

5220150 (2)
 PD-APP-452-B1

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT PAPER FACESHEET

TRANSACTION CODE
 A ADD
 C CHANGE
 D DELETE

PP
 2. DOCUMENT CODE
 3

3. COUNTRY ENTITY
 HONDURAS

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 digits)
 [522-0150]

6. BUREAU/OFFICE
 A. SYMBOL LA B. CODE [05]

7. PROJECT TITLE (Maximum 40 characters)
 [AGRICULTURE SECTOR II PROGRAM]

8. ESTIMATED FY OF PROJECT COMPLETION
 FY [85]

9. ESTIMATED DATE OF OBLIGATION
 A. INITIAL FY [79] B. QUARTER [3]
 C. FINAL FY [79] (Enter 1, 2, 3 or 4)

10. ESTIMATED COSTS (\$000 OR EQUIVALENT \$) -

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FY	C. L. C.	D. TOTAL	E. FY	F. L. C.	G. TOTAL
AID APPROPRIATED TOTAL				15,358	9,642	25,000
GRANT				1,551	2,449	4,000
LOAN				13,807	7,193	21,000
OTHER U.S.						
HOST COUNTRY				764	23,247	24,011
OTHER DONORS						
TOTALS				16,122	32,889	49,011

11. PROPOSED BUDGET APPROPRIATED FUNDS (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. 1ST FY 79		H. 2ND FY 80		K. 3RD FY 81	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	GRANT	J. LOAN	L. GRANT	M. LOAN
(1) EN	100 B	220	240	4,000	21,000				
(2)									
(3)									
(4)									
TOTALS				4,000	21,000				

A. APPROPRIATION	LIFE OF PROJECT		12. IN-DEPTH EVALUATION SCHEDULED
	N. 4TH FY 82	O. 5TH FY 83	
(1) EN	4,000	21,000	
(2)			
(3)			
(4)			
TOTALS	4,000	21,000	

MM YY
 11 81

13. DATA CHANGE INDICATOR WERE CHANGES MADE IN THE PID FACESHEET DATA BLOCKS 12, 13, 14, OR 15 OR IN PPR FACESHEET DATA, BLOCK 12? IF YES, ATTACH CHANGED PID FACESHEET

1 = NO
 2 = YES

14. ORIGINATING OFFICE CLEARANCE

SIGNATURE
 TITLE J. B. Robinson
 Director,
 USAID/H

DATE SIGNED
 MM DD YY
 06 06 79

15. DATE DOCUMENT RECEIVED IN AID/W OR FOR AID/W DOCUMENTS. DATE OF DISTRIBUTION
 MM DD YY
 06 11 79

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT IDENTIFICATION DOCUMENT FACESHEET
 TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE
 C A = ADD
 C = CHANGE
 D = DELETE

PID
 2. DOCUMENT CODE 1

3. COUNTRY/ENTITY
 HONDURAS

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 DIGITS)

6. BUREAU/OFFICE
 A. SYMBOL LA B. CODE 05

7. PROJECT TITLE (MAXIMUM 40 CHARACTERS)

8. PROPOSED NEXT DOCUMENT
 A. 2 = PRP 3 = PP B. DATE

10. ESTIMATED COSTS (\$000 OR EQUIVALENT, \$1 =)

FUNDING SOURCE		BASE COST
A. AID APPROPRIATED		25,000
OTHER		
U.S.A.		
C. HOST COUNTRY		24,011
D. OTHER DONOR(S)		
TOTAL		49,011

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION
 a. INITIAL FY b. FINAL FY

11. PROPOSED BUDGET AID APPROPRIATED FUNDS (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. FIRST FY 79		LIFE OF PROJECT	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN
(1) EN	100 B	220	240	4,000	21,000	4,000	21,000
(2)							
(3)							
(4)							
TOTAL				4,000	21,000	4,000	21,000

12. SECONDARY TECHNICAL CODES (maximum six codes of three positions each)

010 031 050 060 250 312

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)

BF COOP DEL EQTY PART TECH

14. SECONDARY PURPOSE CODE

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)

To increase the income of the rural poor in Honduras.

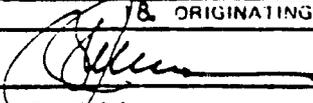
16. PROJECT PURPOSE (MAXIMUM 480 CHARACTERS)

To establish efficient and cost-effective institutional structures and delivery systems to serve the needs of small farmers.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)

1. Agriculture Sector Assessment	\$ 350,670
2. Interim Report Development	\$ 100,000

18. ORIGINATING OFFICE CLEARANCE

Signature: 

Title: J. B. Robinson, Director, USAID/H

Date Signed: MM DD YY

19. DATE DOCUMENT RECEIVED BY AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY

PROJECT PAPER
AGRICULTURE SECTOR II PROGRAM
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ACRONYMS USED IN THE PROJECT PAPER

- AEP (=PEA) - Agricultural Extension Program
- AGRINTER - Interamerican Agricultural Documentation System
- AGRIS - The World Wide Agricultural Documentation System
- AID - Agency for International Development
- AOD (=DGOA=DOA) - General Office for Agricultural Operations of the MNR
- ANACH - National Association of Honduran Peasants.
- BANAFOM (=BNF) - National Development Bank
- BANASUPRO - An extensive network of retail stores run by the National Development Bank which sells consumer goods at non-inflationary prices.
- BNF (=BANAFOM) - National Development Bank
- CABEI - Central American Bank for Economic Integration
- CAL - Local Agricultural Committee
- CAR - Regional Agricultural Committee
- CDSS - Country Development Strategy Statement
- CEDIA - Agricultural Documentation and Information Center located in the Agricultural Operations Office of the MNR
- COHBANA - Honduran Banana Corporation
- COHDEFOR - Honduran Forestry Development Corporation
- COMMA - Area Sample Frame Construction Department of the DGEC.
- CONSUPLANE (=CSPE) - Superior Council for Economic Planning
- COPLAN - Agricultural Sector Planning Committee
- CPA - Agricultural Policy Commission
- CRIS - Comprehensive Resource Inventory Evaluation System
- CSPE (=CONSUPLANE) - Superior Council for Economic Planning

CURLA - The Atlantic Coast Regional University Center of the National Autonomous University of Honduras

CY - Calendar Year

DAR - Regional Agricultural Directorate

DEAR - Agricultural/Rural Survey Department in the DGEC

DEM - Sampling Department in the DGEC

DGC - General Directorate of Roads

DGEC - General Office of Statistics and Census

DGOA (=DOA=AOD) - General Office for Agricultural Operations of the MNR.

DIFOCOOP - The Cooperative Development Directorate

DOA (=DGOA=AOD) - General Office for Agricultural Operations of the MNR

DPA - Agricultural Planning Directorate

DPS - Sectoral Planning Directorate of the MNR

EDUCREDITO - A non-profit institution founded with the assistance of an AID loan to administer educational credit.

EAP - The Panamerican Agricultural School located in the Zamorano Valley of Honduras.

