	25,000	68,000	0	518,260	1,405,883	0		1,405,883
5	0	256,535	250,000	90,000	35,000	90,000	0	721,535	2,108,142	0		2,108,142
Five- Year Total	0	644,673	675,000	297,000	86,200	297,000		\$ 1,999,873	5,000,621	550,000	450,000	\$ 6,000,621

GOH
\$ 1,999,873 = 5 years

AID
\$6,000,621

U.S. dollar costs of \$228,000 are anticipated for equipment purchases for the IHPCADE and the Operations Centers. (See Section for detailed lists.) In addition US dollar costs of \$122,000 are estimated for expanded BCA operations, both at the field level (IHPCADE Centers) and at the central office. Loan funds in the amount of \$20,000 will be used to procure road construction hand tools from U.S. sources, to be issued to communities involved in road improvement work. Up to \$100,000 of initial equipment will be purchased after meeting of standard conditions precedent (1/2 IHPCADE - 1/2 BCA).

GOH

The GOH will contribute, on an annual basis, a counterpart contribution to the project which will be deposited into a jointly programmed GOH/AID account in the Banque Nationale de la Republique d'Haiti (BNRH). The BNRH will act as fiscal agent for the project. At appropriate times over the life of the project, and at least annually, the GOH, represented presumably by the Ministry of Finance, the BNRH, IHPCADE and BCA, will meet with AID and discuss financial needs of the project. Agreement will be reached as to the specific financial needs of each of the sub-activities described below, in relation to planned activities and performance during the last period, and an amount of funds required will be designated to each agency and activity. The BNRH will then disburse these funds to each agency over the period required, according to normal GOH procedures and regulations. Accounting for use and expenditure of such funds will be according to normal GOH procedures and regulations. A monthly report of expenditures will be prepared by the BNRH and sent to each agency, the Ministry of Finance and AID. Further details concerning the specific operations of the joint fund will be developed prior to AID disbursement.

Over the life of the project, the joint counterpart fund will finance activities in support of the loan's activities as described below. These specific allocations represent the best estimate as to need and timing at this time. Some variation is expected as experience is gained and some reallocation of program needs may become apparent. Within the total amount expected, no one activity will be allowed to vary, however, more than 50% from its original projection over the life of the project, without a formal amendment to the Loan Agreement. Changes up to that amount may be managed through Implementation Letters.

(a) Cash Credit

Approximately US \$645,000 will be allocated to cash credit contributions, on a grant basis, to BCA. Such funds will complement the in-kind fertilizer credits.

(b) Rural Roads

Approximately US \$675,000 will be allocated to the construction and improvement of approximately 100 miles of rural roads in the coffee-producing areas. Community action is expected to complement

this expenditure. Up to \$50,000 of this amount will be available to cover the costs of local engineering expertise.

(c) IHPCADE Centers

Approximately \$297,000 will be allocated to the increased costs of maintaining the IHPCADE operations centers and fertilizer distribution program. After the first five years of the program, increased coffee exports are expected to produce the additional revenue required through already established per-bag earmarking of the coffee tax due IHPCADE for recurrent expenditures.

(d) Coffee Farmer Training

Approximately \$86,000 will be allocated to the systematic training of coffee farmers in new techniques of coffee production and in the establishment of pre-cooperative and cooperative enterprises.

(e) BCA Operations

Approximately \$297,000 will be allocated to BCA to cover increased operating costs of an expanded credit program. After the first five years, these costs will be absorbed by the interest and principal payments from the coffee credit fund.

3. Financial Schedule

Table 22 provides a detailed estimate, by year, of GOH and AID contributions to the project over five years. It should be understood that this schedule represents the present estimate as to the pace at which the program will be implemented. If experience shows that these estimates are not realistic, a future revision may be necessary. Any increase in pace of AID disbursements could be expected to be proportionately matched by an increased GOH pace of contribution.

AID

(a) Fertilizer

Purchases of fertilizer will be made according to the scheduled needs of the program as described in Part 3 Section C . Letter of Commitment procedures for each transaction will be used, with the GOH responsible for opening corresponding letters of credit and for purchasing the fertilizer whenever possible. AID would be responsible for all US dollar costs GIF Port-au-Prince.

(b) IHPCADE Centers

These centers will be constructed during the first two years of the loan. Upon completion of the required condition precedent to disbursement, AID will make an advance, equivalent to an estimated three months expenditures, to the joint account. This advance will be used to initiate design and construction work at the center sites. AID will then replenish the advance upon presentation of appropriate vouchers and supporting documentation on expenditures made, including inspection reports of construction accomplished. It is estimated that approximately US \$250,000 and US \$300,000 will be disbursed the first two years of the program for this purpose, with US \$50,000 for equipment purchases during year three.

(c) Equipment:

During the first year of the project, the GOH will develop specifications and begin purchasing of necessary operational and office equipment for the IHPCADE operations centers and BCA credit functions. All purchases will take place during the first three years of the project.

GOH

It is expected that the GOH will make, at the least, semi-annual cash payments (one half payment each time of annual amounts as specified in Table 22), scheduled to coincide with the amounts of fertilizer needed by the project. If such payments are delayed for reasons beyond the scope of the project, AID will inform the GOH that letters of commitment for further purchases of fertilizer for the project will be held in abeyance until due payment is deposited into the account.

The periodic programming of the annual amounts deposited into the joint account will be allocated generally as specified in Table . These yearly allocations, however, may need to vary if, as expected, various elements of the project will move at a somewhat different pace. As experience develops, and as specific needs emerge (i.e. a shortfall on amounts available for cash credit) some reallocation among project elements may be necessary. This will be subject, at the least, to an annual review between AID and the GOH. Again, within the total annual amount, no variation of more than 50% from the original projection of each category would be allowed without amending the Loan Agreement. Changes of less than 50% among categories would be accomplished by Letters of Implementation.

4. Profitability

The profitability of the overall program involves two aspects:
(a) financial return to the GOH on the investment required by the project

in the form of the AID loan and annual cash contributions 1/; and (b) viability of the revolving agricultural credit fund within the BCA. Both aspects depend largely upon the success of the program to substantially increase production over that which would have been expected under current conditions.

(a) Return of GOH Investment

At the present time Haiti exports approximately 330,000 to 350,000 sacks (60-kg) of coffee per year and an estimated 225,000 sacks enter domestic markets for internal consumption. Haiti's quota under the now suspended International Coffee Organization Quota System was 490,000 sacks of coffee per year. It was never filled.

In calculating the possible returns to Haiti from this project, Table 23 was developed which estimates coffee production without and with the program over a ten-year period, estimated to begin in 1975.

Without the program, a natural rate of growth is estimated in response to higher producer prices which are expected to encourage Haitian farmers to collect more coffee from their plantings. Domestic consumption also increases with population. The net result is an estimated difference of approximately 16,000 bags per year over the Year 1 estimates at the ten-year mark.

Production with the program is calculated on the basis of expected yields per hectare from the 12,778 hectares in the program. As can be seen, there is an estimated initial decrease in production as some plantings are removed and new seedlings planted. However, by year three, the program results are noted and steady increases are projected. By Year 5, 41,000 additional sacks per year are expected, and by Year 10, 135,000 additional sacks per year are expected to be exported.

It should be noted that these projections represent the most conservative set of calculations made on the expected yields. IHPCADE, on the basis of some recent experience, expects considerably more optimistic results.

Table 24 projects the ten-year impact of the program on Foreign Exchange earnings and on GOH revenues. A total of \$288 million value of exported coffee is projected over the ten-year period without the program, calculated on a constant value of \$80 per 60-kg. bag 2/. Using the estimated increases in production, the program is estimated to produce \$337.5 million over the ten-year period, or a net additional gain to the Republic of almost \$50 million in foreign exchange earnings.

1/ The GOH will repay the loan out of general revenue. The financial returns discussed here also ignores the significant institutional return expected.

2/ For a discussion of the projected level of world prices for coffee, see Section J , Part 3 .

TABLE 23 EXPORTS WITHOUT PROGRAM STARTING 1974/1975 = Year 1 (000 - 60-Kg. Bags)

<u>Years</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
PT*	587	593	599	605	610	616	622	628	635	641
DC**	231	236	241	246	251	256	261	266	272	277
PX***	356	357	358	359	359	360	361	362	363	364

Assumptions: PT = Base: 4-year average

PX = Coffee Year basis 70/71 - 73/74 (587.000 bags) Compound Rate of Growth: 1 percent

DC = Base CY 1973/1974 = 227.000 Compound Rate of Growth: 2 percent

EXPORTS WITH PROGRAM (000 - 60-Kg. Bags)

<u>Years</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
PX***										
W/O Prg.	356	357	358	359	359	360	361	362	363	364
Effect of Prg.	- 3	- 2	+ 2	+17	+41	+77	+105	+127	+135	+135
	353	355	356	366	400	437	466	489	498	499

* PT (Production - Total Tons)

** DC (Domestic Consumption)

*** PX (Production Exports)

TABLE 24 10-YEAR IMPACT OF PROGRAM ON FOREIGN EXCHANGE EARNINGS AND GOH REVENUES AT \$80/BAG

Years	FOREIGN EXCHANGE						REVENUES				
	Before Program		With Program		Difference		General GOH Budget Revenue under present tax allocation \$10/per bag		Difference \$000	Incremental Annual Requirements of Expended Program	Net Gain (Loss) GOH Revenue \$000
	Est. Exports (000-60 Kg. bags)	Value (\$000)	Est. Exports (000-60 Kg. bags)	Value (\$000)	(000) Bags	\$000	Before Prg.	After Prg.			
1	356	28,480	353	28,240	- 3	- 240	2,848	2,824	- 24	129	(153)
2	357	28,560	355	28,400	- 2	- 160	2,856	2,840	- 16	235	(251)
3	358	28,640	356	28,480	- 2	- 160	2,864	2,848	- 16	395	(411)
4	359	28,720	366	29,280	7	560	2,872	2,928	56	518	(462)
5	359	28,720	400	32,000	41	3,280	2,872	3,200	328	721	(393)
Five-Year Sub-Total	1,789	\$143,120	1,830	\$146,400	41	\$3,280	\$14,312	\$14,640	\$ 328	\$1,998	\$(1,670)
6	360	28,800	437	34,960	77	6,160	2,880	3,496	616	0	616
7	361	28,880	466	37,280	105	8,400	2,888	3,728	840	0	840
8	362	28,960	489	39,120	127	10,160	2,896	3,912	1,016	0	1,016
9	363	29,040	498	39,840	135	10,800	2,904	3,984	1,080	0	1,080
10	364	29,120	499	39,920	135	10,800	2,912	3,992	1,080	0	1,080
Ten-Year Total	3,599	\$287,920	4219	\$337,520	20	\$49,600	\$28,792	\$33,752	\$4,960	\$1,998	\$2,962

Government revenues, calculated at a net \$10 per bag over and above present coffee tax earmarkings, (in other words, available for general budgetary use) are calculated at \$28.7 million vs. \$33.7 million over the ten-year period, or a net gain of almost 5 million dollars in revenue.

The annual GOH contribution to the project is considered as an investment over the first five years of the program. It shows that the GOH will have to forego income of approximately \$1.6 million during this period, including income lost on plantings which have been replaced. The second five-year period, however, shows substantial and increasing gains, resulting in a net gain to the GOH of approximately \$3.0 million dollars, and an annual gain of over \$1.0 million in the last three years.

The projections dramatically illustrate the long-term nature of the program. It is not until Year 4 that the program shows a gain in GOH revenues, and even then the gain is more than offset by the annual investment needed. It is really not until year 7 of the program that substantial annual gains accrue.

Table 25 provides a summary of the financial flows of the program in relation to total annual fertilizer and cash credit needs, and compares the annual GOH contributions to the project for the first five years in terms of a percentage of the estimated value of the export crops with the program. Assuming the GOH maintains its present resource flows to IHPCADE (a condition of the loan), the net additional investment by the GOH into coffee, represented by its annual contribution to the loan raises the total GOH investment of their own resources into coffee from 2.3 percent to 4.0% of the value of the export (and therefore taxable) crop over the five-year period. Such a result is a desirable trend which the loan has facilitated. The amount of the annual disbursements of the loan are, of course, net additions to that total.

After Year 5, projected increased production will produce for IHPCADE an estimated additional \$88,000 per year for operations expenses and an additional \$32,000 for investment purposes.

This latter fund, composed of US \$.40 per 60-kg. sack exported will be available to IHPCADE on an annual basis during the life of the project. The availability of these funds, over and above the loan financing and GOH contribution to the project, constitutes an important element within the program (as does BCA's "other" portfolios). No agency should be totally tied to an AID loan. Each should preserve the right and resources to pursue some programs which respond to its own specific needs which may fall outside of the parameters of the AID loan-financed program.

(b) Viability of BCA Revolving Fund

Table 26 provides an illustrative cash flow of the BCA Small Farmer Improvement Fund.

For the first five years, annual credit needs of the program are comprised of fertilizer and an estimated 30% complementary cash credit as a minimum requirement. The AID loan for fertilizer (and its sale to the farmer at credit terms) and the GOH cash contributions represent capital grants to the capitalization of the fund. Amounts shown represent the value of the fertilizer to the farmer, with the subsidy already deducted. These amounts shown are thus due the fund, plus interest.

The crucial point in the fund's existence will come in Year 6. At this time, the AID loan will be disbursed and the annual GOH cash contributions theoretically end (although it is quite possible the GOH will decide to continue them if conditions warrant such action). At that time there remains an element of the program which still requires a subsidy. Therefore, as presently projected, the fund will have to manage its portfolio in such a way as to insure that in Year 6 the fund will be able to purchase the necessary fertilizer requirements, absorb the subsidy, provide complementary cash credits, and pay for BCA operations.

Clearly the terms at which loans are made in the early years of the fund's existence will largely determine its ability to carry out this task successfully. The GOH has indicated it will vary the terms of the loans it makes according to the circumstances of each farmer. New plantings will obviously require longer terms than a rehabilitation schemes. Therefore, for purposes of analysis, a three-year term was used as an average, with repayments, plus 8 percent interest on the outstanding balance, due in three equal payments.

The projections assume that farmers receiving fertilizer at discount prices will receive three-year credits. Farmers paying full price for their fertilizer will only receive one-year credits. Any additional resources available in the fund after Year 5, over and above the minimum projected credit needs of the farmers in the program, are shown as being lent out as cash credit at no more than two-year terms. (this process, while seemingly somewhat complicated, will be eased considerably by BCA's plans to extend "lines of credit" to each farmer as he enters the program. His credit needs over several years will be formulated and based upon the type coffee cultivation he chooses, and his estimated repayments will be calculated at the same time.)

The cash flow, while illustrative, shows that the fund in Year 6 will have a total of \$2,750,921 available for lending. Table 25 (Column 1) shows that projected fertilizer requirements in Year 6, estimated to cost \$387 per ton, will necessitate an expenditure of \$2,240,645, or a net loss to the fund of approximately \$30,000.

The Table, then, purposefully illustrates the care that must be taken in the early years of the program to provide credits at judicious, but not excessive terms. Several factors are at play. Any significant increase in one-year or two-year-loans will decrease and/or eliminate the deficit. Any major defaults will accentuate it. It is also obvious that reflows cannot be used to finance yet additional fertilizer purchases, beyond the projected needs of the program, for subsequent sale at discount. In effect, the fund must seek to limit its subsidy credits whereby a commodity is purchased at full value, lent in kind, and repayments are made at half or three-quarters its original cash value. After an initial subsidy sale, and after minimum program requirements are met, every effort should be made to make additional credits available in cash and repayable in cash, plus interest, to avoid decapitalization. The GOH has indicated that it is fully aware of this problem and will seek to avoid it.

Another factor is the price of fertilizer in Year 6 and beyond. The requirements of the program are in tons of fertilizer. If the world price is somewhat less than \$387 per ton (compared to today's already inflated prices of \$250 per ton) then the needs of the program will be met with fewer funds, thereby making more funds available for cash credits repayable at full value.

Finally, the continuance of a GOH cash contribution each year to BCA for further capitalization after Year 5 is not beyond consideration. The value of the program to the GOH should be apparent by that time and it is assumed they will have a major interest in seeing that the fund continues to expand.

There seems to be, given good management and careful use of resources, a reasonable chance of achieving a degree of self-sufficiency in the credit needs of the program. Final analysis must depend, of course, on practical experience developed as the program evolves over the first few years. It is recommended that the annual review of the program specifically review this issue and make any necessary adjustments in credit terms in order to assure this reasonable chance of self-sufficiency.