FAO - Food and Agriculture Office of the United Nations

FECOAGROH - Agricultural Cooperative Federation of Honduras

FECOAR - Federation of Regional Agricultural Cooperatives

FIDA - International Agricultural Development Fund - FAO

GDP - Gross Domestic Product

GIDA/ALC - International Group for Agricultural Development in Latin America and the Caribbean

GOH - Government of Honduras

IDB - Interamerican Development Bank

IFB - Invitation For Bids

IHCAFE - Honduran Coffee Institute

IHMA - Honduran Agricultural Marketing Institute

INA - National Agrarian (Reform) Institute

INFOP - National Institute for Professional Training

JRD - Regional Development Junta (ie, Group)

LASPAU - Latin American Scholarship Program of American Universities

MNR - Ministry of Natural Resources

NASA - United States National Aeronautics and Space Administration

OAS - Organization of American States

PAS - Agricultural Sector Program

PEA (=AEP) - Agricultural Extension Program

PLADIC - Agricultural Information Program for the Central American Isthmus

P.L. 480 - United States Public Law 480

PMV - National Transportation Network Master Plan

PND - National Development Plan

PRODERO - Western Region Development Project

PROMYF - Corn and Bean Production Program of the MNR

RFTP - Request For Technical Proposal

ROCAP - AID's Regional Office for Central America and Panama

SNIAH - Honduran National Agricultural Information System

SECOPT - Secretary of State in the Office of Communications, Public Works and Transportation

SPD - Sectoral Planning Department of the Planning Directorate of the MNR

TA - Technical Assistance

TDD - Terminal Disbursement Date

TS - Technical Secretariat

UCD - Consolidation and Dissemination (or Distribution) Department
pertaining to the Agricultural Extension Service of the MNR

UNAH - National Autonomous University of Honduras

USAID - United States Agency for International Development/Honduras
Mission

USDA - United States Department of Agriculture

PART I. PROGRAM DEVELOPMENT AND DETAILED DESCRIPTION

A. Background and Overall Strategy

1. Target Group

The concern of the Government of Honduras, and the basic rationale for the type of program proposed, has been that Honduran agricultural programs are reaching only a small percentage of the rural population. The principal beneficiaries in recent years have been agrarian reform farmers — about 10% of the rural poor, and even for them the principal (and often only) benefit has been the acquisition of land. Provision of governmental technical services and credit has lagged.

The fundamental deficiencies have been structural, i.e., the weakness of institutional systems to deliver essential services when and where needed. These same deficiencies have also acted as effective constraints on the efficient absorption of external aid from international financing organizations. It has been obvious that the capacity of the GOH to meet the needs of the rural poor is severely compromised, and, that without a substantial improvement in institutional capacities -- and expanded delivery systems -- the GOH cannot hope to succeed in bringing about an improved condition and quality of life among the rural poor.

Since the rural poor is the prime target of the GOH in its agriculture sector programs, and, is the principal objective of our foreign assistance, it was clearly obvious that priority attention had to be given to increasing the capacity of the Government to expand and improve its agricultural sector program to deliver services to increased numbers of Honduran poor. This then is the purpose of our assistance -- to deal with the root causes of the problem, to deal with the most inhibiting obstacles to progress in this respect, and to help the Government achieve its goals which are fully consonant with the Congressional Mandate.

It will be noted that institutional improvements depend on expanded and improved human resources, and, this in turn depends on having, or developing, national capacity to produce the human resources when and where needed.

Thus, the analytical process which has taken place over the past two years has been aimed at seeing how the target group can more effectively — and promptly — be reached, i.e., how to remove or alleviate the principal inhibiting obstacles — as a national Honduran effort which can appropriately be assisted by A.I.D.

2. History of Program Development

In mid 1977, the USAID Mission to Honduras and the Government of Honduras agreed to embark on an Assessment of the Agricultural Sector, with three discrete but related objectives: (i) for use as the GOH believed appropriate in the formulation of the agricultural sector portion of its

Five-Year National Development Plan 1979-1983; (ii) as the analytical basis for a second sector program in support of Honduran sectoral objectives; and (iii) for use by the GOH in providing guidance to agriculture sector agencies in the planning and execution of their operations.

Some twenty-three studies were undertaken and constituted the basis for drafting the Sector Assessment, a document which was completed in August, 1978, and subsequently reviewed in AID/W, along with the Interim Report for the Agriculture Sector II Program.

It is noteworthy that in the process of developing the Sector Assessment, key issues of a policy/strategy nature were identified and dealt with by the GOH Agricultural Policy Commission (CPA), a ministerial body responsible for establishing and coordinating public agricultural policies in Honduras. As indicated in the Interim Report, "With few exceptions and with certain differences of nuance, the conclusions of the CPA are consistent with the findings of the Sector Assessment."^{1/} The principal operational results of these policy decisions to date are embodied in this Project Paper and in the GOH Activity Reports on which it is based. In effect, immediately after the CPA policy review and consequent AID/W Interim Report review, the GOH created a series of working parties to study in depth the operational consequences of the new policies and to design the activities, or projects, which would translate those policies into action.^{2/}

3. The Sector Approach

It is worth noting that international lending institutions have tended to favor a project-by-project approach which has had the effect of fractionalizing sector development efforts, often spawning activities and programs with overlapping or conflicting mandates. Moreover, with the evolvment of each new "project", the relatively small pool of qualified Honduran public servants has been stretched thin, often resulting in faulty project execution. It is not unusual to find projects in competition with one another for obtaining the services of qualified Government administrators or technicians. These factors have been very much a part of Mission thinking in developing the approach outlined below.

^{1/} Honduras, Agriculture Sector II Program, Interim Report, p.2. For a detailed discussion of the policy/strategy issues and their proposed resolution, see Annexes A and B of the Interim Report.

^{2/} The Activity Reports of the working groups are available as supplemental materials to the Project Paper. Since the Activity Reports were developed as recommendations to the GOH and A.I.D., there are occasional differences between the Activity Reports and the Project Paper resulting from final Program development and negotiations. In all cases the information in the Project Paper predominates.

The term "Sector Program" can mean many things, from a collection of individual projects presented under one set of covers to an undifferentiated transfer of resources in support of a sector segment of a recipient country's investment budget. In this instance, and as more fully developed in the CDSS, the sector approach is a half-way house between the two extremes mentioned above. It has certain project assistance features, in that it identifies costs and specific inputs for each Activity. It moves towards a supportive transfer of resources in that, where feasible, it encompasses the entire budgets of the directly concerned departments of implementing agencies. Its principal sectoral characteristics, however, are that: (a) the Program is viewed as but one step in a process of analysis, policy formulation, and setting of action priorities on a sector-wide basis; and (b) the action priorities are translated into Activities using a systems approach to make the "projects" mutually supportive in relation to larger sectoral objectives.

This formula is believed to be appropriate to Honduras in its present state of development, where sectoral objectives of increased employment, income and production call for emphasis on institutional development and where it is important to measure the feasibility of proposed actions in aggregate terms. It is also important to understand that while the focus of this sector approach is somewhat narrowed to the major on-farm sources of improved income and employment among the rural poor, important complementary and coordinated programs such as the proposed Rural Technologies Project are focussed on improving both farm technologies and rural industries; as such the linkage between the farm sector and the non-farm sector is assured.

It is also worth noting that the sectoral approach embodied in this Program is not a leap into the dark, but instead builds upon achievements of and represents a considered advance from the Agricultural Sector Program I. The first Sector Program, while somewhat more individual project oriented, contributed to an improvement in the Government's capacity for planning and executing projects in the agriculture sector. It also drew the attention of policy makers to weaknesses in interinstitutional coordinating mechanisms for achieving impact at the farm level, resulting in definite actions, such as the creation and strengthening of a sector policy formulation and review body, the CPA, as well as creating regional level coordinating bodies (Regional Agricultural Committees).

4. Program Content and its Relationship to Sector Objectives

The Government's draft National Development Plan 1979-1983 establishes three fundamental objectives in the agriculture sector: increase in an accelerated and sustained manner agricultural production for both domestic and foreign consumption; maximize employment generation, increase income levels and improve income distribution in the rural sector by means of mechanisms which guarantee an improved integration of Hondurans in the production process and fuller participation in the fruits of development; and the conservation and rational exploitation of natural resources, with the result that the benefits so derived will be channeled in a manner compatible with both production needs and the conservation and protection of the environment.^{1/}

^{1/} "Bases Sectoriales del Plan Nacional de Desarrollo 1979-1983: Objetivos, Políticas y Medidas," Secretaría Técnica del Consejo Superior de Planificación Económica, 1978, p. 18.

These objectives provide ample opportunities for developing sub-sector policies and programs for the individual small farmer and agrarian reform target group beneficiaries (as further defined in the Social Soundness Analysis section of this Paper). It is equally clear from the recently completed Agriculture Sector Assessment, however, that two major constraints, institutional capacity and human resources, inhibit action in almost all areas needing improvement in the agriculture sector, especially if adequate attention is to be paid to the small farmer.

With regard to agricultural sector institutions, the Assessment points out that, "In addition to a trend towards regionalization, there are several other tendencies worthy of note: (a) responding to specific problems and attempting to avoid confronting administrative problems endemic in the executive branch by creating new institutions and institutional arrangements,... (b) establishing special project authorities outside of normal organizational control, e.g., PROMYF,^{1/}..... (c) establishing roles and objectives in development and operational plans which are ahead of the organizational capacity, management and coordinating systems, and human resources capabilities of sector agencies."^{2/} The basic thrust of Sector II Program activities concerned with human resources development and organizational improvement is to help the Honduran Government to establish governmental operations so as to avoid necessity for ad hoc arrangements and to improve capacity for planning, designing and executing programs which effectively support the objectives of the sector outlined earlier. Regrettably, international financing institutions have tended to exacerbate the fragmentation of an integrated approach to sectoral policies and operations. External assistance programs cannot sustain the sector's growth and development, with equity, over time in the absence of strong, effective guidance and control from the Government institutions whose mandates are to promote the sector's development.

A third area addressed by the Sector II Program is concerned with strengthening existing delivery systems and introducing others with a view to providing greater effectiveness and coverage in channeling required inputs and services to target beneficiaries. The objective here is not to reach all campesino farming units in need of assistance within the time frame of the Program, but rather to establish a broader, but integrated, mix of delivery mechanisms whose efficacy and potential for expansion and replication can be objectively ascertained in the future. At present it is clear that the Government's current delivery systems are impacting on a relatively small proportion of the country's poor farmer class and, further, that these systems have both conceptual and structural weaknesses requiring immediate attention. "An improved strategy for delivery of public sector services would include adjustments in the Regionalization Plan to clearly define functions and inter-relationships of the various administrative, research, extension, planning and services units. A change in the technology transfer approach to

^{1/} Programa de Maíz y Frijol.

^{2/} Agriculture Sector Assessment for Honduras, A.I.D., August 1978, p. 25-26.

organize the work of extensionists, promoters, and credit evaluators through agricultural service centers and an expanded use of para-professional personnel should be tested as a means to promote farmer participation and more effective delivery of technology and the means to adopt it.^{1/} In this regard, the Agricultural Research Project and the proposed Rural Technologies Program are focussed on providing the new and improved agronomic and mechanical technologies which are critical to the achievement of objectives of the improved delivery systems.

5. Program Components

As indicated above, this Program proposal focuses on three areas of constraints in sector development as it affects the target group; i.e., institutional capacity, human resource capacity and delivery systems.

Initially, when the working parties referred to in Section 2 above were created by the GOH, they were organized to reflect the 17 Activities grouped into 5 systems, with the emphasis on the systems per se, as presented in the Interim Report. As intensive review proceeded, and interrelationships between systems and activities were explored, it became apparent that a more appropriate set of functional relationships could be obtained by planning for 3 systems comprising 13 Activities as follows:

- Human Resources Development, comprising Participant Training, In-Service Training, and Development of the Agricultural University Center (CURLA).
- Institutional Development, comprising an Agricultural Planning System at all levels (sector-wide, institutional and regional), an Information System, a Marketing Analysis System, and Administrative Reform.
- Delivery of Services and Related Inputs, comprising Extension Improvement, Sub-regional Cooperative Service Centers, Farmer Training, Administration of Credit, Zonal Infrastructure Packages, and Small Farmer Consumption Improvement.

Only 10 of the Activities and one feature of an 11th are considered ready for financing at this time. Work is well advanced on the other elements (Farmer Training, Administrative Reform, and the individual institution aspects of In-Service Training). All three of these elements are important components of their respective systems. For the latter two, the Activity Reports describe the present status of their development. In the case of Farmer Training, matters are less advanced. It is also conceivable that during the next two or three years, other discrete Activities that fit within the three Systems and which are deserving of support will be identified.

In view of this situation, it is essential that Agricultural Sector Program II be conceived as a unified framework and that the Authorization and Project Agreement be written so that, subject to the

1/ Agriculture Sector Assessment, Op.Cit., p. 28-29.

availability of funds, and without modifying the original TDD, activities which fall under the 3 systems -- additional to the 11 now being proposed for financing -- can be incorporated into the Program via an Amendment procedure. This would have the effect of:

1. Assuring that any specific agricultural activity which A.I.D. supports financially and which relates to the three basic sector development systems is designed to support other activities, to avoid overlapping and duplication of effort, and to advance sectoral goals regarding organization, division of responsibility and similar concerns.
2. Permitting an incremental flow of new activities, without major time constraints, and within an organized framework on a sound analytical base - i.e., the Sector Assessment - at such points in time that a discrete activity is sufficiently well thought out and negotiated to ensure reasonable success and expeditious implementation. (Where Activities other than the three now being developed are envisaged, a PID-like document could be used to secure initial authorizations).
3. Reducing substantially the burden of USAID staff for designing, negotiating and administering agricultural activities.

B. Detailed Description

1. Program Goal

The ultimate objective of this Program is to increase the incomes of the rural poor in Honduras. This goal will be verified to the extent that by 1985 (i) the percentage of the rural population below a per capita income of \$250 (1977 prices) drops from 90% to 80%, (ii) average per capita incomes of small traditional farmers increase from \$135 to \$175 (1977 prices), (iii) average per capita incomes of agrarian reform farmers increase from \$106 to \$175 (1977 prices). Goal achievement will be measured by obtaining income data from official GOH publications and rural income surveys.

The Program's sub-goal is to increase the capacity of the agriculture sector to absorb and efficiently use domestic and foreign resources (human, financial, natural and technological) so that they can be more effectively brought to bear on the problems of the rural poor. This will be verified through the following indicators: (i) GOH expenditure levels in the agriculture sector increase from \$162M in 1979 to \$337M by 1985, (ii) foreign assistance expenditures in the agriculture sector increase from \$65M in 1979 to \$88M in 1985, (iii) the agricultural sector contribution to GDP increases by at least 6% per annum in constant terms between 1978 and 1985, and (iv) public investment in the agriculture sector increases from \$137M in 1979 to \$202M by 1985 (1979 prices). Sub-goal achievement will be measured by obtaining annual GOH budget data, foreign donor records, and information contained in official GOH publications.