TABLE 25
SMALL FARMER DEVELOPMENT PROGRAM - PROGRAM SUMMARY

YEAR	Fertilizer	Price	Cash Credit 1961 Value	Annual Total Credits	Annual GCR Contribution	Cash Credit to Cash Credit Covered Needed other Funds	ESTIMATED RETURNS (1960)		COSTS					Total Value	% of FY
							Per Acre	Per Acre	Per Acre	Per Acre	Per Acre	Per Acre	Per Acre		
1	185440	83225	24866	208186	229765	21869	13400	229	229	161200	32010	46010	2840000	15.8%	
2	482721	221626	66484	283109	235822	15829	11700	257	255	142000	28210	40210	2814000	15.8%	
3	674426	311373	105122	629497	705481	212081	37200	358	356	142000	28210	40210	2814000	15.8%	
4	1453480	902627	271087	1172711	518260	182260	33600	337	336	142000	28210	40210	2814000	15.8%	
5	2128142	1488242	444471	1934713	722213	256113	41900	333	332	142000	28210	40210	2814000	15.8%	
5-year Sub-Total	5300421	3214780	964430	6073263	1998873	644673	1351200	1790	1780	712000	141050	199170	14420000	15.8%	
6	720415	1800754	560225	2340979				360	357	173600	33250	146320	3480000		
7	2303581	2101796	620528	4722214				311	308	186400	48900	129610	3120000		
8	1302341	2225662	667632	1993075				362	359	195600	51350	120910	2720000		
9	1203141	2323488	706014	3059655				361	358	195200	52800	122100	3080000		
10	2003441	2393581	706014	3059655				344	341	190600	52850	122100	3080000		
10-YEAR TOTALS	14082222	14082222	4471965	26007070	1919873	644673	1351200	3420	3390	1687600	472150	179130	13750000		

TABLE 26

ILLUSTRATIVE CASH FLOW - BSA SMALL FARMER IMPROVEMENT FUND - 10 YEARS

Years	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11
1. Total Credits (Farming Components) (Estimated)	247,750	(36,000)	(36,000)	(36,000)							
Sub-Totals		211,750	31,750	31,750							
2. Minimum 3-yr. Credit Repay - 1949 Mt.		211,100	(10,000)	(10,000)	(11,000)						
TOTAL Avail. for lending (C)		322,250	(10,000)	(10,000)	(11,000)						
(-) Additional Cash Credit Avail. - No. add		-33,000			(8,000)						
3. Minimum 3-yr. Credit Repay - 1950 Mt.			22,000	(20,000)	(20,000)	(20,000)					
TOTAL Avail. for lending (C)			22,000	(20,000)	(20,000)	(20,000)					
(-) Additional Cash Credit Avail. - No. add			-17,200								
4. Minimum 3-yr. Credit Repay - 1951 Mt.				22,000	(20,000)	(20,000)	(20,000)				
TOTAL Avail. for lending (C)				22,000	(20,000)	(20,000)	(20,000)				
(-) Additional Cash Credit Avail. - No. add											
5. Minimum 3-yr. Credit Repay - 1952 Mt. (R)(C)					145,773	(60,000)	(61,352)	(62,752)			
Minimum 1-yr. Credit Repay - (R)(C)					112,000	(50,526)	(51,526)	(52,526)			
TOTAL Avail. for lending (C)					145,773	(60,000)	(61,352)	(62,752)			
(-) Additional Cash Credit Avail. - add (C)(C)					11,500	(6,000)	(6,000)	(6,000)			
TOTAL Avail. for lending (C)					157,273	(66,000)	(67,352)	(68,752)			
6. Minimum 3-yr. Credit Repay - 1953 Mt. (R)(C)						121,000	(58,225)	(59,775)	(61,275)		
Minimum 1-yr. Credit Repay - (R)(C)						112,000	(47,125)	(48,125)	(49,125)		
TOTAL Credit Needs						112,000	(47,125)	(48,125)	(49,125)		
Plus - BSA operating expense						2,500					
TOTAL Credit plus expenses (C)						114,500					
Difference - Avail. for other Credit - MAXIMUM TWO YEAR TERM (R)(C)						21,573	(1,925)	(1,925)	(1,925)		
TOTAL Avail. for lending year 6						21,573					
7. Minimum 3-yr. Credit Repay - 1954 Mt. (R)(C)							107,000	(57,835)	(59,335)	(60,835)	
Minimum 1-yr. Credit Repay - (R)(C)							100,000	(46,835)	(47,835)	(48,835)	
TOTAL Credit Needs							100,000	(46,835)	(47,835)	(48,835)	
Plus - BSA operating expense							2,500				
TOTAL Credit plus expenses (C)							102,500				
Difference - Avail. for other Credit - MAXIMUM TWO YEAR TERM (R)(C)							4,573	(1,500)	(1,500)	(1,500)	
TOTAL Avail. for lending year 7							4,573				
8. Minimum 3-yr. Credit Repay - 1955 Mt. (R)(C)								102,000	(57,000)	(58,500)	(60,000)
Minimum 1-yr. Credit Repay - (R)(C)								95,000	(46,000)	(47,000)	(48,000)
TOTAL Credit Needs								95,000	(46,000)	(47,000)	(48,000)
Plus - BSA operating expense								2,500			
TOTAL Credit plus expenses (C)								97,500			
Difference - Avail. for other Credit - MAXIMUM TWO YEAR TERM (R)(C)								4,500	(1,500)	(1,500)	(1,500)
TOTAL Avail. for lending year 8								4,500			
9. Minimum 3-yr. Credit Repay - 1956 Mt. (R)(C)									100,000	(56,000)	(57,500)
Minimum 1-yr. Credit Repay - (R)(C)									93,000	(45,000)	(46,000)
TOTAL Credit Needs									93,000	(45,000)	(46,000)
Plus - BSA operating expense									2,500		
TOTAL Credit plus expenses (C)									95,500		
Difference - Avail. for other Credit - MAXIMUM TWO YEAR TERM (R)(C)									4,500	(1,500)	(1,500)
TOTAL Avail. for lending year 9									4,500		
10. Minimum 3-yr. Credit Repay - 1957 Mt. (R)(C)										100,000	(55,000)
Minimum 1-yr. Credit Repay - (R)(C)										93,000	(44,000)
TOTAL Credit Needs										93,000	(44,000)
Plus - BSA operating expense										2,500	
TOTAL Credit plus expenses (C)										95,500	
Difference - Avail. for other Credit - MAXIMUM TWO YEAR TERM (R)(C)										4,500	(1,500)
TOTAL Avail. for lending year 10										4,500	

1. All interest accumulated on outstanding balances.
2. Minimum 3 year credit requirement for all farmers having facilities; at the end of year 10 (first full year) for farmers' mortgages in progress) to be repaid, with interest on that year's installment.
3. Starting year 5, repayments plus interest on amounts owed (including previous repayments) shall be limited to 20% of maximum loan two years.
4. Farmers defaulted from district shall repay all future loans at the year term.
5. BSA operating expense to be charged to fund starting year 6.
6. No debt debts.

G. ENGINEERING ANALYSIS

1. REGIONAL FACILITIES (OPERATIONAL CENTERS)

(a) Location

Discussions between AID and IHPCADE have led to the conclusion that the establishment of 5 to 7 IHPCADE operational centers in major coffee-growing areas is essential to conduct the project as contemplated. While it may be desirable to cover more areas, financial and institutional limitations militate against a larger program at this time. To assure the best selection of operation centers locations, an on-site survey and study will be made of each of the proposed sites in the immediate future by members of the USAID project committee, IHPCADE representatives and BCA personnel, and agreement will be reached on the locations prior to disbursement of funds for design of the facilities, purchase of commodities or contracting for construction. Availability of power, water, materials and labor will be considered at this time and a final cost estimate presented.

A tentative agreement has been reached on the following eight operation centers which have been assigned a priority based on the relative importance of the areas, their degree of advancement in modern coffee technology, the accessibility of land and their practical feasibility as a site for the general promotion of coffee. The sites are listed in their order of priority:

1. Le Borgne
2. Dondon
3. Jacmel area
4. Fond des Negres
5. Beaumont
6. Plaisance/Pilate
7. Baptiste/Savanette
8. Thiotte

The sites and their zones of influence are shown in Annex III.

(b) Function of centers

The role of the IHPCADE operation centers will be to perform the following general functions:

1. Conduct coffee demonstrations.

2. Maintain collections of improved plant materials
3. Produce seed of improved varieties
4. Multiply seedlings of improved varieties
5. Perform variety trials, fertility trials and cultural practice trials
6. Train IHPCADE and BCA personnel in coffee technology, extension methodology and credit methodology.
7. Train farmers in improved cultural practices of coffee
8. Provide mechanisms to assist small farmers in obtaining credit for coffee production
9. Receive, store and redistribute fertilizer and other inputs to coffee growers
10. Develop and operate when appropriate, a minimum price/stabilization program for coffee
11. Gather statistics on coffee production
12. Provide mechanisms for operations control and reporting on activities of the project

The facilities required for these new centers may vary somewhat from one zone to another because of the size of the program or because some facilities may already exist in some locations.

(c) Description of Centers

A typical operations center would include the following facilities:

Land: Approximately 15 acres (fenced in.)

Buildings: Offices/work room

- 1 training center (with dormitory/Kitchen/toilet facilities)
- 1 residence for Director
- 1 residence for farm manager
- 1 warehouse for fertilizer
- 1 coffee drying patio/shed

The center would be operated by:

- 1 Director (coffee agronomist)
- 1 Agronomist (Agr. Crops)
- 1 Credit Agent
- 1 Secretary-Clerk
- 1 Farm Manager
- 2 or more Assistant Agents (as necessary)

The following items of equipment would be required at each center for its proper functioning and to permit effective communications between the center and producers.

Electrical Generator (15 KW) and electrical dist. system

Water pump w/storage tank and dist. system

Short wave radio

Scales (500kgs., 20kgs.)

Calculator

Coffee depulper

Typewriter

Agricultural Hand Tools

1 ea 4 wheel drive jeep

1 ea 4 wheel drive pick up truck

2 ea Motor Bikes

(d) IHPCADE Central Office Requirements

IHPCADE presently has central office facilities available which are satisfactory for the purposes of the loan-financed program. However, to assure desired supervision, inspection and support to district offices, warehouses and operational centers, IHPCADE requires the following vehicles and equipment:

4 Jeeps

3 4-5 ton stake bodied trucks

1 3/4 ton panel truck

2 electric calculators

1 electric typewriter

- 1 mimeograph machine
- 4 Sound equipment for panel truck
training aids (projectors, etc.)
Base radio station

(e) Communications

Telephone communications between Port-au-Prince and major cities in Haiti are usually not possible. In any case the Operations Centers will be located away from the major cities and will not be served by the telephone network. As a part of this project, the central Port-au-Prince IHPCADE office will be connected to each of the operational centers by means of a short-wave radio system. The base station would be located in the central office and small receiver/transmitters would be located at each center in the office of the director. The director and his secretary/clerk would be taught how to operate the unit and a schedule of periodic contacts would be established. (A similar station will be located at BCA central offices which is several miles distant from IHPCADE offices. Both systems will be tied together

2. RURAL ROAD IMPROVEMENT

(a) Haitian Road System

On paper the Haitian road network totals 3,300 kms., of which 1,019 kms. are identified as National Highways, which connect key cities; 736 kms. as Departmental Roads, which connect internal and border points; and 1,545 kms. as Rural Roads, which are no more than trails or paths and not generally suitable for use by motorized vehicles.

(b) Present Condition of Roads

Maintenance of roads in Haiti has been practically non-existent since the early 1960's. Road sections have flattened and developed depressions, road shoulders have disappeared or have been built up above the roads by vegetation so the roads become waterways. Drainage ditches have filled in, culverts and other drainage structures destroyed. A resume of present condition of the system is as follows:

Paved roads (concrete asphalt and block) constitute only 9% of the network. Of these only 11% can be considered in fair condition.

Stabilized roads (gravel and waterbound macadam) make up 17% of the network with about 50% in fair condition during the dry seasons of the year dropping to 25% during wet seasons.

Rural roads make up 47% of the network. They are primarily earth tracks impassable when wet and in most cases impassable in anything except a 4-wheel drive vehicle when dry.

(c) Present Road Activity

The Ministry of Public Works, Transportation and Communications (TPTC) has prepared a six-year plan for reconstruction of the national highway system and is trying to find financing for the estimated \$12.0 million costs involved.

The two principal roads in the country are the 243 kms. Port-au-Prince/Cap-Haitien North Highway and the 197 kms. Port-au-Prince/Les Cayes South Highway. Both of these roads are in very poor condition at the present time but the IBRD is negotiating a \$10.0 million loan to rehabilitate the worst sections of the North Highway and the IDB has granted a \$22.3 loan to do the same to the entire South Highway. In addition the French Government has made a grant of \$2.0 million to improve and pave the existing 43 kms. trail from Leogane on the South Highway to Jacmel on the South Coast.

Complementary to the above loans AID has awarded a combination Grant/Loan in the total amount of \$3.8 million to assist in the development and equipping of a National Highway Maintenance Service (SEPRRN). At the end of a three-year program (1974-76) it is hoped that SEPRRN will have the capability to maintain the North and South Highways and gradually assume responsibility for other national and departmental roads as they are reconstructed under the 6-year plan.

(d) Rural Roads

It is not anticipated that rural roads will benefit from either the TPTC or SEPRRN programs so the construction, repair and maintenance of specific roads will depend on the efforts and financing of the communities involved.

(e) Road Work Involved in Present Project

As a part of this project IHPCADE will develop operational centers located in the major coffee-producing areas. The operational centers are generally located in towns not presently connected to the national highway network. In most cases the local roads or trails serving these towns cannot be used for vehicle traffic, or can be used only at certain times of the year.

To assure movement of technical and credit assistance, fertilizer and other agricultural inputs into the operational centers where they will be distributed to the multitude of small farmers involved in this project, and to facilitate the movement of coffee from the operational areas to export points, improvement of the rural roads connecting the operational centers to the national highway network, and other local roads connecting the operational centers to the principal communities within the zone must be accomplished.

Based on the planned location of the operational centers to be developed as a part of the present project and on discussions with IHPCADE personnel it appears that an average of 20 miles of rural roads serving each of the operational center needs to be improved.

This includes several sections of national or departmental road critical to the project. These roads, however, have a low priority in the TPTC 6-year plan and are not scheduled for reconstruction under this plan, or are scheduled for 1977-1978. As a part of this project it is proposed to improve sections of these roads to permit their use until the TPTC program is carried out. The specific sections of roads to be included in this program will be identified by the GOH/AID project committee at the time the final location of the operational centers is decided.

H. IMPLEMENTATION PLAN

I. Engineering

(a) Engineering Assistance

The engineering and construction phases of this program are representative of relatively simple elements and are within the GOH capabilities to plan and supervise. The GOH Ministry of Agriculture civil engineering group will perform the design. However, engineering assistance in the form of a civil engineer should be furnished with grant financing for two years to assist and train IHPCADE personnel and the communities involved in the design, contract award, construction supervision, procurement of project materials and maintenance of the facilities provided under the loan-financed program. A private consultant will be used. He must be familiar with AID requirements and be fluent in French and English.

(b) Construction of Facilities

Due to the relatively small size of the various facilities to be constructed under this program, the scattered locations of the sites and the inaccessibility of the sites to the present road network, it is not feasible to consider having a single large firm do this work. In Haiti it is the general practice for a builder to perform both design and construction of a facility on a cost-plus-fixed-fee basis.

(c) Design of Operational Centers and Warehouses

The consultant will work with IHPCADE in developing the requirements for the various operational centers and warehouses. He will assist in the preparation of layout plans, outline specifications and the basic information (topographic and soil data, water and power supply, drainage and sewage disposal systems) for negotiating contracts with selected qualified builders in the areas involved. Once builders have been selected and contracts signed, the consultant, under the general direction of the GOH, will supervise the design and construction work of the builder, assist in the procurement of any imported construction materials, inspect the work and approve payments for work performed. He will prepare monthly reports on the status of the program and furnish copies in French for IHPCADE and in English to A. I. D. IHPCADE, or the Ministry of Agriculture, will furnish necessary logistic support (office, secretary, administrative and accounting, construction inspectors, transportation) to the consultant.

(d) Design Standards for Buildings

Design of buildings and supporting works will be based on the type of construction normally used in Haiti. This includes masonry foundations, concrete floor slab with tile facing, concrete block walls with cement plaster inside and out, corrugated sheet metal roofing, metal window frames and wood doors. Interior and exterior electrical, water and sewage systems will be based on good practices. Paved areas will be of concrete over a suitable base.

(e) Engineering Assistance for Road Work

Engineering assistance will be provided as a feature of the loan to guide and assist IHPCADE personnel and the communities involved in the planning, design and construction of the various road projects. The consultant will help determine material, equipment, tools and labor requirements and provide assistance in procuring necessary items. During the actual construction he will assist in supervising the construction.

(f) Design Standards for Roads

Design of the rural roads will be based on providing the cheapest all-weather road possible to accommodate local traffic. Traffic will normally be minimum and consist of trucks and four-wheel drive vehicles with a minor amount of two-wheel drive traffic. The roadway will be 16 feet wide, including shoulder and ditches. Existing alignments and contours will be followed to the maximum extent possible to avoid unnecessary excavations. Adequate ditches and cross drainage will be provided. Bridges will be avoided wherever possible, with culverts or fords provided where necessary. The road will have a base and wearing surface of select material, utilizing available sources along the roads to the greatest possible extent.

A field survey of each road will be made and any obvious problem areas, such as swamps, rock outcroppings, areas periodically flooded, etc., will be avoided when laying out the road. Based on the field survey a trace and profile of the road will be prepared, drainage structures identified, and a bill of materials and cost estimate developed.

(g) Method of Constructing Roads

In Haiti, almost all work is accomplished by use of hand labor rather than equipment. Construction of facilities and rural roads under this program will utilize to the maximum possible extent this method, in order to provide employment to the greatest number of persons and inject cash into the Haitian economy. It is proposed to accomplish construction of the various sections of roads using labor-intensive methods to the maximum possible extent under a direct administration arrangement. The communities involved will assure an adequate supply of labor. An inspector or community representative will control use of project materials and tools and keep track of payroll costs under the general supervision of the engineer. When specific equipment is required to supplement hand labor it will be obtained on a rental basis. A contribution in cash or in labor services will be expected from the local communities.

(h) Building Materials

Sources of gravel and sand are found in most stream beds and when graded are suitable for construction of roads and for making concrete. Large stones from the streambeds and limestone boulders are used to construct rubble masonry foundations and walls. Lime is abundant and easily obtained in all parts of the country.

Cement is produced in Haiti at a plant near Port-au-Prince. Cement blocks are generally fabricated at the construction site from cement and local materials. Lumber is available from local sources.

Building hardware, roofing, plumbing, electrical supplies, glass and other manufactured items are usually imported and can be obtained through Port-au-Prince importers. However, local duties and taxes are included in the price. Since IHPCADE has a duty and tax-free franchise, it would be less expensive if the items were ordered specifically for the IHPCADE projects, either through local importers or directly.

(i) Road Building Materials and Tools

Most of the basic construction materials, i. e. cement, rock, sand, lime, lumber, will be procured locally, using normal good practices. A quantity of construction handtools, picks, shovels, wheelbarrows, sledges, crowbars, tampers, etc., will be procured under the loan and issued by IHPCADE to the communities for specific projects. Where feasible due to the type of items involved, procurement of any imported items will be made in Code 941 countries by IHPCADE with the assistance of the engineer, except as waived. Procedures will conform to normal good business practices as to reasonable price, insurance, shipping, etc.

(j) Maintenance of Completed Roads

Because of the nature of its construction methods and materials, a low-cost road is vulnerable to extreme climatic conditions and corrective and preventive maintenance is required on a continuous basis, otherwise a small slide or plugged drainage canal will lead to further deterioration of the road bed and failure of sections of the roads.

The communities will be responsible for the maintenance of roads in their areas. The consultant will assist IHPCADE and the communities to develop their maintenance capabilities. For any minor sections of the national highway network, SEPRRN will perform this function.

SMALL FARMER IMPROVEMENT, HAITI

ENGINEERING, CONSTRUCTION & PROCUREMENT SCHEDULE

Activity	1974												1975												1976												1977													
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		
Approve CAP and PROP																																																		
Sign Loan Agreement																																																		
Contract for Engineer Advisor (PROP)																																																		
Perform Location Survey For Centers																																																		
Meet Loan C.P.'s to Disbursement for Constr.																																																		
Prepare basis of Design of Centers																																																		
Select Builders and Negotiate Contracts																																																		
Design and Construct Centers																																																		
Determine Material and Equipment Requirements																																																		
Advertise for Bids for Materials																																																		
Award Procurement Contracts																																																		
Delivery of Materials																																																		
Survey Roads and Perform Designs																																																		
Perform Road Work																																																		

2. Fertilizer Delivery System

IHPCADE has a historical experience of buying and selling fertilizer for use on coffee. The system employed has been to purchase through private dealers, pay them a commission of 3 - 5 percent for handling the fertilizer, the importation paper work and delivery to the warehouse. IHPCADE stored the fertilizer in its own warehouse in Port-au-Prince from which it arranged for delivery to the various regional offices near the coffee-growing areas. Transportation costs were paid by IHPCADE. Costs of transport have been in the range of Gdes. 2.5 per 50-kilo sack to Thiotte and Gdes. 3.0 to Marbial, Cap-Haitien or equivalent distances. Upon arrival the fertilizer was stored in depots which were rented when necessary. Sales have been made directly to farmers for cash at a 50% subsidy.

The system of fertilizer purchase/distribution envisaged under the loan is to provide for AID assistance to IHPCADE for direct procurement of fertilizers as well as other necessary commodities. The fertilizer employed in the program will be of an analysis 20-5-15 with 1 percent magnesium. This analysis applied at the rate of 500 kilos per hectare on mature trees will be equivalent, in the case of nitrogen to one metric ton of 10-5-20 analysis used in previous years. External and internal transport costs will be cut in half. The farmers' efforts or costs of transporting more bulk and weight to his farm will be reduced by one half.