2. Program Purpose

The Program seeks to establish efficient and cost-effective institutional structures and delivery systems to serve the needs of small farmers. Attainment of the Program's purpose will be indicated by the following conditions at the conclusion of the Program's execution: (i) There is an increased number and improved quality of trained professionals working in the sector. More specifically, there is a decreased reliance on foreign experts, especially at CURLA (Centro Universitario Regional del Litoral Atlántico); the percentage of Honduran faculty at CURLA with at least Master's Degrees or better increases from 16% in 1978 to at least 33%; at least 235 officials working in public agricultural institutions have benefitted from post-graduate training programs and at least 45% of public agriculture employees have received in-service training. (ii) There are permanent systems to determine agricultural training requirements, both in-country and overseas, for public sector employees. (iii) There is an in-country capability to train all B.A./B.S.-level technicians required in the agriculture sector. (iv) There will be improved mechanisms through which agricultural services can be delivered to reform sector and non-reform sector farmers (i.e., small traditional farmers). The Extension Service alone will be reaching at least 80% of all reform sector farmers and 25% of all non-reform sector farmers, based on 1978 levels.

- 8 -

(v) A system exists by which local or zonal infrastructure needs (e.g., access roads, storage structures, irrigation systems) are identified and projects implemented. (vi) The National Development Bank (BNF) has a strong regional program, and is lending to substantially more target farmers than in 1977. It also has an improved financial position and reduced default rates. (vii) There is improved regional and national coordination among Extension, Research, the National Agrarian Institute (INA), the BNF, and other sector institutions. (viii) There will be increased participation (regional and beneficiary) in the planning and execution of agricultural development programs. (ix) Individual institutions in the sector will have strengthened analytical and planning units. (x) There is an effective sector-wide system for policy analysis, planning, budgeting and evaluation. (xi) The percentage of actual budget expenditures vs. planned expenditures for all sector institutions will increase from 70% in 1978 to 85% by 1983. (xii) Agricultural data and information will be more reliable and accessible to public sector institutions and farmers. Achievement of the Program's purpose will be measured by obtaining reports and records from various GOH institutions, progress reports under Sector Program II, and by Mission monitoring.

3. Sub-Purpose - Human Resources System Component

Human skills and the capabilities of public servants must be upgraded in the agricultural sector if well-run small farmer programs are to be achieved. This was demonstrated in the Sector Assessment, which reached the following conclusions regarding professional, technical and women's training:

- That over the next five-year period, the effective demand for specialized professionals would be greater than their supply, that the preparation of such professionals would have to take place primarily out of country, and that the variety of specialties or disciplines covered under future participant training programs should be broadened.
- That over the next five-year period, the supply of mid-level technical personnel (agronomists, foresters, sub-professionals, etc.), should equal the effective demand for such personnel but that the quality of the mid-level personnel, in large measure being trained in local institutions, is not adequate.
- That women in the agricultural sector have little or no access to agriculture-related training in either local institutions (with the exception of CURLA) or through participant training programs.
- That in-service training programs are weak and, in general, not well-related to operational needs at the field level.

The human resources component of the Program is designed to assist the GOH in its continuing efforts to increase the diversity and improve the quality of the technical personnel responsible for formulating and carrying out programs in the sector as well as conducting the necessary research, development and adaptation of appropriate farm technologies. The activities proposed under this component specifically address the

major constraints outlined above.

The sub-purpose for the human resources system components then is to increase the number and improve the quality of trained professionals working in the agriculture sector. The achievement of this sub-purpose will be verified by the following end-of-program indicators: (i) There is a decreased reliance on foreign experts, e.g., at CURLA the percentage of Honduran faculty is 75% in 1983 vs. 44% in 1977. (ii) CURLA has adequate faculty and facilities to increase its enrollment to 4,000 students, and to train all required B.S. level professionals in the sector. (iii) The percentage of Honduran faculty at CURLA with Master's Degrees or higher increases from 16% in 1978 to at least 33% in 1983. (iv) The percentage of incoming students graduating from CURLA's professional programs increases from 43% in 1978 to 75% in 1983. (v) There is a permanent unit (Technical Secretariat of the Scholarship/In-Service Training Committee) to assess the need and arrange for training both in and out-of-country. (vi) In-service training programs in the agriculture sector are expanded over their 1978 levels, where appropriate conducted on an inter-institutional basis, and are using more uniform training methodologies and techniques. (vii) At least 45% of the officials in key public agriculture sector institutions (MNR, INA, BNF, DIFOCOOP, INFOP) have received in-service training. Achievement of the sub-purpose will be measured by obtaining the necessary data from CURLA and GOH records, manpower projections effected by the GOH, periodic Program progress reports, and observation by the Mission.

In order to realize the human resources sub-purpose, the activities (or outputs) discussed below are proposed for financing under the Sector Program.

Output No. 1: Participant Training Activity

Using the Assessment's findings regarding the public agriculture sector's demand for professionals through 1983 (See Annexes N and O of the Assessment), as modified by subsequent personnel changes, altered program priorities and identification of alternative funding sources, the working group committee, in close consultation with the participating GOH institutions, developed a participant training program to upgrade professionals working in the sector.

The basic differences in approach between Sector I and Sector II Participant Activities are that: (a) in the former, in-country academic degree training was authorized; in the latter only out-of-country training of this type will be financed; and (b) in the former, emphasis was given to increasing the number of degree holders available for government service; in the latter emphasis will be given to matching specific job requirements with specific skills. With some modifications, the GOH will continue using the scholarship selection and administration system established under Sector Program I. As more fully explained in the Technical and Administrative Feasibility sections of this paper, that system has been highly effective in providing post-graduate and

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under-graduate agricultural training to Hondurans in qualified U.S. or other institutions in the Western Hemisphere. This activity seeks to expand upon the success of the first Program by providing scholarships for 235 academic programs (vs. 223 under Sector Program I) and 64 short term training courses (vs. 77 under Sector Program I), all to be undertaken outside of Honduras.

The scholarship program will be improved in several important ways under Sector Program II: (1) Training will be provided in agricultural sciences as before, but training in such support fields as Planning and Development, Business Administration and the Social Sciences (e.g., Rural Sociology) will also be made available to build a stronger base for sound planning and effective delivery systems. Specialized manpower will also be developed to support other sector programs, e.g., Agricultural Research and Rural Technologies projects. (2) A new committee with authority over both out-of-country and in-service training will replace the scholarship committee. It will have representation from each of the 11 institutions participating in Sector Program II and will be provided with a technical secretariat. (3) Eleven (11) Honduran institutions will benefit under the training activity vs. four (4) participating under Sector Program I. (4) A new set of selection procedures and improvement in the orientation, placement and follow-up services provided by EDUCREDITO. ^{1/} (5) Periodic supply/demand studies will be undertaken by the technical secretariat, with contracted assistance, to help ensure that training programs remain relevant to the priority needs of the sector. Such studies may indicate a need for revising the training programs funded under Sector Program II. Flexibility in this regard is considered both necessary and important to the continued relevancy to needs of such training. (6) To avoid the problem of participants encumbering their government positions while in training, the central government will budget the transfer funds annually to a separate fund in EDUCREDITO for financing living expenses for the scholarship recipients and their families during the training period. (7) The scholarship committee will seek to ensure that at least 20 percent of the participants are female.

This Activity has a five-year implementation period to ensure completion of identified training requirements within the life of the Program.

The total cost of this Activity is \$9,634,000, of which A.I.D. will fund \$6,169,000 and the GOH \$3,465,000. These funds also provide for terminating 156 academic programs initiated under Sector Program I.

Output No. 2: In-Service Training Activity

The Sector Assessment pointed to the lack of adequate numbers of properly trained and oriented personnel in the public sector as one of the most serious limiting factors in improving services to reach the target groups. "There is simply no substitute for a critical mass of component

^{1/} An autonomous GOH institution founded with the assistance of an A.I.D. Loan to administer educational credit.

people in policy, planning, management, and technician training positions. Without such a cadre, supported by middle-level operational personnel, it is simply not possible to move substantial amounts of resources to target group beneficiaries in an effective fashion."1/ The Assessment and consequent intensive review effort found the agriculture sector's in-service training programs to be generally quite weak and often unrelated to the principal objectives and critical needs of both the sector and individual institutions, especially as regards small farmer programs. Moreover, in many of the sector's institutions, in-service training programs have floundered because management has considered such training a "cost", rather than an "investment" in upgrading the services provided by a given institution.

This Activity will operate at two levels: institutionally and sector-wide. At the sector-wide level, an In-Service Coordinating Commission with a technical secretariat will be established. The Commission, composed of the principal training officer of the sector agencies, and its secretariat, including training specialists, will provide technical support to the individual institutions, while working on systematizing induction procedures, standardizing methodology for determining training needs and designing training actions, developing mechanisms for control, supervision and evaluation of training. Inter-institutional workshops will be held to facilitate dialogue among the sector's in-service trainers. As appropriate, inter-institutional in-service training courses will be organized, both for instructors and employees, where common needs are identified. It is contemplated, for example, that a core orientation program for all new agriculture sector personnel will be developed which would include such topics as: a general orientation to the country's agricultural sector goals; sectoral objectives, programs and their inter-relationships; national and regional sector and inter-agency coordinating and planning mechanisms; specific types of information, materials services and expertise available through different sector agencies; and the types of continued training opportunities (academic, in-service and special courses) available and an explanation of the mechanisms for participating in these.

This component of the Activity provides for a four-person Secretariat, for 12 short courses and three workshops annually, and for one full-time advisor plus three person/months per year of short-term technical assistance. The technical assistance is designed to introduce innovation into in-service training in areas of orientation training for new sector employees, systematizing the identification of needs throughout sector institutions and appropriate responses including new training methodologies and techniques. These innovations will be directed to insuring that not only the numbers trained increase but that there is a pronounced improvement in quality resulting from better targeting, training content and methods.

1/ Agriculture Sector Assessment for Honduras, Op. Cit., p. 12.

The cost of this component of the Activity is \$ 1,311,500, of which A.I.D. will fund \$ 631,000 and the GOH \$ 680,500. Due to the innovative nature of this component, grant funding of technical assistance foreign exchange costs is proposed for a modest portion of the A.I.D. contribution to these initial costs.

The activity costs include estimates of the amounts that five individual institutions plan to spend on in-service training, using essentially their present methodologies and procedures. At a cost of slightly more than \$2 million they propose to provide a total of 965 courses with 20,241 participants. At an average of 5 courses per employee during this period, the program would reach approximately 4,000 employees, or 45% of the total manpower in the five institutions.

As the Activity Report makes clear, these individual institution programs reflect essentially a continuation of on-going actions and postpones consideration of changes, new orientations and new techniques until the new Committee, referred to above, has been constituted and has staff and technical assistance available to assist the individual agencies in rethinking their plans. This is both understandable and prudent. However, it makes it difficult for A.I.D., at this time, to commit itself to assist in the financing of the in-service training activities of the individual institutions. In view of this situation, we propose that, at present, A.I.D. support be limited to participating in the financing of the Technical Secretariat and related costs of the Scholarship/In-Service Training Committee. This Committee, working with the individual institutions will prepare a revised program for 1980-83, introducing new concepts. Should additional financing be necessary to implement such new training, we would propose to provide additional funds to this Activity via an amendment, subject of course to availability of funds and to the acceptability of the revised program.

Output No. 3: Development of the Atlantic Coast Regional University Center (CURLA)

Founded in 1967, CURLA (Centro Universitario Regional del Litoral Atlántico) is the agricultural campus of the National University (UNAH). At present, it accepts all qualified applicants without regard to year of graduation or nationality. It has been growing, in terms of enrollment, at well over 25% per year in recent years. Its 1979 enrollment is over 1,600 and is projected to increase to over 4,000 by 1983. Approximately 73% of the students are enrolled in Agronomy, 19% in Forestry and the balance are pursuing other careers.

With a view to reducing the country's dependence on foreign training, the Sector Assessment concluded that the assistance to CURLA would be both timely and appropriate. "CURLA's physical plant is inadequate for the level of graduates it was intended to produce. Laboratory facilities and equipment are lacking. Classroom space is in short supply. Living quarters are not available to most students and faculty. Lacking proper laboratories and a library, with only a very limited research capacity

and without demonstration fields and model irrigation facilities, CURLA offers its students little in the way of practical education at present." ^{1/} Aware of these shortcomings, the National University approved a plan in late 1977 for the restructuring and overall development of CURLA. The Mission has examined this plan and finds it to be well conceived and appropriate for addressing the needs generated by an increasing student body (e.g., physical facilities and staff training) and simultaneously upgrading the quality of the education provided (e.g., new study programs and reorganization of the academic/administrative structure of the Center). This activity is designed to provide the resources necessary to implement the Center's development plan. A.I.D.'s participation in financing the plan, marking the first time A.I.D. has contributed to development of Honduras' University in at least a decade, is appropriate and indeed may have provided the incentive for approval of the larger plan with significant additional GOH funding.

The capital investment component of the activity totaling \$ 7,953,000 of which \$ 5,734,000 is in local costs, provides for construction or remodeling of 22 buildings for the library, classrooms, laboratories, cafeteria, auditorium, and administrative and professor's offices. It also includes a large amount of library and laboratory equipment, plus a small number of vehicles. There is also provision for installation of an irrigation system to put 150 hectares under water. In addition to these capital expenditures, the plan also calls for a 140% increase in operating costs between 1979 and 1983, mostly for personnel. Not included in this activity budget is the cost of academic (mostly post-graduate study) scholarships for 92 future teachers at the Center. These costs are to be financed under the Participant Training Activity discussed earlier. As indicated in greater detail in the Administrative Feasibility section of this paper, the Latin American Scholarship Program of American Universities (LASPAU) is prepared to assist CURLA with the placement, orientation, and follow-up of the participants selected by CURLA for advanced academic training in the United States.

The end-of-project status in 1983 will find a student body enrollment of over 4,000 being served by 218 teachers, at least half of whom have a Master's Degree or better, an upgraded and expanded physical capacity for adequately attending to the requirements of the enlarged enrollment, and 650 Agronomist and 300 Forester (B.S. level) graduates.

The total cost of this activity is \$ 15,728,000, of which A.I.D. will fund \$ 4,411,000 and the GOH \$ 11,317,000. Of A.I.D.'s contribution, approximately one quarter is grant financing for Technical Assistance, Special Studies and 50% of the A.I.D. contribution for construction and equipment. Grant financing for these selected costs is deemed not only appropriate but also highly desirable for several reasons, not the least of which is the encouragement provided to the GOH to finance the far greater share of the costs for this activity.