Present warehouse capacity exists in facilities of IHPCADE for the storage of 350 m. t. and in the Damien facilities of DARNDR for 1000 m. t. of fertilizer. This capacity is adequate for the first two years. When additional capacity is needed beyond this time, depots can be temporarily rented at a cost of \$100/month for each 200 m. tons. The delivery system under the loan envisages receipt of fertilizer in Port-au-Prince, providing for temporary storage as necessary and transportation in IHPCADE trucks to regional centers where new warehouses will provide for 200 - 300 m. t. storage in each location. If the need exists to store additional quantities in the general area of a given operational center, arrangements will be made for storage in rented depots near regional offices of IHPCADE in such locations as Jacmel, Gonaives, Cap-Haitien, etc.

The system of sales contemplated under the loan provides for credit sales by BCA to farmers' groups at a subsidized rate of 50 percent the first two years and 25 percent the next two years. In Year 5, the farmer will pay 100 percent of cost. Credit sales of BCA will remain a part of the revolving credit portfolio of BCA as described in another section of this paper.

Inventory controls will be made for all fertilizer received, stored and transported to other locations within the country. Each warehouse will maintain inventory controls necessary to reconcile receipts with departures of fertilizers. BCA will be largely responsible at the operation centers for the inventory system, lock and key system and cash and credit sales to farmers. Countercontrol of receipt, inventories and sales of fertilizer by the IHPCADE Director of the operational center or his designee will assure that fertilizer will be sold and used to meet the specific objectives of the project. Minor amounts of fertilizer stocked at the operation centers will be needed for research, demonstrations and training purposes. These amounts will be so identified in the inventory system. Fertilizer sold for discount will be identified by either a characteristic bag or will be ordered with a special dye for easy identification.

Investigations have been made concerning the availability and price of fertilizer required by the loan project through the five-year period. Information has been obtained from the Tennessee Valley Authority that the minor quantities involved (approximately 14,000 m. t.) will in all likelihood be available from U. S. sources. Current prices of 20-5-15 in 1000 m. t. lots are \$250 plus \$35 freight from Gulf ports. Significant reductions in price could not be obtained unless lots of 5000 m. t. were purchased at one time. Such quantities will be needed by the fifth year of the project. Therefore, some savings may result from larger quantity purchases at that time.

Discussions were held with the Ambassador of Venezuela to determine fertilizer availability from that source. AID was assured that sources of 20-5-15-1 exist at prices of 225/m. t. plus \$15 - \$20 freight.

In the case that it is desirable to purchase fertilizer through Haitian private enterprise, such sources have assured investigators that eligible source fertilizers could be purchased in the types and quantities indicated at existing world market prices at the time of purchase. Cash payments for the purchase would facilitate ordering. Private enterprise would work on a commission basis (3-5%).

While it is impossible to foresee any sudden changes (either for better or worse) in the present tight fertilizer market situation, there appears to be reason to assume that the project will be able to acquire the relatively small quantities needed in the time frame planned. This is assuming that adequate forward planning and purchase is done.

Purchases are expected to be made six months in advance of expected arrival dates. Where possible, purchases should correspond to off-season U. S. markets. An estimated schedule for delivery is as follows:

<u>Years</u>	<u>Quantity</u>	<u>Purchase Date</u>	<u>Arrival Date</u>	<u>Distribution Date</u>
1	584	Oct. 74	Mar. 75	Mar.- June 75
2	1,440	Jul. 75	Jan. 76	Mar.- June 76
3	2,638	Jul. 76	Jan. 77	Mar.- June 77
4	3,916	Jul. 77	Jan. 78	Mar.- June 78
5	<u>5,437</u>	Jul. 78	Jan. 79	Mar.- June 79
Total	14,015			

3. Credit

The Bureau of Agricultural Credit (BCA) of the Ministry of Agriculture and Natural Resources will execute the credit component of this project.

Administration and accountability for project lending will be entirely separate and distinct from other operations of the BCA, and credit will be channeled through a special "window" for this purpose. Loans will be extended in cash and in kind (fertilizer) to individual and group borrowers through regional offices of the BCA to be located in the planned 6 IHPCADE Regional Operations Centers.

The lending operation will proceed as follows:

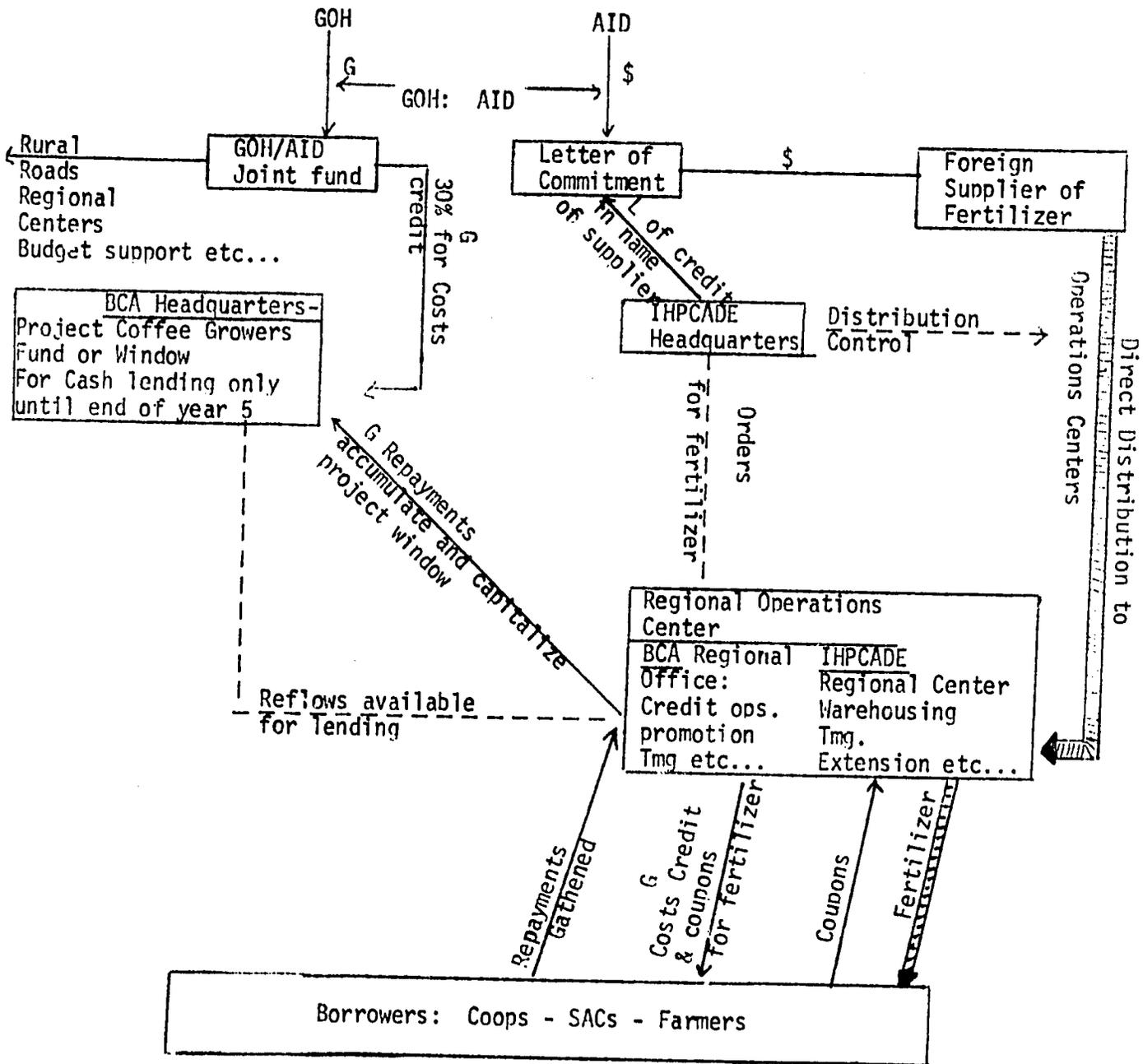
(a) An initial commitment of AID Loan funds for the purchase of fertilizer will be made in the form of a letter of commitment to a U. S. Bank. Prior to the purchase of fertilizer by IHPCADE through letters of credit, the GOH will deposit counterpart funds in the special joint GOH/AID account as discussed above, a portion of which will be utilized to cover project requirements for cash credit (estimated to be approximately 30% of the cash value of the fertilizer to the farmer).

(b) Upon approval of a sub-loan (see Credit Policy and Procedures, below) credit will be extended in the form of coupons for fertilizer and cash, in varying amounts and proportions, depending on the purpose of the loan - regeneration or new planting - and the area to be covered. Credit will be extended in accordance with an approved farm plan and a line of credit to be initially established for each project participant.

(c) To receive fertilizer, the farmer will present his coupon to the regional IHPCADE agent and be provided the amount specified. The coupon is then returned to the BCA by IHPCADE to verify that the loan was in fact consummated whereupon the loan account of the borrower is debited by the corresponding amount.

(d) At the end of the first year, the borrower begins to repay the loan. (See Credit Policies and Procedures.) Repayments are credited to the account of the borrower and become available for relending, but only in cash - not in kind. In this fashion the project window of the BCA is, in effect, capitalized over a five-year period through the indirect granting of AID loan funds (for the purchase of fertilizer) to the project portfolio in the amount of \$5 million plus interest.

(e) Graphically the operation can be illustrated as follows:



Credit Policies and Procedures

The following Policies and Procedures will be established for BCA project lending.

(a) Terms

Loans will be made at a uniform rate to all borrowers of 8% or higher depending on GOH regulations in effect at the time. At this time the intention of the GOH is to require repayment over the shortest possible time frame. Initial discussions have established, however, maximum limits under which the credit will be provided. The exact guidelines of allowable and desirable terms will be developed as a condition precedent to disbursement of AID funds.

Loans for the regeneration of stands of coffee will be for a period of no more than 3 years with equal annual repayments of principal plus interest over the period. Loans for complete new plantings may be made for periods longer than 3 years.

(b) "In kind" and Costs Lending

The BCA will advance both cash and "in kind" credit to small farmers and groups, but the disbursement of both types to a single borrower will be treated for accounting and repayment purposes as a single specific loan amount, although records will be kept as to the relative proportion of each type for statistical and evaluation purposes. In addition, prior to lending to a new borrower, a line of credit will be established, internally in the Bureau, for that borrower in accordance with the farm investment plan to be jointly approved by IHPCADE and BCA regional personnel having this authority.

(c) Amount and Percentage of Sub-Project Cost

No maximum amount is established for project lending except that credit initially may not be extended to borrower for more than 6 ha. of coffee. This requirement will be subject to periodic review to determine whether a degree of flexibility should be introduced. Loans may be made available to finance up to 100% of the cost of the individual coffee project. In no case will a farmer be allowed to borrow more than 5 tons of subsidized fertilizer in any one project year.

(d) Loan Applicant Eligibility and Approval

(1) Coffee farmers may receive credit in kind in the form of fertilizer for up to a maximum of 6 hectares at a 50% subsidized cost for the first two years of borrowing and at a 25% subsidy for the sub-

sequent two years of the individual project, as long as borrowing commences prior to the end of the fifth project year. In initial discussions, the GOH has indicated a clear desire to channel the bulk of the program resources to the small farmer. However, given the fact that almost all Haitian coffee farmers are, almost by definition, small, the added costs of trying to limit the program may not be either warranted or justified. This issue will be resolved during loan negotiations.

(ii) Coffee farmers with up to 10 hectares may borrow cash from the project window.

(iii) The loan applicant must receive the approval of the credit committee of the IHPCADE Operations Center and must not have borrowed the money elsewhere for the same loan purpose.

(iv) Collateral in most cases will be the character and capacity to repay of the farmer, except where the recipient is granted a portion of group credit through a SAC in which case there is joint and several liability.

(v) The minimum land holding for eligibility for borrowing by individuals under the program will be approximately 0.25 hectares. (These very small farmers will be able to borrow through group arrangements.)

(e) Loan Collection, Control and Procedures on Bad Debts

Currently, BCA does not maintain a separate loan delinquency file nor does it have a system of "aging" its loan accounts in accordance with the terms of notes to determine the current status from various stages of loan delinquency. Such a system will have to be established, at least for project lending, or it will be impossible to implement effective collection practices. Adequate delinquent loan monitoring and collection procedures will be established prior to disbursements under the loan. In addition a reserve account will be established for bad debts of a reasonable percentage of operating profits.

Capital Accumulation and Treatment of Rollover

Other factors aside and if all goes according to plan, the BCA should have an accumulated project loan portfolio of approximately \$2,700,000 by the end of the fifth year of project lending. (See Table 26, Section F-4.) At this point all AID Loan funds should be disbursed.

Out of accumulated repayments, the BCA will directly finance fertilizer purchases from year 6 on. Also, from then on the maximum term for all project loans will be two years. For some farmers three additional years of subsidized fertilizer credit will be in order after year 5. The magnitude of this subsidy amount, however, will be available from the roll-over payments of principal and interest on past credits. All fertilizer requirements for the second five-year period of the project will be financed from the fund. The continuation of a matching GOH contribution to the fund after year 5 is not contemplated at this time, but needs of the program at that time will be reviewed and such determination will be made as appropriate by the GOH.

The integrity of the BCA project window will be maintained through the end of the 10th year of project lending at which time it can be untied and the accumulated portfolio may be utilized for other types of credit or expansion to a larger target group.

BCA Non-Credit Activities Relevant to the Success of the Project

(a) Savings Generation

Borrowers from the BCA are automatically members. Shares are purchased in the BCA through the process of a deduction of a percentage of each loan. The present regulation (unenforced) is that 5% of each loan is credited to the share capital account of the member. This practice may be maintained under the project, but for purposes of cash flow analysis it has not been included.

In actual fact, there are no share capital accounts nor has there been any voluntary savings generation. Also there are no provisions for interest or dividend payments in the 1963 law which created the BCA. However, in the decree of February 18, 1974 legalizing pre-cooperatives, credit unions, "caisses populaires" and federations, Title III provides that up to 6% annual interest may be paid on capital accounts. The importance of savings for the long run viability of the organization as well as member SAC's and Cooperative argues for a new policy of savings mobilization through the provision of adequate incentives. It is not unreasonable to assume, for example, that member farmers could start off by saving a gourde a month in the local unit, which in turn could maintain a group savings growth program in the Bureau. Under this project it should be possible for the first time to offer a modest rate of return for a borrower's share account as well as voluntary savings. A new interest rate structure could be calculated to provide for this without inhibiting the operation or lending activity of BCA. In the medium and long term this will contribute to an expanded outreach of the project.

(b) Promotion, Training and Technical Assistance for the Establishment of successful SAC's and Cooperatives

Because of the promotional efforts of many voluntary agencies and ONAAC, there are a number of community level groups with which to work. (See Section D-3 .) Such groups, however, follow no particular common mold and were formed for a variety of purposes. The BCA and IHPCADE have both been instrumental in the past in the formation of the approximately 180 SAC's in existence today and BCA believes that over the first five years of the project an additional 670 can be formed. This appears highly unlikely given the fact that only 180 have been formed since 1967. Nevertheless, every encouragement and support should be provided to BCA and IHPCADE field staffs under this project to accelerate SAC formation process, as well as the grouping of SAC's into Coops.

To arrive at an increased pace of SAC and coop creation, (a) BCA and IHPCADE field agents will have to be trained in promotion and national training as well as a range of organization, skills, (b) an effective system of coordination of BCA, IHPCADE, and other agency community organization activity will have to be devised, and (c) a program of continuous follow-up technical assistance will have to be provided to SAC's in order to help them through the difficult transitional process to more viable cooperative units. Counterpart funds under the Loan are programmed for essential small farmer training and follow-up activity.

(c) Bonding

There are no bonding programs covering BCA personnel, SAC's credit unions, "caisses populaires" and agricultural cooperatives. Considering the magnitude of funds which the loan project system will be generating, the BCA will be assisted to establish an action program which results in appropriate bonding for all personnel handling funds and assets of its organizations.

(d) Auditing

There is no evidence that the BCA has been audited, either formally or informally. In the execution of this project, periodic audits will be vital to: show whether or not operating procedures have been faithfully carried out; verify the organization's profitability; pinpoint discrepancies in the accounting system; and assess the performance of management and staff. The BCA under the loan will be required to provide for a system of both internal and external audits at periodic intervals.

BCA Structure, Organization and Manpower Requirements

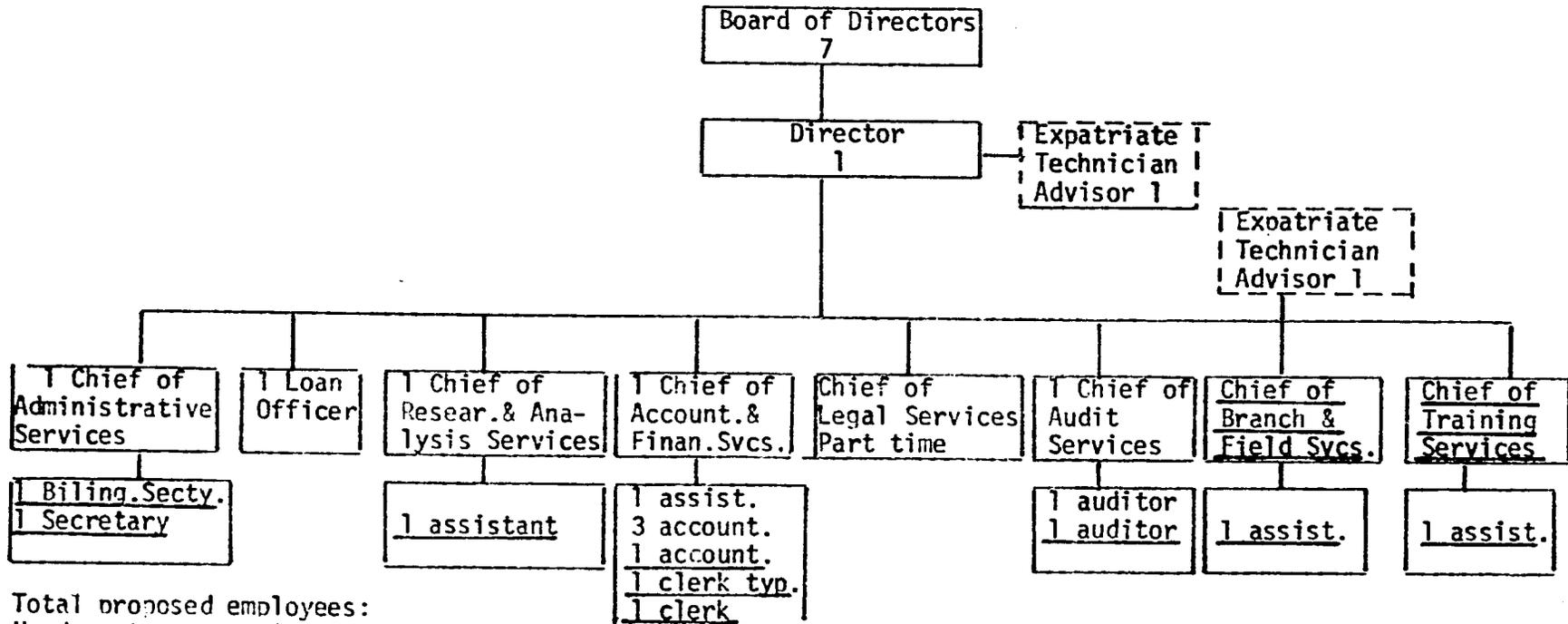
During the life of the project, BCA will be expected to take the form of a cooperative finance organization acting in the dual capacity of (1) providing loan capital to small farmers through their SAC's, to other agricultural cooperatives and to individual farmers, and (2) providing services to its members in the form of bonding and other insurance protection, auditing, training, organizational development, bookkeeping assistance, promotion, etc. Serving farmers in the rural area will be done from the regional and local offices of IHPCADE as well as from BCA's own regional offices: All BCA personnel, especially field personnel, will have to work in very close coordination with the IHPCADE staff and with personnel of all other government agencies and private sector groups involved in community development.