1/ Agriculture Sector Assessment for Honduras, Op. Cit., p. 59

4. Sub-Purpose - Institutional Development System Component

If the GOH is to attain its objectives vis-a-vis small farmers, it must have an improved system to plan and coordinate its efforts in this direction. This Program component seeks to establish such an effective sector-wide system for policy analysis, planning, budgeting, coordination and follow-up of operations, and evaluation at central and regional levels. It also proposes to provide certain back-up services to the policy analysis and planning functions, i.e., an agricultural information system, an institutional analytical capacity in the area of marketing, and a similar capacity in the area of natural resource use.

A third problem area which this Program component seeks to address relates to improvements in the administration of programs and projects, specifically: procurement, personnel, and internal agency organization policies and procedures. This last Activity is still in a development phase and is not yet ready to be presented for financing. When the implementation aspects of the Activity have been fully thought through it will be proposed for financing via an amendment to the Sector Program.

The principal conclusions of the Assessment bearing on this Program component are as follows:

- Institutional organization of the sector is not systematically aligned with the needs of the National Development Plan nor with the realities of agricultural development.
- There are complex but inadequate mechanisms for coordination of programs.
- Operational plans are developed which are ahead of the organizational capacity and human resources capabilities of sector organization.
- There is no effective sector wide system for policy analysis, planning, budgeting and evaluation.
- The linkages between planning and budgeting, on the one hand, and budget execution, on the other, are weak and the latter often does not reflect the former.
- There is little organized input into the national planning process from the regional level.
- Marketing constraints of various types are a major and pervasive impediment to the economic progress of the target group.
- There is no central, policy-oriented marketing entity in the Government to examine the various components of the marketing system and their interrelationships and propose measures to improve matters; such an entity is badly needed.

All the planning departments, policy making bodies, coordinating committees, information gathering units, administrative units, and analytical units (with the exception of a marketing studies and analysis unit) exist albeit some in very nascent stages. They are uncoordinated and do not presently function as a system. There is little in the way of standard procedures. Also, the individual units are in general weak in terms of numbers and quality of staff. Therefore, the underlying strategy for this component of the Program is to strengthen the relevant units of the individual institutions involved in this Program component and to simultaneously develop and implement procedures for integrating their respective outputs into a coherent whole. The Sector investment budget programmed for 1979-83 is US\$ 821.5 million equivalent—a 100% increase over the previous 5 year period. Improvements proposed under this Program component are essential if these resources are to be efficiently utilized.

Achievement of this sub-purpose component of the Sector Program will be verified by the following end-of-program indicators: (i) There will be one comprehensive Annual Operating Plan for the Agriculture Sector for use by sector agencies produced each year, rather than the current multiplicity of such plans; (ii) The planning and budgeting processes (now on separate, parallel tracks) will be integrated; (iii) Medium-term (five year) plans will be revised and up-dated on a continuing basis; (iv) Regional plans, both annual and medium-term, will be produced regularly; (v) Systematic evaluations of programs and projects will be undertaken and acted upon; (vi) Line item budgets for all sector institutions will be reorganized on a program objective basis;^{1/} (vii) Handbooks will have been developed and put into use on such items as revolving funds, auditing and vouchering practices, procurement of goods and services, job classification, and promotion procedures;^{2/} (viii) Regional documentation centers will be in existence; (ix) A National Agricultural Bibliography, a National Directory of Sources of Information, and a Collective Catalogue for Periodical Publications will be published; (x) An Area Sample Frame Survey system will be in place nationally; (xi) A reorganization of the Dirección General de Estadísticas y Censo will have been effected; (xii) A central data bank, with terminals to 4 principal user agencies will be installed and in use; (xiii) the CRIES^{3/} system will be operational; (xiv) There will be compatible methodologies and procedures for the collection, processing, classification, coding and storage of information among the institutions of the SNIAH. (xv) A series of studies will be produced and regularly

1/ These indicators relate to the Administrative Reform component of the Activity.

3/ CRIES, Comprehensive Resource Inventory and Evaluation System, is a natural resource inventory system developed jointly by A.I.D., USDA, NASA, and Michigan State University. It is anticipated that approximately the first year of this program will be DSB funded.

is programmed. Since 10 of the present 133 positions are vacant, this will mean recruiting 58 new professionals. These figures have been arrived at by attempting to balance anticipated increases in work load with personnel who will be absent while in training programs. They represent an estimate of the minimum critical mass necessary to make the system work.

As will be noted, the major portion of the new positions (66%) are directly related to building strength at the regional level and in those central and national units concerned with annual operation programming and budgeting.

The line of demarcation between the categories of "Medium Term Planning" and "Special Studies and Analyses" is by no means sharp and distinct. Many of the 52 professionals listed under "Special Studies and Analyses" in Table 1 will spend a considerable portion of their time preparing material which serves as inputs to medium term planning, including for example, the five-year plans. However, it was not possible to distinguish precisely these people from those primarily engaged in pre-feasibility project studies and the like.

The technical assistance is related essentially--for the various functions of the system--to the development of methodologies, preparation of manuals and handbooks for utilizing them, and teaching personnel how to put the instructions into practice. With regard to the special studies and analysis function, it should be noted that special attention is proposed for installation of the CRIES system of natural resources planning. Also, while subsumed under annual and medium term planning, discrete methodology for regional and zonal planning is to be developed and put into place.

The 286 person months of technical assistance proposed falls into two major groupings. Approximately 133 person months (46% of the total) correspond to experts who will be working as a team with all institutions in the system, at all levels.^{1/} The remaining 54% will be working primarily with individual institutions on problems peculiar to those institutions, mostly directly related, but in a few instances, somewhat marginal to the planning system per se, e.g., agrarian reform legislation.

The bulk of the individual institution technical assistance (73 person months--25% of total technical assistance) is for development of the CRIES system. As Table 2 makes clear, the remaining 80 person months is composed of a number of specialized tasks, ranging from project/pre-investment studies to financial planning. As in the case of personnel, much of the output of this individual institution technical assist-

^{1/} It may be desirable to procure these services in the form of one institutional contract. This could potentially be a Title XII Institutional Arrangement.

ance will take the form of inputs to the medium-term planning.

This Activity involves two other actions necessary to make the system work, although no specific inputs are proposed for financing here:

a. Regionalization of the Planning Departments of the Institutions

There is general agreement that the internal divisions of functions and allocation of personnel among the units of each agency is less than optimal. This is evidenced by the fact that the plans put forward reflect a considerable number of changes of this type that have been undertaken in the past few months on the part of the MNR, CONSUPLANE and INA. In large part, the main thrust of the reorganization actions--actual and planned--are designed to strengthen the regional planning and the annual operational planning functions (see Table 1 below). It is anticipated that this process of internal reorganization will and should be a gradual one as specific work load requirements emerge, deficiencies are identified, personnel return from out-of-country training, etc. No specific input for furthering this process is envisaged at this time.

b. Upgrading Quality of Planning Personnel

In all of the planning departments responsibilities are being carried out by personnel with insufficient preparation. The BNF, MNR, and INA have developed detailed training plans for academic and short course out-of-country programs for their present personnel. The necessary resources are available under the Participant Training Activity of Sector Program II. Out-of-country training will be supplemented by in-country short courses and seminars programmed under the In-Service Training Activity of Sector Program II.

The total cost of this Activity is \$ 16,187,000, of which A.I.D. will fund \$ 3,503,000 and the GOH \$ 12, 684,000.