BCA's regional personnel must be given the broadest operational flexibility possible in order to deal effectively on a local level to meet the needs of farmers in a timely manner including the granting of loans, providing cash credit or in-kind credit coupons, encouraging savings on a systematic basis, encouraging new members to join the SAC's or cooperatives, and organizing new SAC's and cooperatives: in short BCA's regional and local offices must operate as full service organizations in the field. BCA is not currently staffed to cope with the volume or variety of services expected under this project.

Proposed additions to the BCA staff over the life of the project both regionally and at the national headquarter, are illustrated on the following organizational chart. External technical assistance is also shown.

In the succeeding table is shown a cost breakdown of new manpower requirements for the first five years of the project. Obviously the increased counterpart input from the special GOH/AID fund will not be sufficient to cover these costs. Instead a gradual "staffing up" sequence is envisioned, probably not arriving at full strength until the end of the fifth year. During the life of the project, however, positions will be added as possible in key areas for execution of the project as they become apparent.

EXISTING AND PROPOSED ORGANIZATION OF THE BUREAU OF AGRICULTURAL CREDIT (BCA)



Total proposed employees:

Headquarters 22 - 1 part time
 Field Employees 35 - 2 part time
 Total 57 - 3 part time

BLACK indicates existing functions with 26 full time and 8 part time employees.

RED indicates proposed new functions with 31 new full time employees and 3 part time.

----- Indicates 2 full time expatriate technicians for life of project.

2 new -- Cap-Haitien	11 - 1 part time
4 new -- Gonaïves	5
St. Marc	1 - 1 part time
2 new -- Hinche	3
3 new -- Jérémie	4
4 new -- Jacmel	5
2 new -- Port-au-Prince	2
* Fond des Nègres	3
* Thiotte	1
Total	35 - 2 part time

* New Centers

NEW MANPOWER REQUIREMENTS -- BCA
U.S. \$

19		20		21		22		23		24		25	
		Title		* SALARIES		BENEFITS							
				1st year		2nd year		3rd year		4th year		5th year	
Central Office (1)													
1		Chief-Branches	3200 -	3360 -	3528 -	3704 -	3889 -						
1		Chief-Training	2700 -	2835 -	2976 -	3125 -	3281 -						
1		Asst. Resea/Ana.	2400 -	2520 -	2646 -	2778 -	2916 -						
1		Accountant	3000 -	3150 -	3307 -	3472 -	3645 -						
1		Auditor	3200 -	3360 -	3528 -	3704 -	3889 -						
1		Assc. Branches	2400 -	2520 -	2646 -	2778 -	2916 -						
1		Asst. Training	2400 -	2520 -	2646 -	2778 -	2916 -						
1		Secty. Billing.	1500 -	1575 -	1654 -	1737 -	1824 -						
1		Secretary	1200 -	1260 -	1323 -	1389 -	1458 -						
1		Clk. Typist	900 -	945 -	992 -	1041 -	1093 -						
1		Clerk	600 -	630 -	661 -	694 -	728 -						
Total 11			23500 -	24675 -	25907 -	27200 -	28555 -						
Regional Offices (9)													
Cap-Haitien	2	Agronomes, Cashiers	7800 -	8190 -	8599 -	9029 -	9480 -						
Gonaives	4	Agronomes Cashiers	15600 -	16380 -	17199 -	18059 -	18962 -						
Hinche	2	Agronomes Cashiers	7800 -	8190 -	8599 -	9029 -	9480 -						
Jérémie	3	Agronomes Cashiers	11700 -	12285 -	12899 -	13544 -	14221 -						
Jacmel	4	Agronomes Cashiers	15600 -	16380 -	17199 -	18059 -	18962 -						
Fond-des-Nègres	2	Agronomes Cashiers	7800 -	8190 -	8599 -	9029 -	9480 -						
Port-au-Prince	2	Agronomes Cashiers	7800 -	8190 -	8599 -	9029 -	9480 -						
Thiotté	1	Agronome	2700 -	2835 -	2977 -	3126 -	3282 -						
Total 20			76800 -	80640 -	84670 -	88904 -	93347 -						
Total New employees 31			100300 -	105315 -	110577 -	116104 -	121902 -						
5 year total			554198 -										
All salaries include 5% annual increases													

Equipment and Material Requirements of Project

Commodity requirements to effectively equip the additional functions and activity of both BCA headquarters and field officers are tentatively calculated as shown in Annex III. As in the case of manpower requirements, equipment and material purchases will logically be spread out over a period of several years depending on the pace and development of key activity areas.

External Technical Assistance and Training

(a) Technical Assistance

The needs in the external technical assistance area are heavy due to the extreme lack of experience and skill at either national or local levels in such areas as credit administration, community and cooperative organization, accounting, inter-agency coordination and planning and a variety of other technical areas in addition to management itself.

Resident advisors are proposed for the first three and preferably for the five years of the project in (a) credit cooperative and rural organization and (b) general credit administration and management. In addition, substantial short-term consultation will be required but not necessarily limited to the following:

- (i) Accounting procedures
- (ii) Bonding and insurance
- (iii) Specialized organizational training
- (iv) Credit Procedures
- (v) Systems development
- (vi) Loan delinquency control and collection

Technical assistance will be grant funded. Approximate costs are as follows:

(i) Resident Advisors (3-5 years)	up to	\$ 450,000
(x) Credit administration and management		
(xx) Credit cooperative and rural organization advisor		
(including salaries, benefits, travel, allowances, etc.)		
(ii) Short-term Consultants		\$ 50,000
(cooperation, travel, per diem, other costs, etc.) _____		
		\$ 500,000

Training

The BCA will need to engage in a program of continuous training to upgrade the technical capabilities of its entire staff and of the volunteers in SAC's and other credit cooperatives: for this they plan to establish a training function at the headquarters level.

In-country training will be carried out mainly through seminars and workshops at national, regional, and community levels. The subjects to be intensively treated but not necessarily inclusive will be the following:

- (a) Credit Management
- (b) Duties and responsibilities of directors and committees
- (c) Effective collection
- (d) Cooperative organization, management and principles
- (e) Accounting procedures and control
- (f) Auditing
- (g) Savings mobilization

International training should be available to key members of the BCA to other credit and cooperative institutions in Latin America, the United States and Canada.

Estimated training costs over the first five years of the project are as follows:

In-country	\$ 40,000
International	<u>20,000</u>
	\$ 60,000

4. Training

An essential element of the program is the training that will be required to technically upgrade existing GOH personnel and the selected target farmer group. The content of the training will center around coffee technology and activities related to the transmittance of the more intensive coffee technology to the small farmer. Six types of training have been identified as necessary for the conduct of the program:

- Coffee Technology Training
- Coffee Extension Methodology Training
- Coffee Research Techniques Training
- Credit Methodology Training
- Systems Management Training
- Farmer Training

The project anticipates that much of the training will be performed at operation centers, employing the best talent obtainable in Haiti. Discussions between USAID and FAO have resulted in the conclusions that collaboration between the two agencies is highly desirable, with FAO providing the leadership and major responsibility for assisting the GOH in this task. Two FAO experts are programmed to be assigned beginning January 1, 1975 to this activity to design and assist in conducting a training program. One of these FAO experts is already in Haiti and will be transferred to full-time coffee work no later than January 1, 1975.

(a) Coffee Technology Training

It is anticipated that a cadre of 15 or so of the best "agronomes" will be selected for a comprehensive course in modern technology. The content of this training should include emphasis in the science and art of modern coffee production and technology. The principal purpose is the development of a cadre of 15 or so persons competent in coffee technology. It will allow for the selection of 4 or 5 who are the best qualified and specifically interested to serve as trainers. The remaining will be assigned to serve as Directors of Operations Centers or in other capacities where their talents would be appropriate. The initial training would be for a period of approximately three months on a GOH coffee farm, such as the one which exists in the Fonds-des-Negres area. The project would

provide for adequate budget for all expenses of the training. Emphasis would be on acquiring knowledge and skills by doing -- by performing all of the operations in the production cycle and acquiring an understanding of why such practices are desirable. Field work during the morning hours and laboratory and study assignments for the afternoon would provide a good balance for training of an intensive type.

After training of the cadre of 15 persons, training courses of a similar type, but for a shorter period of time, would be scheduled and conducted for each operation center as soon as construction is completed. The cadre of 4 or 5 trainers with one selected as a leader would travel to the operation centers to develop and conduct a course of 4 - 5 weeks for assistant agents (adjoints techniques) and others selected, to share with them the knowledge and skills acquired. New personnel recruited by IHPCADE should receive such training as well as the existing experience personnel. Such training is considered essential to assure that the IHPCADE and DARNDR personnel assigned to work with coffee are proficient and skilled in the subject that they are trying to promote with the less educated traditional farmer.

The approach suggested above has been successfully employed in other parts of the world -- particularly that training conducted by the International Rice Research Institute (IRRI) in the Philippines, the International Center for Maize and Wheat Improvement (CIMMYT) in Mexico and the International Center for Tropical Agriculture (CIAT) in Colombia. The "training-the-trainer" approach is expected to result in rapid dissemination of the technical knowledge necessary for the application of the technical package.

(b) Coffee Extension Methodology Training

The methodology in the way knowledge will be transmitted is a skill in itself. Haiti has had the historical experience of the use of extension methods in AID and other donor-supported programs in prior years. Therefore, emphasis in this subject matter as part of the "trainer training" mentioned above, should be geared to the degree felt necessary as the training progresses. It should be considered a necessary complement to the technical subject matter being covered.

(c) Coffee Research Technique Training

At an appropriate time in the early life of the project, 3 or 4 selected participants should be sponsored for AID grant-financed training abroad to attain skills in coffee research methodology. Such

training may be long term for academic degree at a university or short term to provide opportunities for observation, exposure and making contacts with researchers and their work in nearby Latin American country coffee research institutions. Possibilities will be explored with the following to assist in such short or long-term training:

-- Federation Nacional de Cafeteras
Bogota, Colombia

Subject: production, research

-- Departamento de Cafe
Ministerio de Agricultura y Ganaderia
Costa Rica

Subject: Field experiments on farms technical package

-- University of Costa Rica
San Jose, Costa Rica

Subject: Research in coffee physiology

-- Centro Agronomico Tropical de Investigacion y Ensenanza, CATIE
Turrialba, Costa Rica

Subject: Germ plasm collection breeding for rust resistance

(d) Coffee Credit Methodology Training

This type of training will be required for BCA agents at all levels participating in the coffee program. It is anticipated that AID will be involved in this type of training through long-term contract personnel assigned to assist ECA funded under the Agricultural Development Support Grant Project. A description of this training is provided in the credit portion of this paper.

(e) Systems Management Training

The implementation of the Small Farmer Development Loan will be a new experience for the IHPCADE. It will require a considerable amount of administrative talent in simply implementing the program. AID will be called upon to assist in ad-hoc short term on-the-job training of IHPCADE management personnel in management theory, procedures and techniques. Such training and instruction will be provided on a continuing basis by the USAID direct-hire Project Manager and by short-term grant-

funded TDY personnel principally in management of the loan as it relates to the implementation of the project.

Selected IHPCADE personnel will also be provided opportunities for short-term training as required in certain aspects of an improved coffee system for Haiti. Investigation will be made of the following contacts to develop details of such training:

-- Mr. F. Briscoe, Manager
Coffee Industry Board
Kingston, Jamaica

Subject: Cooperative organization for marketing, processing

-- Oficina de Cafe
San Jose, Costa Rica

Subject: Coffee marketing

-- Ing. German Valenzuela
Federacion Nacional de Cafeteras
Bogota, Colombia

Subject: Marketing, credit

(f) Farmer Training/Education

The purpose of the various types of training mentioned above should be directed to transfer knowledge, skills, information, services and resources to groups of coffee farmers. The training of farmers will be performed by IHPCADE, DARNDR and BCA agents who work in areas served by the operational centers. Farmers will be taught principally by demonstrations of intensive coffee production methods in cooperating farmers' farms. This approach is absolutely essential to show the farmers what is possible with better methods. Training will use such media as meetings, field days, short courses, leaflets, radio, contests and personal contacts of all sorts. Groups will be assisted in all aspects of coffee production from starting nurseries to harvesting and marketing the crop. Training will be followed up on a continuing basis with credit resources and supervision/advice required to make their operations more profitable.

5. Specific Responsibilities

The major activities of the entities implementing the Small Farmer Development Project are graphically indicated in the Implementation Plan PERT (Chart B). The flow of resources and services from AID and the GOH, through the National Bank, IHPCADE, and BCA, and FAO to the groups of small farmers will be continuous throughout the life of the project and are expected to continue for a period of at least five years thereafter. Other parts of this paper describe in detail the types and quantities of resources and services and the manner in which they will be provided. The specific responsibilities described herein represent assignment of the major activities to the different parties as they relate to each other. Many of the activities will occur in the early life of the project. The sequence of activities by implementing entities are as follows during the first year:

AID will, upon satisfaction of appropriate conditions precedent:

- provide an advance of up to three months requirements to the joint GOH/AID counterpart fund in the National Bank
- obtain Project Manager Advisor
- contract for full-time services in credit coop for BCA
- provide engineering assistance by contract employee to help GOH in design and construction of operational centers and roads
- approve site selection, design and contractor selection for construction of IHPCADE operational centers
- approve equipment and commodity lists and specifications
- arrange for appropriate international advertising, if needed
- arrange for financing of stabilization fund study
- upon deposit of GOH contribution (at least one half of annual requirements), open letter of commitment for fertilizer purchase
- approve BCA credit policies and procedures
- approve formal IHPCADE/BCA "protocol" and individual execution plans for IHPCADE and BCA
- approve procedures for joint GOH/AID counterpart fund
- authorize the purchase of up to \$75,000 of fertilizer and up to \$100,000 of equipment (shared equally between IHPCADE and BCA) to cover part of the first year requirements of the program.

GOH will:

- provide for authorization to pass on proceeds of loan to IHPCADE and BCA on grant terms
- establish joint GOH/AID counterpart fund in BNRH and establish disbursement and reporting procedures through BNRH
- provide counterpart funds for augmenting IHPCADE and BCA budgets and other aspects of project, and disburse such funds at regular intervals

.. IHPCADE will:

- provide for carrying out study on stabilization fund
- develop and sign a formal "protocol" with BCA on project responsibilities and application of funds
- draft an execution plan for the project
- establish technical committee of AID, IHPCADE, BCA and FAO
- advertise and order appropriate amounts of fertilizers and commodities under letters of credit
- carry out a locational analysis for site selection of operational centers
- upgrade training facilities at Fonds-des-Negres
- let contracts for construction of operations centers
- upon completion of operation centers, assign personnel to centers
- conduct training course for "adjoints techniques" at centers
- deliver fertilizer and commodities to operation centers
- set up operational procedures at centers in coordination with BCA
- develop plan of work for centers
- begin implementation of plan of work
- begin study of price stabilization policies, stabilization mechanism, procedures, legal requirements, impact of taxes on production, etc.

BCA will:

- develop and sign a formal "protocol" with IHPCADE on project responsibilities and application of funds
- establish and implement credit policies, procedures, plans
- train key personnel in credit methodology and techniques
- order commodities needed for first year
- assist in location of operation centers
- assign personnel to operation centers
- establish inventory controls with IHPCADE
- begin to identify and form credit groups among farmers who are working with IHPCADE to increase coffee production

FAO will:

- assign two experts to assist IHPCADE in coffee technology training
- develop training program
- conduct training program at Fonds-des-Negres for trainers and Directors of operation centers
- conduct training for "adjoints techniques" in operation centers
- plan for farmer training, short courses, etc.

As the implementation of the program gets under way, new activities will begin in the second year. Activities already begun will require repetition in the second to the fifth year of the project. These are as follows:

AID will:

- continue disbursements of local currency under loan according to requirements
- continue to open letters of commitment for fertilizer purchases, contingent upon adequate and timely GOH contribution and completion of stabilization study

- continue to provide services of project manager advisor during life of project
- continue services of contract-hire personnel in credit coops
- through second year continue services contract employee for construction of operational centers not yet completed by end of first year
- provide local technical assistance for construction of feeder roads from year two through year five
- provide participant training opportunities
- conduct annual evaluation of all program elements in coordination with IHPCADE and BCA, and in relation to annual programming of joint account expenditures

GOH will:

- continue to provide for flow of loan disbursements to IHPCADE
- continue to provide counterpart funds for IHPCADE and BCA
- participate in annual reviews

IHPCADE will:

- continue to advertise for and order fertilizer according to five-year schedule, contingent upon adequate and timely GOH contributions to the joint account
- continue technical training of personnel as necessary
- continue delivery of fertilizer to operation centers according to schedule
- examine the study of price stabilization and tax questions and take appropriate action to overcome any problems which are identified
- implementation of operation center's work plan, including nurseries, demonstrations, seed multiplication, research, etc.
- provide for farmer training of various types

- provide technical assistance to farmers receiving credit from BCA
- organize community groups for feeder road construction
- construct feeder roads with hand labor
- recruit and train additional personnel

BCA will:

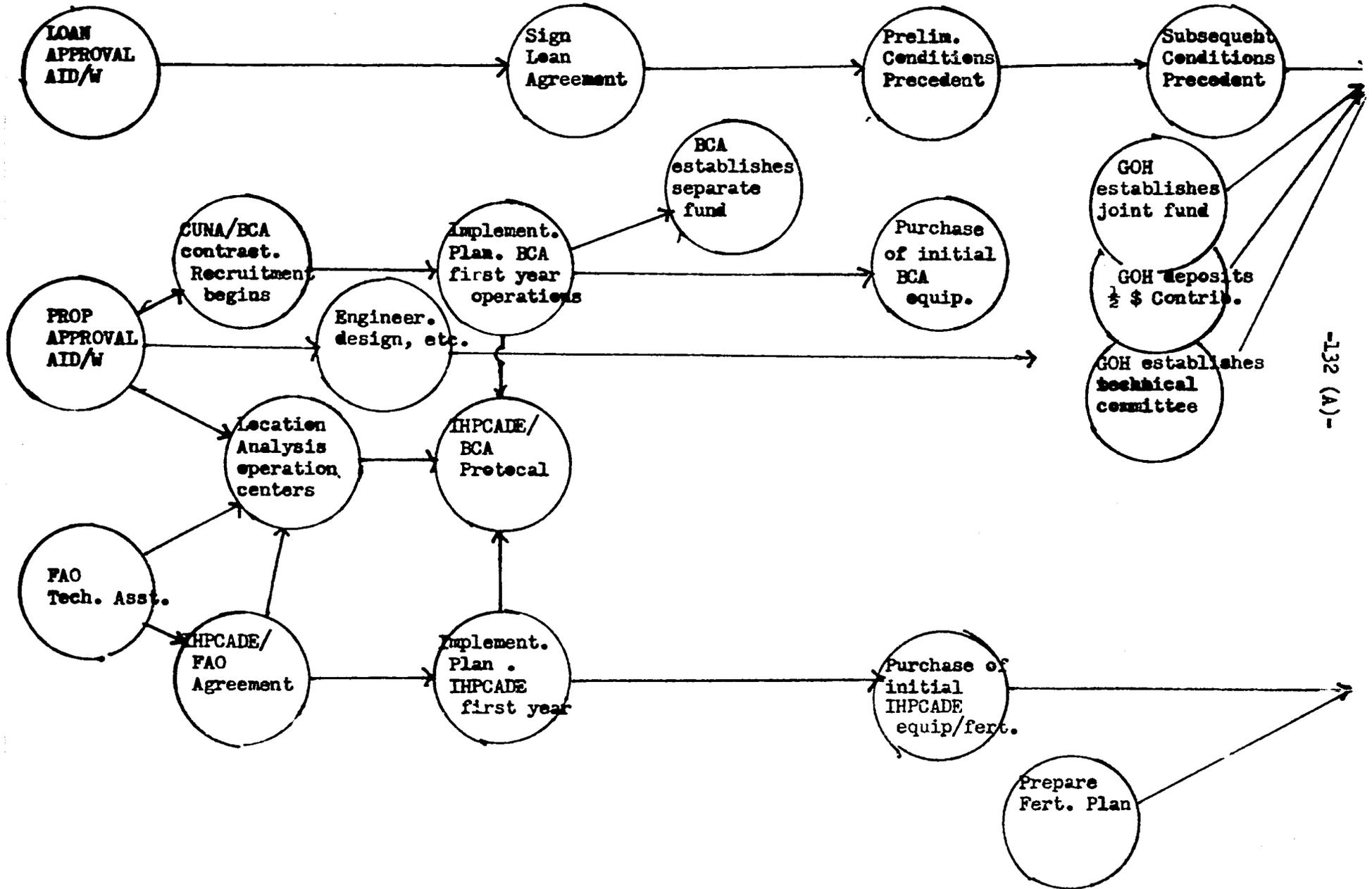
- continue expansion of credit in form of fertilizer and cash to farmers
- maintain records of loans, repayments and information regarding credit
- continue to form new credit groups among farmers who are working with IHPCADE to increase coffee production
- provide for system of reflow of credit payments into project system to provide for purchase of fertilizer after year five

FAO will:

- continue its program of assistance to provide for upgrading "agronomes" and "adjoints techniques"
- begin training of new personnel of IHPCADE
- assist in planning and conducting farmer training of many types

The program is of such complexity (with one activity often depending upon the accomplishments achieved by another activity), that adequate time will be necessary for implementation. The long-range nature of coffee culture -- production of coffee begins in the third year -- requires adequate time for the progress to be achieved in terms of increased coffee production and increased income. Five years, therefore, are considered necessary for AID funding and implementation.

ILLUSTRATIVE IMPLEMENTATION PLAN
PRIOR TO DISBURSEMENTS



I. Evaluation Plan

This project shall be evaluated annually (preferably at or near the anniversary date of the loan) to determine progress toward reaching the loan objectives. The evaluation team will consist of representatives of the Government of Haiti and AID (USAID and/or AID/Washington) and such other outside expert personnel as the evaluation team may consider necessary and appropriate at the time of preparation of the evaluation.

The evaluation will endeavor to measure in overall terms progress toward the primary objectives of the loan as outlined in the loan document and on the basis of a) appropriate work plans and b) the progress and "end of project" indicators provided below.

The Government of Haiti accepts responsibility for the collection of the necessary data by BCA, IHPCADE or other instruments of the Government of Haiti to permit the annual review of the indicators outlined below

GOAL

Increase income of small farmers and cause corresponding increase of GOH foreign exchange earnings

1. Annual export of Haitian coffee increased from an estimated 350,000 bags (60 kgs) in 1974 to 500,000 bags in 1984.
2. No appreciable increase in the number of coffee farms in excess of 6 ha.
3. 4% of annual value of exported coffee crop reinvested in coffee sectors from GOH resources.

SUB-GOAL

Increase productivity by target group of small farmers resulting in corresponding increase in GOH foreign exchange earnings.

Indicator:

1. Increase in the average yield of coffee per hectare from 250 kgs/ha to 750 kgs/ha on approximately 12,800 ha of new and rehabilitated plantings. (1100 kg/ha. on new plantings)

PURPOSE

Develop a rural delivery system for the provision of credit, supplies and complementary services to the small coffee farmer

Indicators:

1. Following amounts of fertilizer imported under AID Loan:
 - Year 1 - 580 tons
 - Year 2 - 1440 tons
 - Year 3 - 2640 tons
 - Year 4 - 3920 tons
 - Year 5 - 5440 tons
2. Using 1974 fertilizer imports as base, total Haitian fertilizer imports increase annually by amount of AID subsidized imports.
3. Operations Centers staffed and equipped per tables of organization and equipment
 - 4 Centers by Year 2
 - 6 Centers by Year 3
4. Operation Centers located within estimated 8 hours normal mode travel from 80% of target group farmers
5. Annual turnover of professional IHPCADE staff does not exceed 10%.
6. Annual turnover of professional BCA staff does not exceed 10%.
7. 100% fertilizer loans under this program limited to farmers with 6 ha. coffee or less.
8. 75% of number of BCA loans under this program made to farmers with 3 ha. or less.
9. 50% of total amount of BCA loans under this program made to farmers with 3 ha. or less.
10. Ratio of BCA cash loans to fertilizer loans does not exceed 40:60.
11. Average length of time for processing loan documents by BCA from application to disbursement does not exceed 15 days (beginning 1976).
12. BCA project operating expenses totally covered from interest income by the end of 1979
13. The percentage of the total number of fertilizer/cash loans to be channeled through SACs and Coops (or pre-Coops) will increase from 40% by the end of year 2 to 70% by the end of Year 5 at the rate of an additional 10% each year.

14. Ten cooperatives will be formed per year from SACs participating in the project beginning in year 2. There are currently 3 viable coffee cooperatives.
15. Loan default rate not exceeding 5% of amount outstanding loan capital under project.
16. Loan delinquency rate not exceeding 20% of amount outstanding loan capital under project.
17. By the end of 1976 dividends or interest will be paid regularly by the BCA on savings deposited by individuals and groups.
18. Extension staff conducts farmer training program as per work plan.

2. Farmer Survey

In addition to other evaluation techniques which may be implemented over the time frame of the project, the BCA will establish as part of their credit procedures a select group of farmers from which base line data will be gathered as part of the credit process. A suggested copy of a questionnaire is attached as Annex V.

PART FIVE - CURRENT ECONOMIC TRENDS

A. Economic Growth

After more than a decade of stagnation, Haiti's GDP began to grow at a more satisfactory pace between 1968 and 1973. This reversal reflects economic recovery in several sectors, particularly construction, manufacturing, government, and services, including tourism. Savings deposits of the banking system, after remaining virtually at the same level between 1961 and 1967, almost doubled between 1967 and 1972. The relaxation of the political climate in 1971 further contributed to the improvement of the economic situation and the resumption of confidence, which is reflected by the increased foreign investment and other remittances from abroad. However, the growth rate since 1968 of slightly over 4 percent, owes much to recovery after years of stagnation. It was only in 1972 that real GDP exceeded the 1962 level, and some of the major sectors of the economy--agricultural exports and transport--have shown only minor signs of improvement. Because of the lack of infrastructure, the precarious balance of payments position, and the weakness of economic management, Haiti will depend a great deal on external assistance in devising and implementing development policies.

Since 1967, the real GDP has risen by an average of 4.3 percent per annum, the growth rate increasing from 2.6 percent in 1968, to 4.5 percent in 1970, 5.7 percent in 1971, and 5.1 percent in 1972. It is estimated that the 1973 growth rate was approximately 5 percent. Adjusted for the terms of trade, the real GDP per capita which had declined by about 7 percent from 1962 through 1967, began to increase in 1968 and from then until 1972 it rose at 2.7 percent per year. In 1972 it exceeded the 1962 level by 5.7 percent.

The balance of payments deficit on goods and services has fluctuated between 4 and 5.6 percent of GNP during the last five years, with year-to-year changes resulting from the irregular performance of both exports and imports of goods and services. Exports rose at an average annual rate of 11 percent in the 1968 to 1971 period, dropped 9 percent in 1972, only to increase by 14 percent in 1973 (estimate only). Imports rose at an annual rate of 8 percent from 1968 to 1972; but in 1973 the increase is estimated at over 25 percent. The gap in the balance on goods and services has risen from \$15.2 million in 1969 to an estimated \$38 million in 1973. Through 1972 the gap has been covered by unrequited transfers, mainly remittances from Haitians living abroad. Net capital movements were very small through 1969, and while capital inflows rose substantially in the following three years, they were broadly matched by reserve movements.

Gross domestic expenditure in the 1967-1972 period has risen in nominal terms at an annual average rate of 8.1 percent. The largest growth element has been investment, which in marked contrast to the

1963-67 period when it was virtually stagnant, has grown at an average rate of 16 percent,

It has risen faster than output, and in 1972 it was 6.4 percent of GDP. The increase in investment was led by the public sector in 1968 and 1969, with the investment in the Peligre hydroelectric plant, but the rate of increase in public sector investment declined in subsequent years, and in 1972 such investment was only 2.3 percent of GDP, compared to 2.7 percent in 1968. On the other hand, private sector investment increased from 1.9 percent of GDP in 1968 to 4.1 percent in 1972 (or 111 million gourdes). Consumption grew by 7.7% annually between 1967-1972.

B. Public Finance

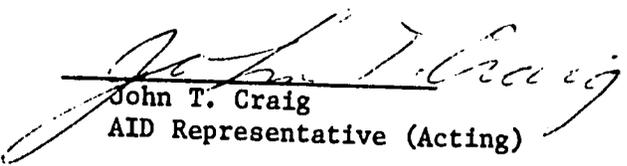
Total revenues (both budgetary and extrabudgetary) of the Haitian Government increased an average of 14 percent annually in the 1968-71 period. Because of a one-time change involving consolidation of extrabudgetary accounts, collections in 1972 rose only 5.8 percent. As a result, revenues which were 11.0 percent of GNP in 1971 dropped to 10.5 percent in 1972. Revenues again began to increase in 1973, however, and were up by 15 percent for the first five months of the fiscal year. Expenditures as a whole have kept up with revenues, although there were small deficits for the 1968-71 period. A small surplus (2.4 million gourdes) was achieved in 1972, however. The deficits have been financed by domestic borrowing.

The government's five year economic development plan calls for increased spending on development projects with funds to come from both domestic and foreign sources. Haitian funds projected for development in the budget have increased from US\$10.6 million in FY 1971/72 to US\$14.4 million in FY 1973/74.

In addition to the budgetary and extrabudgetary accounts there are unfiscalized funds. Certain commissions from the distribution of sugar, flour, cement, cigarettes, textiles, and soap, as well as various ear-marked taxes from imported merchandise accrue to the account of the State Tobacco Monopoly. Some of these funds are returned to the economy as contributions to the budget or to pay for specific purchases. However, there is no detailed data available on the revenues and expenditures of the State Tobacco Monopoly. The commissions accruing to the monopoly were reduced in late CY 1973 and early 74; however, it is not known by how much total income of the Monopoly has been cut.

CERTIFICATION PURSUANT TO
Section 611(e) of the
FOREIGN ASSISTANCE ACT
As Amended

I, John T. Craig, the principal officer of the Agency for International
in Haiti, do herewith certify that in my judgement, Haiti has both the
financial capability and human resources to maintain and utilize effectively
goods and services procured under the capital assistance project entitled
the HAITI SMALL FARMER IMPROVEMENT LOAN.


John T. Craig
AID Representative (Acting)

May 4, 1974



ANNEX I, EXHIBIT B

Department of State

TELEGRAM

PORT-AU-PRINCE

ACTION: AID
INFO: AMB
DCM
ECON
ADMIN
CHRON

UNCLASSIFIED

CONT: 0605
RCVD: 1 MAR 74

ClassificationR 282220Z FEB 74
FM SECSTATE WASHDC
TO AMEMBASSY PORT AU PRINCE 4906
BT
UNCLAS STATE 040615

AIDAC

E.O. 11652: N/A

SUBJECT: SMALL FARMER DEVELOPMENT IRR REVIEW

1. ON FEBRUARY 19, 1974 THE DAEC APPROVED THE IRR AND USAID/PORT AU PRINCE IS AUTHORIZED TO PROCEED WITH THE INTENSIVE REVIEW. SEVERAL ELEMENTS OF THE PROJECT WILL REQUIRE CAREFUL EXAMINATION AND ANALYSIS DURING INTENSIVE REVIEW, AND WILL REQUIRE INVESTIGATION AND NEGOTIATION WITH THE GOH PRIOR TO CAP PRESENTATION. THE FOLLOWING AREAS WERE RAISED IN THE DAEC REVIEW WHICH WILL REQUIRE IN-DEPTH STUDY AND DISCUSSION:

A. A DETAILED ANALYSIS OF THE CREDIT REQUIREMENTS, INCLUDING FERTILIZER NEEDS, TOOLS AND MISCELLANEOUS MATERIALS MUST BE MADE. THIS SHOULD INCLUDE A SAMPLE MICRO-FARM ANALYSIS COUPLED WITH A SENSITIVITY ANALYSIS OF THE IMPACT OF PRODUCER PRICES, FACTOR COSTS AND NON-ECONOMIC FACTORS WHICH AFFECT THE UTILIZATION OF CREDIT. BEST ESTIMATES OF ANTICIPATED BENEFITS/COSTS SHOULD BE DETERMINED OVER THE PROJECT LIFE AND A GIVEN PERIOD THEREAFTER. THE CREDIT SYSTEM DESIGN AND SUCH QUESTIONS AS APPLICANT ELIGIBILITY AND APPROVAL, DISBURSEMENT AND COLLECTION SHOULD BE TREATED WITH CONSIDERABLE DISCUSSION OF INTER ALIA: (1) THE UTILIZATION OF EXISTING, AND FORMATION OF ADDITIONAL, CREDIT COOPERATIVES OR SIMILAR ORGANISMS; (2) THE RELATIONSHIP TO OTHER GOH ENTITIES SUCH AS ONAAC, IDAI, AND VOLUNTARY AGENCIES; (3) THE TERMS OF CREDIT; (4) OPERATING PROCEDURES FOR USE OF THE CREDIT; (5) THE MOBILITY REQUIREMENTS AND COSTS OF IHPCADE/CREDIT AGENTS; AND (6) THE TOTAL COSTS OF ADMINISTERING THE CREDIT THRU WHATEVER SOURCE.

THE AMOUNT OF CREDIT MUST BE RELATED TO MACRO-CREDIT ESTIMATES OVER THE PROJECT LIFE. THIS, IN TURN, SHOULD BE LINKED TO

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TARGET GROUP DIMENSIONS, AND REFINED DURING INTENSIVE REVIEW. THIS SECTION SHOULD TAKE INTO ACCOUNT THE POSSIBLE AVAILABILITY OF SOME FUNDS FROM THE STABILIZATION FUND AFTER TWO YEARS.

B. A SYSTEM OF ON-GOING EVALUATION WITH A SELECTED NUMBER OF FARMERS IS NEEDED TO DETERMINE THE EFFECTS OF CREDIT, NEW TECHNOLOGY FERTILIZER USE, INSTITUTIONAL EFFECTIVENESS, ETC., ON COFFEE PRODUCTION. A BASE-LINE STUDY COMPRISING A SYSTEM OF RECORD KEEPING IS ESSENTIAL TO MEASURE THE PROJECT'S IMPACT ON THE TYPICAL COFFEE FARMER PARTICIPATING IN THE PROGRAM. THE EVALUATION PLAN WHICH MUST BE DEVELOPED FOR THIS LOAN SHOULD SET SPECIFIC PERFORMANCE BENCHMARKS AT APPROPRIATE STAGES OF LOAN IMPLEMENTATION. THEY SHOULD BE DESIGNED TO FACILITATE CRITICAL DECISIONS, E.G. TRADEOFFS BETWEEN THE CREDIT AND MARKETING FUNDS, HALT TO CREDIT DISBURSEMENTS IF THE ECONOMIC TERMS TO THE SMALL FARMER INDICATE THAT ADDITIONAL AGRICULTURE INPUTS ARE UNECONOMIC. IN THIS REGARD IT WAS SUGGESTED IN THE DAEC THAT THE MISSION CONSIDER INCLUDING THE LA EVALUATION OFFICER AS A TEAM MEMBER OF THE INTENSIVE REVIEW.

C. RELATED TO THE ABOVE CONSIDERATIONS REGARDING FERTILIZER CREDIT REQUIREMENTS IS THE NEED TO DEMONSTRATE, TO THE DEGREE FEASIBLE AND POSSIBLE, THAT ADEQUATE AMOUNTS OF FERTILIZER BY QUANTITY, TYPE, TIME, AND AT RELATIVELY COMPETITIVE PRICES WILL BE AVAILABLE FOR PLANNED PROJECT IMPLEMENTATION. THIS INFORMATION WILL, OF NECESSITY, BE OBTAINED FROM LOCAL IMPORTERS AND DISTRIBUTORS, BUT IT IS SUGGESTED THAT POTENTIAL FERTILIZER SOURCES, SUCH AS VENEZUELA BE CONTACTED FOR INDICATIONS OF WILLINGNESS TO SUPPLY. THE EFFECT OF A SHORTFALL IN THE AVAILABILITY OF FERTILIZER ON THE OVERALL PROJECT SHOULD BE REVIEWED BOTH IN TERMS OF THE EFFECT ON THE INDIVIDUAL FARMER ALREADY IN THE PROGRAM, AND GENERAL PROJECT PRODUCTION OBJECTIVES.

IT SHOULD BE DEMONSTRATED THAT THE MECHANISM FOR PURCHASE, DELIVERY, STORAGE, SALES AND CONTROL OF INVENTORY OF FERTILIZERS IS ADEQUATE OR CAN BE ASSISTED TO HANDLE THE MAJOR FERTILIZER VOLUME INCREASES WHICH THE LOAN PROPOSES.

D. THE ISSUE OF THE SUBSIDIZATION OF FERTILIZER SHOULD BE DISCUSSED IN DEPTH WITH THE GOH TO DETERMINE CLEAR POLICIES WHICH WILL MAXIMIZE THE FARMERS' SHARE OF THE MARKET. THE COSTS TO THE GOH OF CONTINUANCE OF THIS POLICY AS WELL AS ITS INEQUITABLE EFFECTS ON NON-USERS OF FERTILIZERS SHOULD BE SET BEFORE GOH OFFICIALS, AND ALTERNATIVE WAYS TO INCREASE PRODUCER REVENUE SHOULD BE CONSIDERED. HOWEVER, WE RECOGNIZE THAT WHILE THERE MAY BE INEFFICIENCIES IN THE SUBSIDIZATION SYSTEM THIS MAY BE THE

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ONLY MECHANISM TO PROVIDE A COST TRADE-OFF TO THE FARMER PRODUCING COFFEE UNDER THE EXISTING TAX STRUCTURE, PARTICULARLY AT HIGH COFFEE/FERTILIZER PRICES. THE MISSION SHOULD BE PREPARED TO INCLUDE IN THE CAP A CONDITION PRECEDENT PROPOSAL WHICH PROVIDES SOME MEANS FOR REVIEW OF THE GOH COFFEE TAX POLICY DURING THE COURSE OF PROJECT LIFE, AND MODIFICATION THERETO.