Output No. 2: Development of an Information System

Honduras, like several other Central American countries, has experienced considerable difficulty in collecting, storing, updating and retrieving reliable information pertaining to agriculture and to welfare of rural Hondurans. Some of the more important problems relating to numerical and documentary information collection efforts in the past include:

1. The collection of contradictory information.
2. The non-existence of adequate channels for disseminating data which has been collected.
3. Inefficient management of data after it has been collected which results in distribution of key data several weeks or months after it is needed for policy and program decisions.

TABLE 1
AUTHORIZED POSITIONS FOR PROFESSIONALS AND TECHNICIANS,
BY UNIT AND BY FUNCTION OR PRINCIPAL LOCATION ^{1/}

	TOTALS	REGIONAL OFFICES	ANNUAL OPERATIONAL PLANNING	MEDIUM TERM PLANNING	SPECIAL STUDIES AND ANALYSES	OTHERS
1. <u>DPA/TS/ CONSUPLANE</u>						
1979	18	0	5	5	6 ^{6/}	2 ^{7/}
1983	41	8	9	9	13	2
Increase	23	8	4	4	7	0
2. <u>TS/ CPA</u>						
1979	14	7	1	-	-	6 ^{11/}
1983	15	7	3	-	-	5
Increase	1	0	2	-	-	-1
3. <u>DPS/ MNR</u> ^{2/}						
1979	48(3)	16(3)	8 ^{3/}	-	20 ^{4/}	4 ^{5/}
1983	64	19	13	-	26	6
Increase	16	3	5	-	6	2
4. <u>INA</u>						
1979	32(7)	9(6)	10	-	8(1)	5
1983	28	9	8	-	7	4
Increase	-4	0	-2	-	-1	-1
5. <u>BNT</u> ^{8/}						
1979	21	0	6	-	6	9
1983	28	5	8	-	6	9
Increase	7	5	2 ^{9/}	-	0	0
6. <u>Other Institutions</u> ^{10/}						
1979	0	-	0	-	-	-
1983	5	-	5	-	-	-
Increase	5	-	5	-	-	-
7. <u>Totals</u>						
1979	133(10)	32 (9)	30	5	40(1)	26
1983	181	48	46	9	52	26
Increase	48	16	16	4	12	0

^{1/} Numbers in parenthesis correspond to vacant positions.

^{2/} Excludes the Department of Information which forms a part of the "Information System" Activity.

^{3/} Departments of Planning, Evaluation and Budget.

^{4/} Departments of Sectoral Analysis and Pre-investment.

^{5/} Departments of Management, Administration and CATYF.

^{6/} Corresponds to the personnel of the Departments of Forestry, Fishing, Water Resources and Environment.

^{7/} Corresponds to the Directors of the DPA and the Department of Agriculture.

^{8/} Technical Division of the Bank.

^{9/} Corresponds to one Head of Regional Planners and one professional in planning and operational budgeting.

^{10/} Includes IHMA, COHBANA, COHDEFOR, IHCAFE and DIFOCOOP. It is not known how many personnel are currently involved in the functions of planning in these institutions. The proposed increase is so that each can establish a liaison officer with COPLAN.

^{11/} Personnel dealing with studies related to operational policy decisions.

TABLE 2
PROGRAMMED TECHNICAL ASSISTANCE
(in person/months)
BY PRINCIPAL FUNCTION AND LOCATION OF EXPERTS^{1/}

	<u>TOTALS</u>	<u>REGIONAL PLANNING</u>	<u>ANNUAL OPERATIONAL PLANNING</u>	<u>MEDIUM TERM PLANNING</u>	<u>SPECIAL STUDIES AND ANALYSIS</u>	<u>OTHERS</u>
1. <u>DPA/TS/ CONSUPLANE</u>	30	-	21 ^{* 4/}	9 ^{4/}	-	-
2. <u>TS/ CPA</u>	118	48 *	64* ^{6/}	-	-	6
3. <u>DPS/ MNR</u>	97	-	-	-	85 ^{2/}	123 [/]
4. <u>INA</u>	35	-	-	-	35 ^{7/}	-
5. <u>BNF</u>	6	-	-	-	6 ^{5/}	-
6. <u>Totals</u>	286	48	85	9	126	18

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- 1/ The asterisk indicates these experts will provide services to all of the institutions in the system and that the use of their time will be programmed by COPLAN.
- 2/ 73 person months correspond to the introduction of the CRIES program.
- 3/ Design of preinvestment studies in fields such as cacao, henequen and sorghum and for the integral development of the zones of Trojes and Patuca.
- 4/ One expert for 18 months who will work in the methodology of sectoral evaluation at both the central and institutional levels, for both annual and medium term programs; and one expert for 12 months in project evaluation.
- 5/ Expert in financial planning.
- 6/ Advisers in the methodology of planning and operational programming, in control and follow-up and in the analysis of outputs.
- 7/ Consists of 6 person months in socio-economic investigations; 4 person months in agricultural credit; 8 person months in agricultural marketing; 6 person months in agro-industry; and 11 person months in agrarian reform (planning and legislation).

4. Inadequate coordination of data gathering and analysis activities which results in the same data being gathered by different institutions at the same time.
5. The non-existence of standard methodologies for collecting and analyzing data which means that data collected by different sources is very often not comparable.
6. The total lack of an information system geared to provide timely agricultural information to farmers, which is particularly harmful in the case of the small farmer.

The Honduran Government has recognized these problems and has begun a series of actions designed to resolve them. In 1974, the Agricultural Documentation and Information Center (CEDIA) was created and located in the Agricultural Operations Directorate of the MNR. CEDIA has subsequently established contact with the Interamerican Agricultural Documentation System (AGRINTER), and the world wide Agricultural Documentation System (AGRIS), thus providing ready access to international agricultural information. In 1976, the MNR and the DGEC agreed to construct an area sample frame which will facilitate future collection of more precise and more reliable agricultural and rural information. In 1978, the MNR, with the help of PIADIC, initiated a series of activities which identified Honduran Information System needs, for the agricultural sector, and began to describe the types of data needed for the information system.

This Activity continues and expands upon the above-mentioned actions with the aim of developing a more comprehensive national agricultural information system. Ideally, as a first step, a law would be passed to establish the legal identity, responsibilities and jurisdiction of the Honduran National Information System (SNIAH), and its relationships with the major agricultural institutions who are contributors to and users of information stored in or generated by SNIAH. Such a law, however, is not a prerequisite for implementing this Activity.

Primary responsibility for carrying out this Activity has been assigned to the MNR and the DGEC. Within the MNR, information system tasks have been given to the Department of Agricultural Statistics, to CEDIA, and to the Consolidation and Dissemination Department (UCD), a unit within the Extension Service. The Department of Agricultural Statistics will be in charge of overall administration of the numerical data bank and will also be responsible for seeing that data stored in the data bank is in its most useful form. To do this, the Department will have to perform different types of preliminary data manipulation and basic analyses. These manipulations and analyses will provide material which will be published by the Department, and which comprises one of the outputs from the Activity. The Department will also be charged with seeing that data stored is available to users of the data bank in a lowest common denominator format to ensure that data in the information system can be used by any agricultural institution.