E. THE STABILIZATION FUND IS INTENDED TO PROVIDE INCENTIVE PRICES FOR THE COFFEE PRODUCER OVER THE LONG-TERM. GUIDELINES AND REGULATIONS REGARDING THE USE OF THESE FUNDS SHOULD BE STRINGENT ENOUGH TO ASSURE THEIR JUDICIOUS USE AND PROVIDE ADEQUATE SAFEGUARDS TO PREVENT DECAPITALIZATION. THEREFORE, THE DETAILS OF THE FUND AND ITS OPERATING PROCEDURES SHOULD BE ADEQUATELY DESCRIBED AND DEVELOPED BY AN EXPERIENCED TECHNICIAN IN THIS FIELD. (AID/W WILL ASSIST IN OBTAINING SUCH EXPERTISE, AND WILL ADVISE USAID/HAITI ON DEVELOPMENTS.)

PROVISION IN THE FUND WILL BE MADE FOR ADEQUATE CONTROL AND DATA COLLECTION IN ORDER TO PERMIT MEANINGFUL EVALUATION/REVIEW BY AID AND GOH PROJECT EVALUATORS. IT IS INTENDED THAT THE EVALUATION PROCESS BE SEMI-CONTINUOUS IN THE EARLY STAGES TO POINT UP STRENGTHS OR DEFICIENCIES IN THE SYSTEM TO ALLOW NECESSARY REVISIONS.

2. THE CAP SHOULD DRAW ON INFORMATION DEVELOPED FOR THE AID AGRICULTURE SECTOR ASSESSMENT AND DEMONSTRATE COMPATIBILITY WITH THE ASSESSMENT'S FINDINGS AND RECOMMENDATIONS.

3. WE ANTICIPATE THAT ADDITIONAL TDY WILL BE NEEDED FOR DEVELOPING FURTHER PROJECT DETAILS AND ASSISTING IN THE PREPARATION OF THE CAP. THUS, AID/W WILL MAKE AVAILABLE SPECIALISTS IN AGRICULTURAL ECONOMICS, AGRONOMOY AND AGRICULTURAL INSTITUTIONS, A COOPERATIVE SPECIALIST, AN EVALUATION SPECIALIST, AND LOAN OFFICER DURING THE APRIL 21 - MAY 3 PERIOD, IF THE MISSION DEEMS THIS SATISFACTORY AND APPROPRIATE. AS DESCRIBED ABOVE WE WILL ALSO TRY AND OBTAIN THE STABILIZATION FUND SPECIALIST DURING THE SAME PERIOD. IF THE MISSION HAS ALTERNATIVE PLANS OR COMMENTS PLEASE ADVISE ASAP. CASEY

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01/0835/NWA

FORM FB-412

UNCLASSIFIED

Classification

10 mai 1974

REQUETE D'ASSISTANCE TECHNIQUE ET FINANCIERE

DU

GOVERNEMENT DE LA REPUBLIQUE D'HAITI

A

L'AGENCE POUR LE DEVELOPPEMENT INTERNATIONAL

DU GOUVERNEMENT DES ETATS UNIS D'AMERIQUE DU NORD

POUR

UN PROJET DE REHABILITATION DE LA CULTURE

CAFEIERE CHEZ LES PETITS PLANTEURS

Le Gouvernement Haïtien, par la présente, sollicite de l'Agence pour le Développement International du Gouvernement des Etats Unis d'Amérique du Nord (AID), un prêt de SIX MILLIONS DE DOLLARS U.S. (3.6.000.000.00) destiné à financer un projet de Réhabilitation de la Culture du Café chez les petits planteurs.

Ce projet de réhabilitation des caffières, dont le démarrage est prévu au début de l'année fiscale 1974-1975, couvrira pour une période de 5 années environ 13.000 hectares de caffières au moyen des interventions principales suivantes:

1. Importations d'engrais pour application tant aux nouvelles plantations qu'à celles réhabilitées;
2. Création et amélioration de centres d'opération dans les zones les plus propices à la culture caffière;
3. Acquisition de l'équipement nécessaire au fonctionnement efficace de ces centres et à l'élargissement des opérations de l'Institut de Promotion du Café et des Denrées d'Exportation (IHPCADE) et du Bureau de Crédit Agricole (BCA);
4. Amélioration des chemins vicinaux desservant les régions caffières au moyen surtout de travaux communautaires utilisant la main d'oeuvre locale disponible;
5. Entraînement des Agents de l'IHPCADE et du BCA et des planteurs de café dans les techniques modernes de la production caffière et du crédit.

Le projet aura un coût total de \$8.000.000 dont \$5.400.000 en dollars américains et l'équivalent de \$2.600.000 en monnaie haïtienne.

.../...

La contribution du Gouvernement Haitien pour les cinq ans s'élèvera à DIX MILLIONS DE GOURDES (\$10.000.000) soit l'équivalent de DEUX MILLIONS DE DOLLARS américains (\$2.000.000).

Les objectifs sont les suivants:

- a) Augmenter les revenus des petits planteurs de café, et ainsi élever leur standard de vie, par l'accroissement du rendement de leurs champs;
- b) Augmenter la production caféière d'Haiti et améliorer aussi la qualité du produit;
- c) Améliorer la balance des paiements d'Haiti par l'augmentation des exportations de café;
- d) Augmenter les revenus du Gouvernement;
- e) Créer un fonds destiné au renforcement du système de crédit au sous secteur caféier;
- f) Encourager et étendre les activités de type coopératif dans l'industrie caféière.

En vue d'assurer le succès de ce projet, le Gouvernement Haitien s'engage à prendre les dispositions suivantes:

1. Ouvrir à la Banque Nationale de la République d'Haiti, avant l'exécution du Prêt, un Compte Spécial où seront déposés les fonds conjoints Gouvernement Haitien - AID réservés à l'exécution des activités sus-mentionnées du Programme. La contrepartie haitienne à verser à ce compte représentera au moins les valeurs suivantes, par année:

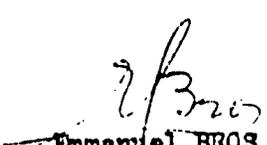
.../...

1974 - 1975	\$.	129.000
1975 - 1976	"	236.000
1976 - 1977	"	395.000
1977 - 1978	"	518.000
1978 - 1979	"	722.000
TOTAL		\$. <u>2.000.000</u>

Chaque année au moins, les fonds conjoints du Programme feront l'objet d'une étude évaluation d'utilisation et de résultats de la part du Gouvernement d'Haiti et de l'AID.

2. Continuer à verser à l'IHPCADE et au ECA leurs allocations annuelles régulières.
3. Entreprendre, durant la première année du projet une étude sur l'impact de la taxation actuelle du café et sur l'opportunité d'établissement d'un mécanisme de stabilisation des prix du café qui envisagerait les voies et moyens de la création d'un fonds de stabilisation pour cette denrée.

Le Gouvernement souhaite que l'AID finance à partir de ses fonds d'assistance non remboursable cette étude de même que l'assistance technique qui, sur agrément mutuel, se révélera nécessaire à l'exécution de certaines phases du Projet.


Emmanuel BROS
Secrétaire d'Etat des Finances
et des Affaires Economiques
Secrétaire Exécutif du CONADEP


Jaurès LEVEQUE
Secrétaire d'Etat de l'Agriculture,
des Ressources Naturelles
et du Développement Rural

CHECKLIST OF STATUTORY CRITERIA

(Alliance for Progress)

In the right-hand margin, for each item, write answer or, as appropriate, a summary of required discussion. As necessary, reference the section(s) of the Capital Assistance Paper, or other clearly identified and available document, in which the matter is further discussed. This form may be made a part of the Capital Assistance Paper.

The following abbreviations are used:

FAA - Foreign Assistance Act of 1961, as amended.

FAA, 1973 - Foreign Assistance Act of 1973.

App. - Foreign Assistance and Related Agencies Appropriations Act, 1974.

MMA - Merchant Marine Act of 1936, as amended.

BASIC AUTHORITY

1. FAA § 103; § 104; § 105;
§ 106; § 107. Is loan being made

a. for agriculture, rural development or nutrition; Yes, Directly

b. for population planning or health; N/A

c. for education, public administration; or human resources development; N/A

d. to solve economic and social development problems in fields such as transportation, power, industry, urban development, and export development; N/A

AID 1240-2 (4-74)

e. in support of the general economy of the recipient country or for development programs conducted by private or international organizations.

N/A

COUNTRY PERFORMANCE

Progress Towards Country Goals

2. FAA § 208; §.251(b).

A. Describe extent to which country is:

(1) Making appropriate efforts to increase food production and improve means for food storage and distribution.

Within its limited resources and with external assistance the GOH is providing extension and credit services to farmers and is undertaking research to improve production. The GOH has assigned a high priority to agricultural development.

(2) Creating a favorable climate for foreign and domestic private enterprise and investment.

The GOH has created a favorable investment climate by passing suitable legislation to provide incentives for foreign and domestic investment, has established a special office to facilitate investment, has ratified an investment guaranty agreement with the US., and otherwise encourages and cooperates with private enterprise.

AID 2240-2 (4-74)

(3) Increasing the public's role in the developmental process.

The GOH has an official community development program to encourage the formation of community councils, cooperatives, farmers associations, etc. and is actively engaged in community development projects.

(4) (a) Allocating available budgetary resources to development.

The GOH's development budget for 73-74 is 30% larger than for 1972-73, which was 33% more than the preceding year. The GOH has agreed to provide \$73 million over a five year period (1974-79) for development purposes.

(b) Diverting such resources for unnecessary military expenditure (See also Item No. 20) and intervention in affairs of other free and independent nations.) (See also Item No. 11)

The budget for the Department of Interior and National Defense is the largest of the operating ministries. However, included in this total are police, fire protection and other non-military costs. There has been no intervention in affair of other nations.

(5) Making economic, social, and political reforms such as tax collection improvements and changes in land tenure arrangements, and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiative, and private enterprises.

The GOH has established its intent to undertake reforms in public administration and fiscal management and is receiving or has requested assistance from external sources in these and in the social areas. Haiti has a much more open society now than it had several years ago, as evidenced by the recent return of many citizens to the country.

(6) Adhering to the principles of the Act of Bogota and Charter of Punta del Este.

GOH performance in this regard is encouraging.

AID 1240-2 (4-74)

(7) Attempting to repatriate capital invested in other countries by its own citizens.

Due to the present economic boom in Haiti capital flight is not a problem at this time. With the return of many Haitians to the country after long absences capital is also being returned.

(8) Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.

The present regime has expressed on numerous occasions its concern for improving the welfare of the people and has taken various measures to this end.

B. Are above factors taken into account in the furnishing of the subject assistance?

Yes

Treatment of U.S. Citizens:

3. FAA § 620(c). If assistance is to government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) debt is not denied or contested by such government?

There is no evidence that Haiti is so indebted.

4. FAA § 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

There is no evidence that the GOH has taken such actions.

AID 1240-2 (4-74)

5. FAA § 620(o); Fishermen's Protective Act. § 5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing vessel on account of its fishing activities in international waters, Haiti has not taken any such action against U.S. fishing vessels.

a. has any deduction required by Fishermen's Protective Act been made? Not applicable

b. has complete denial of assistance been considered by A.I.D. Administrator? Not applicable

Relations with U.S. Government and Other Nations

7. FAA § 620(a). Does recipient country furnish assistance to Cuba or fail to take appropriate steps to prevent ships or aircraft under its flag from carrying cargoes to or from Cuba? No

AID 1240-2 (4-74)

8. FAA § 620(b). *If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement?* The Secretary of State has determined that Haiti is not controlled by the International Communist movement.
9. FAA § 620(d). *If assistance is for any productive enterprise which will compete in the United States with United States enterprise, is there an agreement by the recipient country to prevent export to the United States of more than 20% of the enterprise's annual production during the life of the loan?* Not applicable
10. FAA § 620(f). *Is recipient country a Communist country?* No
11. FAA § 620(i). *Is recipient country in any way involved in (a) subversion of, or military aggression against, the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or aggression?* No
12. FAA § 620(j). *Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction, by mob action, of U.S. property?* There have been no incidences of action in Haiti in recent years.

AID 2240-2 (4-74)

23. FAA § 620(l). *If the country has failed to institute the investment guaranty program for the specific risks of expropriation, in convertibility or confiscation, has the A.I.D. administration within the past year considered denying assistance to such government for this reason?* An investment guaranty agreement with Haiti is in effect.
24. FAA § 620(n). *Does recipient country furnish goods to North Viet-Nam or permit ships or aircraft under its flag to carry cargoes to or from North Viet-Nam?* No
25. FAA § 620(q). *Is the government of the recipient country in default on interest or principal of any A.I.D. loan to the country?* Since rescheduling its debts with the U.S. in 1970 the GOH has been current in its payments.
26. FAA § 620(t). *Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?* No
27. FAA § 620(u). *What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget?* Haiti is in arrears with regard to some of its U.N. obligations, but not to the extent of affecting its voting rights or being granted continued U.N. assistance. Cumulated arrearages are being reduced.

AJD 1240-2 (4-74)

18. FAA § 481. *Has the government of recipient country failed to take adequate steps to prevent narcotic drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully?*
- The GOH has cooperated with the U.S. with regard to international control of narcotics trafficking. Haiti has not been designated as a priority action country as regards narcotics.
19. FAA, 1973 § 29. *If (a) military base is located in recipient country, and was constructed or is being maintained or operated with funds furnished by U.S., and (b) U.S. personnel carry out military operations from such base, has the President determined that the government of recipient country has authorized regular access to U.S. correspondents to such base?*
- Not applicable

Military Expenditures

20. FAA § 620(a). *What percentage of country budget is for military expenditures? How much of foreign exchange resources spent on military equipment? How much spent for the purchase of sophisticated weapons systems? (Consideration of these points is to be coordinated with the Bureau for Program and Policy Coordination, Regional Coordinators and Military Assistance Staff (PPC/RC).)*
- The total of the FY 73-74 ordinary and development budget is \$71 million of which \$6.4 million, or 9% of the total, is budgeted for the armed forces. No detailed breakdown is available but most of this sum is for administration. Sophisticated weapons are not being procured.

AID 1240-2 (4-74)

CONDITIONS OF THE LOAN

General Soundness

21. FAA § 201(d). Information and conclusion on reasonableness and legality (under laws of country and the United States) of lending and relending terms of the loan.

Terms are legal and reasonable under both U.S. and Haitian law.

22. FAA § 251(b)(2); § 251(e).

Information and conclusion on activity's economic and technical soundness. If loan is not made pursuant to a multilateral plan, and the amount of the loan exceeds \$100,000, has country submitted to A.I.D. an application for such funds together with assurances to indicate that funds will be used in an economically and technically sound manner?

The activity to be financed has been determined as economically and technically sound and the borrower has assured that the funds will be used in a sound manner.

23. FAA § 251(b). Information and conclusion on capacity of the country to repay the loan, including reasonableness of repayment prospects.

The prospects for loan repayment are considered good.

24. FAA § 251(b). Information and conclusion on availability of financing from other free-world sources, including private sources within the United States.

It has been determined that financing for this project is not available from other free world or U.S. public and private sources (e.g. IDB, IBRD, IDA, Ex - IM)

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25. FAA § 611(a)(2). Prior to signing of loan will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the United States of the assistance?

Preliminary engineering, financial and other plans are included in this CAP. The cost estimate of the project is considered sound.

26. FAA § 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of loan?

No legislative action is required to permit accomplishment of loan.

27. FAA § 611(e). If loan is for Capital Assistance, and all U.S. assistance to project now exceeds \$1 million, has Mission Director certified the country's capability effectively to maintain and utilize the project?

The certification prescribed by this section is included as an annex in this CAP.

Loan's Relationship to Achievement of Country and Regional Goals

28. FAA § 207; § 251(a); § 113. Extent to which assistance reflects appropriate emphasis on: (a) encouraging development of democratic, economic, political, and social institutions; (b) self-help in meeting the country's food needs; (c) improving availability of trained manpower in the country; (d) programs designed to meet the country's health needs;

One purpose of the loan is to strengthen administrative and technical capabilities in the GOH. Under the program the lowest social and income groups will be furnished financial and technical assistance and community groups and cooperative will be developed. Self help is one of the features of the road improvement program. Health benefits will be realized by improvement of rural transportation networks, providing

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(e) other important areas of economic, political, and social development, including industry; free labor unions, cooperatives, and Voluntary Agencies; transportation and communication; planning and public administration; urban development, and modernization of existing laws; or (f) integrating women into the recipient country's national economy.

additional cash income to small farmers to enable them to improve their diet and medical services. Training of GOH personnel and farmers is heavily emphasized in the program. Women share a large portion and participate actively in the country's national economy.

29. FAA § 209. Is project susceptible of execution as part of regional project? If so why is project not so executed? No
30. FAA § 251(b)(3). Information and conclusion on activity's relationship to, and consistency with, other development activities, and its contribution to realizable long-range objectives. GOH has assigned highest priority to the agricultural and rural development fields and improvement of the nations highway network to facilitate movement of agricultural products. This program supports both activities, will increase the principle export product and improve the country's balance of payments.
31. FAA § 251(b)(7). Information and conclusion on whether or not the activity to be financed will contribute to the achievement of self-sustaining growth. The project will contribute to self-sustaining growth.
32. FAA § 209; § 251(b)(8). Information and conclusion whether assistance will encourage regional development programs, and contribute to the economic and political integration of Latin America. Not applicable, the project will, however, contribute toward national intergration within Haiti.

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33. FAA § 251(g); § 111. *Information and conclusion on use of loan to assist in promoting the cooperative movement in Latin America.* Formation of agricultural and credit cooperatives is one of the features of the program. Assistance in the cooperative field will be provided.
34. FAA § 251(h). *Information and conclusion on whether the activity is consistent with the findings and recommendations of the Inter-American Committee for the Alliance for Progress in its annual review of national development activities.* The project is fully consistent with the findings and recommendations of the CAP and has been specifically indorsed by CIAP.
35. FAA § 281(a). *Describe extent to which the loan will contribute to the objective of assuring maximum participation in the task of economic development on the part of the people of the country, through the encouragement of democratic, private, and local governmental institutions.* As a feature of the program the GOH will make a substantial cash contribution. In addition, community participation in realizing improvements to rural roads is included, with self help emphasized.
36. FAA § 281(b). *Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.* More than 80% of Haiti's population is rural and the largest single crop is coffee. Since a large number of small farmers are involved in growing coffee, this loan will directly affect the income and well being of this group. Through community councils, cooperatives, road improvement, training and technical assistance, additional persons will also benefit. Institutional development and participation in governmental and political processes are logical second steps.

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37. FAA § 601(a). Information and conclusions whether loan will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.

A primary purpose of the loan is to increase production of Haiti's principle export product, coffee. This will be done by fostering private initiative, encouraging development of community institutions, cooperative, and credit unions. Through a price stabilization feature monopolistic practices will be controlled. Technical assistance to and training of small farmers is highlighted.

38. FAA § 619. If assistance is for newly independent country; is it furnished through multilateral organizations or plans to the maximum extent appropriate?

Not applicable

Loan's Effect on U.S. and A.I.D. Program

39. FAA § 251(b)(4); § 102. Information and conclusion on possible effects of loan on U.S. economy, with special reference to areas of substantial labor surplus, and extent to which U.S. commodities and assistance are furnished in a manner consistent with improving the U.S. balance of payments position.

Most of the loan will be used to purchase fertilizer, hopefully from U.S. sources. About \$450,000 will be used to procure U.S. manufactured items, i.e. vehicles, radios, training aids, office equipment. U.S. technical assistance in the agricultural, credit and engineering fields will be furnished to the project under grant funding. Therefore the loan should have a position effect on the U.S. economy.

40. FAA § 252(a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources.

Of the \$6.0 million loan all will be used to purchase goods and services from private enterprise.

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41. FAA § 601(b). Information and conclusion on how the loan will encourage U.S. private trade and investment abroad and how it will encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).
- U.S. investors are evidencing considerable interest in Haiti at the present time, particularly with regard to transformation industries. An increase in production of coffee could stimulate development of local coffee based industries. Training of farmers in use of fertilizers and insecticides will also result in increased private trade.
42. FAA § 601(d). If a capital project, are engineering and professional services of U.S. firms and their affiliates used to the maximum extent consistent with the national interest?
- Included in the program are provisions for use of U.S. engineering, agricultural and credit advisors.
43. FAA § 602. Information and conclusion whether U.S. small business will participate equitably in the furnishing of goods and services financed by the loan.
- Provisions will be made for U.S. small business to participate equitably in the furnishing of goods financed by this loan to the maximum feasible extent.
44. FAA § 620(h). Will the loan promote or assist the foreign aid projects or activities of the Communist-Bloc countries?
- There is no Bloc aid to Haiti.
45. FAA § 621. If Technical Assistance is financed by the loan, information and conclusion whether such assistance will be furnished to the fullest extent practicable as goods and professional and other services from private enterprise on a contract basis. If the facilities of other Federal agencies will be utilized, information and conclusion on
- Technical assistance for this program will be provided under grant funding, and will be obtained from private enterprise, except for credit assistance, which will be furnished by a non-profit institution working in this field under AID programs worldwide.

whether they are particularly suitable, are not competitive with private enterprise, and can be made available without undue interference with domestic programs.

Loan's Compliance with Specific Requirements

46. FAA § 110(a); § 208(e). Has the recipient country provided assurances that it will provide at least 25% of the costs of the program, project, or activity with respect to which the Loan is to be made? Yes, the GOH will provide \$2.0 million toward the total project cost of \$8.0 million.
47. FAA § 112. Will loan be used to finance police training or related program in recipient country? No
48. FAA § 114. Will loan be used to pay for performance of abortions or to motivate or coerce persons to practice abortions? No
49. FAA § 201(d). Is interest rate of loan at least 2% per annum during grace period and at least 3% per annum thereafter? Yes
50. FAA § 504(a). Will all commodity procurement financed under the loan be from the United States except as otherwise determined by the President? Procurement will be from Haiti, the U.S. and AID Geographic Code 941 countries.
51. FAA § 604(b). What provision is made to prevent financing commodity procurement in bulk at prices higher than adjusted U.S. market price? Appropriate provisions will be included in the loan agreement to assure that commodities financed are procured at prices not in excess of the adjusted U.S. market price.

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52. FAA § 604(d). *If the cooperating country discriminates against U.S. marine insurance companies, will loan agreement require that marine insurance be placed in the United States on commodities financed by the loan?* Haiti does not discriminate against U.S. Marine insurance companies.
53. FAA § 604(e). *If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity?* Not applicable
54. FAA § 604(f). *If loan finances a commodity import program, will arrangements be made for supplier certification to A.I.D. and A.I.D. approval of commodity as eligible and suitable?* While the purpose of the loan is not primarily to finance commodity imports, fertilizer will be purchased as a feature of the project. To the extent applicable arrangements will be made for suppliers to submit certifications of eligibility to AID for approval.
55. FAA § 608(a). *Information on measures to be taken to utilize U.S. Government excess personal property in lieu of the procurement of new items.* An appropriate provision will be included in the loan agreement relative to excess property.
56. FAA § 611(b); App. § 101. *If loan finances water or water-related land resource construction project or program, is there a benefit-cost computation made, insofar as practicable, in accordance with the procedures set forth in the Memorandum of the President dated May 15, 1962?* Not applicable

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57. FAA § 611(c). *If contracts for construction are to be financed, what provision will be made that they be let on a competitive basis to maximum extent practicable?* Construction of six relatively small operational centers in remote areas of Haiti is included in the program. Due to the locations and poor road conditions it is anticipated that only builders from the immediate area of each center will be interested in each project. The Haitian method of construction is for the builder to do the design and, once approved by the owner to continue with the construction on a cost plus fixed fee basis. A waiver of normal competitive bidding procedures will be required for this program.
58. FAA § 612(b); § 636(h). *Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the United States are utilized to meet the cost of contractual and other services.* The loan conditions requires the GOH to contribute local currencies for specific features of the program. The U.S. does not own or control Haitian Gourdes which could be allocated to this project.
59. App. § 113. *Will any of loan funds be used to acquire currency of recipient country from non-U.S. Treasury sources when excess currency of that country is on deposit in U.S. Treasury?* There is no excess Haitian currency on deposit in U.S. Treasury.
60. FAA § 612(d). *Does the United States own excess foreign currency and, if so, what arrangements have been made for its release?* The U.S. does not own excess Haitian currency.
61. FAA § 620(g). *What provision is there against use of subject assistance to compensate owners for expropriated or nationalized property?* Loan funds will be limited to use for procurement of specific goods and services related to this project.

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62. FAA § 620(k). If construction of productive enterprise, will aggregate value of assistance to be furnished by the United States exceed \$100 million? Not applicable
63. FAA § 636(i). Will any loan funds be used to finance purchase, long-term lease, or exchange of motor vehicle manufactured outside the United States, or any guaranty of such a transaction? No, the loan agreement will restrict procurement of vehicles to U.S. Sources.
64. App. § 103. Will any loan funds be used to pay pensions, etc., for military personnel? No
65. App. § 105. If loan is for capital project, is there provision for A.I.D. approval of all contractors and contract terms? Yes, loan agreement will require AID approvals.
66. App. § 107. Will any loan funds be used to pay UN assessments? No
67. App. § 109. Compliance with regulations on employment of U.S. and local personnel. (A.I.D. Regulation ?). Loan Agreement will require this compliance.

68. App. § 110. Will any of loan funds be used to carry out provisions of FAA §§ 209(d) and 251(h)? No

69. App. § 114. Describe how the Committee on Appropriations of the Senate and House have been or will be notified concerning the activity, program, project, country, or other operation to be financed by the Loan. Program was originally included in the FY 74 congressional presentation as a \$5.0 million Rural Sector Loan. When the loan was modified to reflect its present form standard procedures were followed to obtain congressional approval of the revised project.

70. App. § 601. Will any loan funds be used for publicity or propaganda purposes within the United States not authorized by the Congress? No

71. MMA § 901.b; FAA § 640C.

(a) Compliance with requirement that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed with funds made available under this loan shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.

Appropriate provisions will be included in the loan agreement.

(b) Will grant be made to loan recipient to pay all or any portion of such differential as may exist between U.S. and foreign-flag vessel rates? No

GEOLOGY

Coffee is normally produced in mountainous country at altitudes of between 500 and 1500 feet and the operations centers will be located in this type of terrain. Geologically, these areas are generally composed of limestone overlain by deep, well-drained soils, although intrusions of igneous rock, usually metamorphosed, occur throughout the mountains. Limestone and stony residual soils make good roads for light traffic when properly graded and dressed with hard rock or gravel. Since facilities for crushing the hard rock do not exist in the rural areas, gravel is normally used.

CLIMATE

All parts of Haiti have a warm and notable agreeable temperature, with mean annual temperatures in the mountain areas ranging from 20°C to 25°C. Precipitation is lacking in uniformity, varying greatly with both the season and at different localities. Rainfall is greater on the windward side of the mountains (usually the North side) and less on the leeward side in most of the mountain ranges.

The mean annual precipitation in the coffee-producing areas is from 1000 mm to 2000 mm. This precipitation is concentrated in two rainy seasons, separated by two comparatively dry seasons. The dates for these seasons differ in the various parts of the country but are generally, March to June, wet; June to August, dry; August to December, wet; December to March, dry. During the dry seasons, many small streams and some of the larger ones are dry throughout all or a part of their courses. In the wet season, nearly all streams are subject to sudden and violent floods due to the rapid runoff from the mountain slopes. When not polluted by wastes and sewage, which is the case in the areas in question, the surface water is suitable for domestic use and irrigation. Springs are common in the areas where coffee is produced. Their source is generally rainfall that enters the ground and follows channels in the limestone or fractures in igneous rock.

ENVIRONMENTAL CONSIDERATIONS

The implementation of this project could produce two environmental consequences, one positive and one negative. On the positive side would be the establishing of tree orchards on steep, sloping lands which, when deprived of trees or grass, are highly susceptible to the forces of erosion. The management practices resulting from this project, e. g. proper spacing, weeding, the replanting of old orchards, pruning and thinning, would have the positive effect of

fostering vigorous growth with rapidly expanding root systems that would hold the soil and lessen the incidence of water erosion. On the negative side are the possible dangers related to the use of fertilizers and insecticides in the coffee orchards to stimulate growth and prevent insects, parasites and diseases from causing losses. Insecticides are potentially more dangerous than fertilizers. Inasmuch as the coffee trees are grown on non-irrigated soils, however, the danger of insecticides to human life is very slight, according to the indications of current research. The fact that coffee berries are despulped and decorticated before processing also reduces the likelihood of damage to human life or to the environment because of previously applied insecticides. The handling and transport of insecticides before application represent a potential hazard. Fertilizers, as far as can be determined, do not constitute an environmental hazard. Maximum applications would be 2,000 pounds of 10-5-10 per hectare, which would mean maximum applications of 100 pounds of nitrogen per acre, a rate not considered toxic or dangerous when used in connection with food crops.

With respect to the improvement of existing local roads and trails, which is a feature of this project, no adverse environmental aspects are envisioned since existing roads and trails and natural contours are to be followed to the maximum extent possible. Any road work will improve existing natural drainage systems and lessen hillside erosion. Stagnant standing water, potential breeding areas for mosquitos, will be eliminated along the roads. Disturbances to established sociological and wildlife patterns will be minimal since existing roads and trails are involved and the amount of vehicular traffic will not increase to the point where it will become a factor for change. (Little wildlife remains in Haiti except for birds.)

DESIGN CRITERIA

Buildings will be of one-story construction with concrete block-bearing walls resting on masonry foundations topped with a concrete beam. Concrete columns and wall stiffeners and a bond beam will provide structural rigidity. The roofs will be wood framed trusses with sloped upper chords covered with corrugated sheet metal roofing, and overhang the building proper so as to protect the walls from heavy rains. Plaster-board ceilings will be provided in living and office areas, with sufficient height to permit natural ventilation. Windows will have wood or glass louvers, as appropriate. Floors will be of 4" concrete slabs with tile in offices and living areas, except for the warehouses which will be 6" thick concrete. Walls will be cement plaster with paint in offices

and living areas, unpainted in warehouses. Lighting and power will be provided where needed as will sanitary facilities.

Concrete pavements will be 6" thick concrete over a suitable base except for the coffee-drying yard which will be 4" thick. Drainage will be provided.

Electric power for operation of the centers will come from a diesel generator of approximately 15 KW. A fuel tank and electric distribution system will be required.

Water for the operation of the centers may be available from surface sources or it may be necessary to dig a well, depending on the location. A water pump, storage tank and distribution system will be required.

Sewage will receive primary treatment in septic tanks before being disposed of in tile fields or leaching wells.

Rural Roads

Design and construction of single-track stabilized earth rural roads will be based on the following:

Traffic of less than 50 vehicles/day

Operating speed	10 MPH
Right of way width	30 feet
Roadway width	16 feet
Maximum grade	15% for short distances 10% otherwise
Sight distances	225 feet
Minimum horizontal curve radius	150 feet

Design will assume a 2 axle truck weighing a maximum of 10 tons as the largest and heaviest vehicle using the roads.

Drainage

Whenever the road encounters a natural water crossing, a ford will be provided if possible; otherwise a culvert, or in the extreme case, a timber bridge. Lateral flows will be accommodated in side ditches of sufficient depth to prevent saturation of sub grade materials. A 5% slope in the roadbed will direct surface water runoff to the side ditches.

BASIS OF COST ESTIMATES

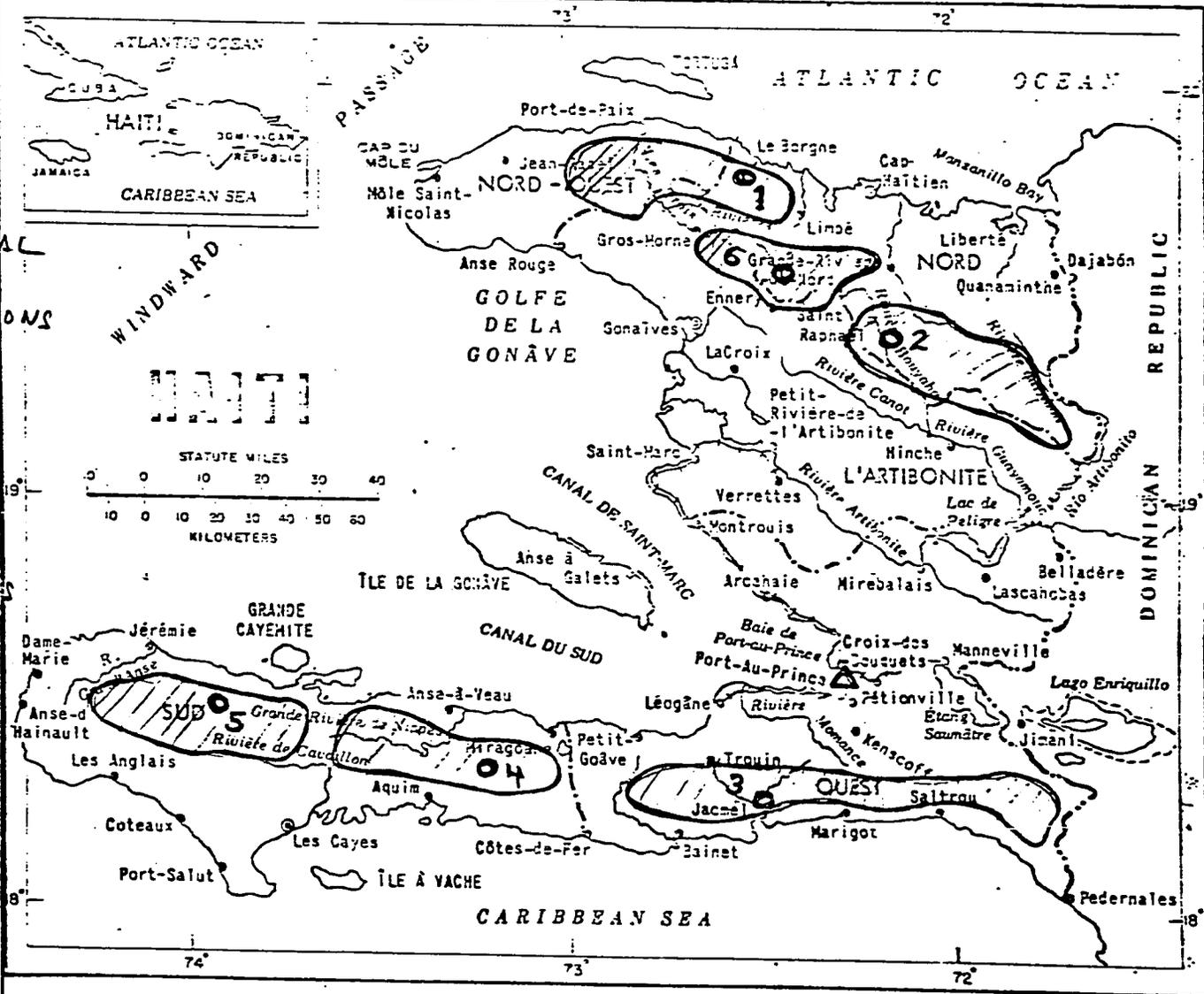
Cost estimates for building construction are based on average square foot or square yard figures recently paid in Haiti, with 10% escalation to cover recent increases in the cost of labor and materials. An additional 10% contingency has been included to cover possible increases over the next two years and unexpected expenses.

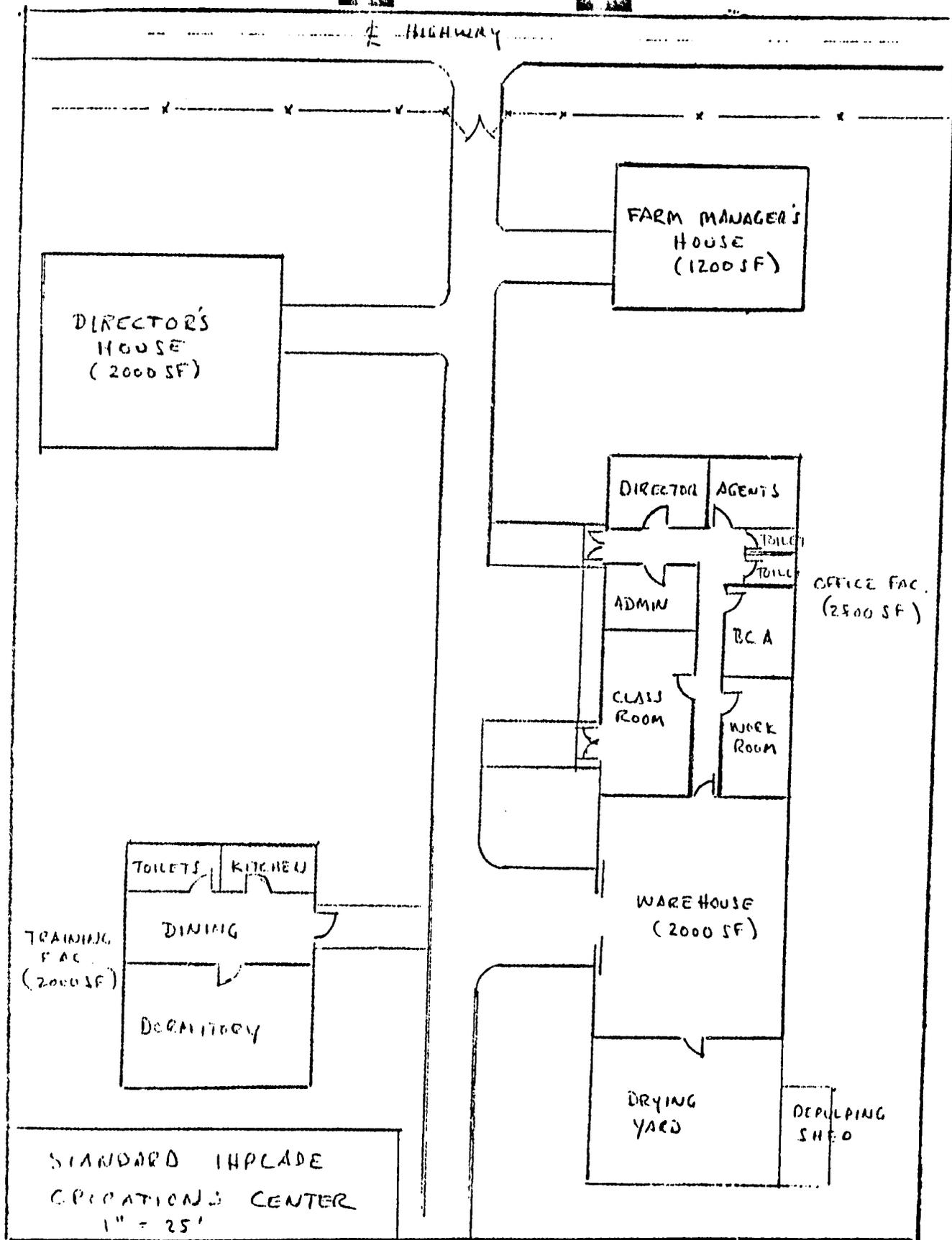
Costs for rural road construction are based on average per-mile costs for similar type roads in mountainous areas constructed during the past two years under various voluntary programs and special development projects.

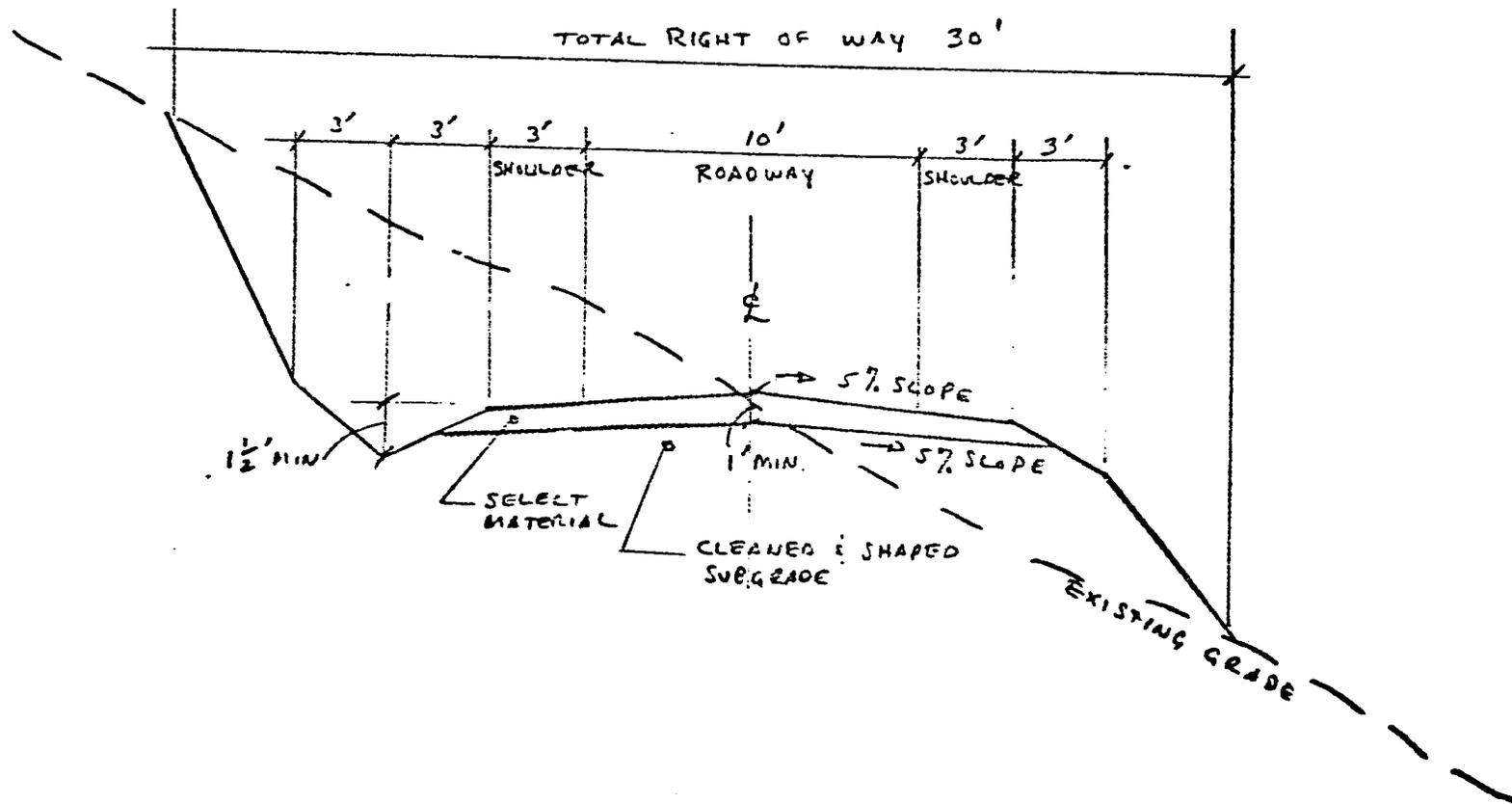
SMALL FARMER IMPROVEMENT, HAITI
LOCATION OF IHPCADE FACILITIES

LEGEND

- △ IHPCADE CENTRAL OFFICE
- IHPCADE OPERATIONS CENTER W/ ZONE OF INFLUENCE
- 1- LE BORNE
- 2- DONDON
- 3- JACMEL
- 4- FOND DES NEGRES
- 5- BEAUMONT
- 6- PLAISANCE-PILARTE







SMALL FARMERS IMPROVEMENT
HAITI

TYPICAL CROSS SECTION
DESIGN OF RURAL ROAD
IMPROVEMENT

RESUME OF PROJECT COSTS)\$.000)

Item	AID Costs			GOH Costs	Total
	\$	LC	Total		
- Construction of Operations Center	80	550	630		630
- Rural Road Improvement				625	625
- Local Engineering assistance				50	50
- Procurement of Equipment					
IHPCADE Central Office	60		60		60
IHPCADE Operations Center	168		168		168
BCA Central Office	37		37		37
BCA Regional Offices	85		85		85
Road Const. tools	20		20		20
Total const costs	80	550	630	675	1305
Total Equipment costs	370		370		370
Total Project costs	450	550	1000	675	1675

OPERATIONS CENTER CONSTRUCTION COSTS

(1 center)

<u>Desc. of Area</u>	<u>Area</u>	<u>Unit cost</u>	<u>Total cost</u>
Director's house	2.000 SF	\$8.00	\$16.000
Farm Manager's house	1.200 SF	8.00	9.600
Offices	2.800 SF	8.00	22.400
Warehouse	2.000 SF	6.00	12.000
Training Facility	2.000 SF	7.00	14.000
Repulping Shed	<u>200 SF</u>	<u>4.00</u>	<u>800</u>
Total buildings cost	10.200 SF		74.800
Roads and Parking (6" thick)	350 SY	3.00	1.050
Drying area (4" thick)	150 SY	2.50	375
Fuel tank assembly		L.S.	500
Exterior elec. dist. system		L.S.	1.000
Water well and 5000 gal tank		L.S.	3.000
Exterior water dist. system		L.S.	2.000
Sewage collection and disposal		L.S.	1.000
Fence (3000 LF)		L.S.	<u>2.500</u>
Total site work			11.425
Total			86.225
Escalation (10%)			<u>8.623</u>
			94.848
Contigencies (10%)			<u>9.485</u>
Totalest cost 1 center			104.333
Cost for 6 centers =	6 X 104.333	=	\$ 625.998
Rounded to			\$ 630.000

RURAL ROAD IMPROVEMENT

Based on experience gained by voluntary agencies and communities working under AID Special Development projects on the type of road improvement work planned in this project, it appears that a cost of \$5000 per mile is realistic at the present time.

A 20% Factor to cover anticipated cost escalation over the period of the project brings the total estimated/mile cost for planning purposes to \$6000 per mile. In addition to the labor, Hand tools are to be procured and furnished to the communities. Of the total tool costs of \$45.000, an estimated \$20.000 worth will be procured in the U.S. with loan dollars, leaving \$25.000 to be locally financed.

Cost of Road - 100 miles at 6,000/mile -	\$600.000	
Procurement of tools	<u>25.000</u>	
Procurement of tools	\$625.000	(GOH)
	20.000	(Loan)

ENGINEERING ASSISTANCE COSTS
(\$ Costs GRANT FUNDED)

Costs are based on a U.S. Civil Engineer assisting IHPCADE during a two year period in the design and construction of warehouses, operation centers and access roads, procurement of equipment and supplies and development of good road maintenance practices.

IHPCADE will provide from their staff, or from the Minister of Agriculture's office of Civil Engineering, engineering support in the form of project inspectors, a driver, secretarial and accounting assistance.

1 U.S. Engineer at \$4000/mo x 24 = \$96.000

(includes all travel overhead differential allowances)

Local group - 3 inspectors, driver, secretarial and accounting assistance \$1000/mo x 50 mos = \$50.000(GOH contribution)

CENTRAL OFFICE EQUIPMENT COSTS

<u>Quantity</u>	<u>Description of Item</u>	<u>Unit Cost</u>	<u>Total Cost</u>
4	4 wheel drive vehicles (jeeps)	4000.	16.000.
3	4 - 5 ton stake body truck	7000.	21.000.
1	3/4 ton Panel truck	5400.	5.400.
2	Electric Calculators	500.	1.000.
1	Electric typewriter. 16"	400.	400.
1	Mimeograph machine	300.	300.
1	Base Radio Station	3000.	3.000.
1	16mm Movie Projector	600.	600.
1	16mm Movie Camera	400.	400.
1	35mm Slide Projector	150.	150.
1	35mm Camera	100.	100.
2	Projection Screens	50.	100.
1	Sound System for truck	1000.	1.000.
1	REflector type Projector	500.	500.
2	Cassette tape recorder	100.	<u>200.</u>
	Total		\$50.150.
	Contingencies and spare parts (20%)		<u>10.000</u>
	Total		60.150.
	Rounded to		\$60.000

OPERATION CENTER EQUIPMENT COSTS (for one center)

<u>Quantity</u>	<u>Description of Item</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1	4 wheel drive vehicle (jeep)	\$4000.	\$ 4000.
1	4 wheel drive Pick-up Truck	5000.	5000.
2	Moto Bike	350.	700.
1	15Kw Electric Generator with fuel tank	5000.	5000.
1	Water Pump	300.	300.
1	Short Wave Radio	1000.	1000.
1	500Kg Scales	400.	400.
1	20kg Scales	100.	100.
1	Coffee depulper	500.	500.
1	Elect. Calculator	500.	500.
1	Typewriter	400.	400.
	Agricultural tools	L.S.	<u>5000.</u>
	One center total		\$ 22900.
	Spare parts and contigency (20%)		<u>4580.</u>
	Total for 1 center		\$ 27480.
	For 6 centers (6 X 27.480) =		\$ 164880.
	Rounded to		\$ 168000.

BCA CENTRAL OFFICE
EQUIPMENT (IN U.S.\$)

Quantity	Description of Item	Unit Cost	Total Cost
Central Office - Damien			
1	Photo copier (3M)	350 -	350 -
1	Vault safe	2000 -	2,000 -
1	Vault door	300 -	300 -
1	Radio Base Station	3000 -	3,000 -
3	Telephones	150 -	450 -
1	Switchboard	500 -	500 -
2	Typewriter, Electric, 16"	400 -	800 -
3	Typewriter, Manual, 14"	250 -	750 -
4	Adding Machine, Manual	150 -	600 -
1	Bookkeeping Machine	3000 -	3,000 -
1	Slide Projector	150 -	150 -
1	Camera, Roliflex	300 -	300 -
1	Camera, 35mm Small	55 -	55 -
1	Movie Screen	40 -	40 -
1	Duplicator	540 -	540 -
10	Air Conditioners	400 -	4,000 -
2	Vehicle, Chev. Van, 2 wheel Dr.	5400 -	10,800 -
2	Vehicle, Jeep, Commando	4000 -	4,000 -
	Total		32,630
	10% Escalation		3,263
	Total		35,893
	Rounded to -		37,000

**BCA REQUIREMENTS FOR REGIONAL
OFFICES (IN US \$)
(9 offices of which 6 are in IHPCADE Operational Center)**

<u>Quantity</u>	<u>Description of Item</u>	<u>Unit Cost</u>	<u>Total Cost</u>
<u>Regional Offices (9)</u>			
9	Photo copier (3M)	350 -	3,150 -
9	Vault safe	2000 -	18,000 -
9	Vault Door	300 -	2,700 -
9	Adding Machines, Manuel	150 -	1,350 -
3	Receiver-Transmitter Set	1000 -	3,000 -
9	Projector, Movie, 16mm	600 -	5,400 -
9	Projector, Slide, Battery	25 -	225 -
9	Movie Screen	40 -	360 -
9	Vehicle, Jeep Commando	4000 -	36,000 -
14	Motor Bikes	350 -	4,900 -
	Total to		75,085
	10% Escalation		7,508
	Total		82,508
	Rounded to -		85,000

TERMS OF REFERENCE FOR THE MARKETING STUDY ON COFFEE

1. Describe the existing internal and external marketing structure of the coffee sector with special reference to the functions of and relationships between producers, producer associations, speculators (traders), exporters, banking and credit institutions, and government agencies involved in the marketing process.
2. Ascertain the cost of production by region for different sized farms, different levels of technology (extensive versus intensive cultivation) and different types (unwashed versus washed) of coffee. Identify and comment on the major inputs (land, cost of labor, technological inputs, credit, etc...).
3. Analyze and comment on the annual distribution of coffee income with particular reference to the share of the export price received by producers, by intermediaries and by the GOH. The analysis will include the study of the government revenue generated by coffee which is redirected to the coffee sector either through subsidies to IHPCADE and/or to other institutes which participate in the development of the production of coffee.
4. Study the various alternatives available to the GOH for the stabilization of (a) coffee prices and/or (b) farmers revenues, taking into account the need to make the best possible use of the existing marketing structure, the special problems of

(2)

farmers who adopt the technical package supported by this loan, the declared policies of the Government with respect to community development, internal and external marketing, and make recommendations thereon.

5. Evaluate the financial, technical and institutional requirements for the efficient operation of a coffee price stabilization scheme.

BASIC DATA NEEDED IN DETERMINING IMPACT OF PROGRAM

(Target Farmer Group Profile before program and sometime after participation)

- Location - Altitude
- Number in Group - homes of members
- Age (average) - Number in Family (average)
- Land area in Coffee
 - per farmer number of parcels
 - Total Total no. parcels
 - tenancy by farmer - by group
- Land in other crops
 - per farmer number of parcels
 - Total Total no. parcels
- Total coffee production 1973-74
 - by farmer - total by group
- Status of coffee
 - % area old trees
 - % rehabilitated - when started
 - % replanted -- when started
- Total income from coffee 1973-74
 - per farmer - total per group
- Total income - sale of other crops 1973-74
 - per farmer - total for group

(DRAFT)

ALLIANCE FOR PROGRESS

LOAN AUTHORIZATION

Provided From: FAA Section 103 ("Food and Nutrition")
Haiti: Small Farmer Improvement

Pursuant to the authority vested in the Deputy U. S. Coordinator, Alliance for Progress, by the Foreign Assistance Act of 1961 as amended and the delegations of authority issued thereunder, I hereby authorize the establishment of a Loan pursuant to Section 103 of said Act, and in furtherance of the Alliance for Progress, to the Republic of Haiti ("Borrower") of not to exceed six million United States dollars to assist in financing the United States dollars and local currency costs (Approximately \$550,000) of a small farmer improvement project ("Project"), including the following components under the Loan: Fertilizer (Approximately \$5,000,000), Construction of Operations Centers (Approximately \$550,000), and Equipment (Approximately \$450,000).

The Loan shall be subject to the following terms and conditions:

I. Interest and Terms of Repayment.

Borrower shall repay the Loan to the Agency for International Development ("A.I.D.") within forty years from the date of the first disbursement under the Loan, including a grace period of not to exceed ten (10) years. Borrower shall pay to A.I.D. in United States dollars on the outstanding balance of the Loan, interest at the rate of two percent (2%) per annum during the grace period and three percent (3%) per annum thereafter.

II. Other Terms and Conditions.

- A. Goods and services (except for ocean shipping) and marine insurance financed under the Loan shall have their source and origin in Haiti or countries included in Code 941 of the A.I.D. Geographic Code Book. Marine insurance may be financed under the Loan only if it is obtained on a competitive basis and any claims thereunder are payable in freely convertible currencies. Ocean shipping financed under the Loan shall be procured in any country included in Code 941 of the A.I.D. Geographic Code Book, excluding Haiti.

- B. Prior to the issuance of any commitment documents or disbursements under the Loan for other than an initial \$100,000 for equipment and \$75,000 for fertilizer, Borrower shall furnish in form and substance satisfactory to A.I.D.:
- (i) Evidence of the establishment of a Borrower/A.I.D. joint account in the National Bank of Haiti for the deposit of Borrower's contribution to the Project and for A.I.D.'s local currency costs disbursements.
 - (ii) Evidence that Borrower's first contribution to the Project has been deposited to said joint account in an amount no less than one-half of the Borrower's first year counter-part contribution in accord with the Project's financial plan.
 - (iii) Evidence that the Haitian National Institute for Coffee Promotion ("IHPCADE") has entered into a formal institutional agreement with the Bureau of Agricultural Credit ("BCA") outlining the responsibilities of said institutions for carrying out the Project and in particular, setting forth the rules and regulations of the fertilizer credit and cash credit programs, including eligibility requirements, the amounts and terms of any subsidy element to small farmers, maximum terms, amounts of sub-loans and interest rates.
 - (iv) Evidence that suitable sites for the construction of the Operating Centers have been selected and that clear title to such sites is held by Borrower or agencies of the Borrower.
 - (v) An implementation plan outlining the procedures and regulations for the purchase, control and distribution of fertilizer procured for the Project.

- (vi) Evidence of the establishment within BCA of a separate revolving fund for the provision of agricultural cash credit.

III. Covenants.

Borrower shall covenant that:

- A. During the course of the Project, IHPCADE and BCA shall receive as their normal, annual budgetary allotments no less than those amounts received by each from Borrower's 1973-74 fiscal year budget.
 - B. During the course of the Project, Borrower will contribute the equivalent of \$2,000,000 in cash in addition to those funds normally received by IHPCADE and RCA for recurrent annual budgetary and investment expenditures as noted in A above.
 - C. Borrower shall carry out during the first year of the Project a study of the impact of (i) current coffee tax rates in Haiti, and (ii) world market prices of coffee, on coffee producer prices. Such study shall include an analysis of the need to establish a coffee price stabilization mechanism, including alternative means of financing a coffee price stabilization fund.
 - D. Borrower shall deposit in the BCA separate, revolving fund all repayments and interest from credits of cash and fertilizer extended under the Project, and said fund shall be maintained for a period of at least ten (10) years from the date of the first repayment of said credits.
 - E. Borrower shall conduct with A.I.D. an annual evaluation of the progress of the Project.
- IV. The Loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

Deputy U. S. Coordinator

Date