The numerical data bank will be located in the Department of Agricultural Statistics. It is also planned to put a computer, additional memory, a printer and a terminal in the Department of Agricultural Statistics. Three additional terminals will be located in IHMA, the DGEC and CONSUPLANE, because these entities along with the MNR are the principal contributors to and users of information in the data bank. Other institutions which will be both contributors to and users of information in the data bank include: CPA, INA, COHDEFOR, IHCAFE, COHBANA, BANAFOM and others. CEDIA will expand its role in direct support of the information needs of the National Agricultural Research program, including the newly established small farmer technologies unit. It will act as a critical link in capturing needed research and technical information on a worldwide basis as input to the PNIA and also as the channel in delivering small farmer research and technology development results to MNR extensionists and small farmers.

CEDIA will also continue its work as an agricultural documentation center within the MNR and will organize a national agricultural documentation system which will consist of documentation centers in key agricultural sector institutions, and will also organize regional documentation centers in each of Honduras' seven agricultural regions. Key elements in this system will be: (1) a National Agricultural Bibliography; (2) a National Directory of Sources of Information; and (3) a Catalog of all publications and periodicals in the National Agricultural Documentation System. The existence of a functioning network of agricultural documentation centers throughout the country will reduce losses of documentary information, and will provide a link between each individual documentation center in Honduras and international documentation centers (AGRIS and AGRINTER).

The Consolidation and Dissemination Department (UCD) of the Extension Service will be responsible for seeing that information needed by farmers is disseminated throughout the country on a timely basis. Special emphasis will be placed on dissemination of improved or adapted technologies information generated by the proposed Rural Technologies Program. The UCD will use a variety of media to disseminate this information. Some of the media which will be used include radio broadcasts, newspaper articles and/or advertisements, and agronews letters. To ensure that a maximum number of farmers receive this information, the UCD will coordinate its dissemination program with various agencies and groups such as: local extension offices; campesino federations; patronatos; municipal offices and officials; INA; agricultural credit outlets (particularly local BNF offices); and IHMA grain buying stations.

To fulfill its responsibilities as the chief data collecting agency for the agricultural sector, the DGEC will undergo a reorganization which will result in the creation of the following three new departments: The Area Sample Frame Construction Department (COMMA); the Agricultural/Rural Survey Department (DEAR); and the Sampling Department (DEM). Although construction of the area sampling frame was begun in 1978 under an agreement between the MNR and the DGEC, control over construction of the area frame has remained with the MNR (which has also assumed responsibility for all costs). Now that construction is almost completed for Agricultural Region 1, it has been determined that acceptance of the area frame as an important component in the information system should be institutionalized

by transferring responsibility for construction and implementation of the area frame to the DGEC. To this end, the DGEC has agreed to create the Area Sample Frame Construction Department (COMMA) and the Agricultural/Rural Survey Department (DEAR). The former will, of course, assume responsibility for finishing construction of the area frame while the latter will be involved with implementing the new area frame as soon as it is constructed. The DEAR will also assume responsibility for carrying out all agricultural and/or rural surveys needed in the future. Initially, the DEAR will be using the existing census segment frame 1/ for those regions where the area frame has not been completed. The DEAR is programmed to carry out six surveys per year. Three of these will be primarily crop outlook surveys (March, June and October), although additional questions may be added to the basic outlook questionnaire to obtain socio-economic or other important information. The DEAR will also carry out two objective yield surveys (in July and August) and at least one special survey each year (in December). When the area sample frame is completed all of the above surveys will use samples drawn from the area frame. The DEAR will be responsible for collecting all information needed by the data bank, and will carry out a series of surveys which will provide agricultural, socio-economic, technical, nutritional and other data required by agricultural sector institutions.

The Sampling Department (DEM) will consist of two mathematical statisticians and one secretary. At present, the DGEC has no mathematical statisticians and is consequently dependent upon outside consultants whenever modifications must be made in the current sample frame or when new samples are needed. The lack of in-house personnel to do this work has caused problems in the past and may be partly responsible for some of the problems and inaccuracies which have occurred in past outlook surveys.

The following inputs are programmed for this activity: 37.5 person months of technical assistance; 31 person months of training outside Honduras; 40 additional technical personnel (a 100% increase over 1979 levels); four additional support personnel; 26 vehicles; approximately \$300,000 for a computer, printer, additional memory capacity, four terminals, software, technical assistance, and a maintenance contract to cover labor and material costs for replacement of defective parts; nearly \$18,000 for books, office furniture and equipment; \$72,200 for photocopy and other document reproduction costs; and \$13,340 for 30 storage cabinets for area frame mosaic maps, aerial photographs and enlargements.

The total cost of this activity is \$ 5,295,000 of which A.I.D. will fund \$ 1,046,000 and the GOH will fund \$ 4,249,000.

1/ This frame uses segments from the 1974 Agricultural Census to draw crop forecasting samples.

Output No. 3: Marketing Research and Analysis System

The Honduran Agricultural Marketing Institute (IHMA) was created in August, 1978. The USAID encouraged the establishment of IHMA whose functions are important to the small farmer. Shortly after its creation A.I.D. signed a P.L. 480 Title III Agreement with the GOH to provide support to its basic grains price stabilization activities.

IHMA's authorizing legislation gives it a broad mandate in the field of marketing. It has become obvious that IHMA is handicapped in its efforts to fulfill the responsibilities entrusted to it under Law 592 due to a lack of reliable marketing data and a lack of trained technicians capable of analyzing this data. Consequently, IHMA at present finds itself in the uncomfortable position of being given responsibility to make marketing policies without adequate information regarding either the appropriateness or the probable results of policy alternatives. This Activity will improve the present situation by creating the analytical capability within IHMA which will allow it to establish effective marketing policies, including ones beneficial to the small farmers in furtherance of the GOH sectoral objectives.

The Marketing Research and Analysis Department will have as its main function the preparation, distribution and (when appropriate) publication of a series of analytical and descriptive reports which will help policy makers understand the structure and behavior of Honduran markets and marketing systems. The Department will also be responsible for building and maintaining a series of analytical models which will help Honduran leaders understand the consequences of alternate marketing policies and/or incentives. To do this, the Department will have to work closely with the National Information System to specify the types, frequency and statistical reliability of marketing data collected by the system, and the format in which marketing data is stored. The Department will also coordinate IHMA's data collection activities with data collection activities carried out by other institutions in order to avoid unnecessary duplication of efforts.

The Marketing Research and Analysis Department will need to work closely with the Sectoral Analysis Department of the MNR and with the CPA in developing communication channels between technicians and policymakers to assure that technical results receive due consideration before policy decisions are finalized. These same entities will need to work with policymakers to formulate a master plan for marketing and basic grain pricing policies and strategies, and assist with implementation, monitoring, and updating of the master plan on a continuing basis.

To carry-out these activities the Department will contract seven technicians in 1979 and 1980. A plan has been suggested for sending six of these seven abroad for training at staggered intervals between 1979 and 1984. The proposed training schedule will permit all six technicians to be trained by September of 1984 and at the same time ensures that an adequate

number of technicians will be on hand each year, so that the Department can function while these technicians are in formal training programs overseas. A long-term advisor will be contracted for the period 1980 through 1983 to help organize the Department, and to provide continuous on-the-job training for technicians assigned to the Department. In addition, the Activity calls for 24 months of short-term technical assistance which is designed to provide expertise needed for the solution of specific short-term problems and to provide additional on-the-job training for IHMA's technical staff.

Two four-wheel drive vehicles will be purchased in 1980 to provide the mobility needed by the staff when engaged in case studies and other field work. The 1980 budget also provides about \$12,000 to purchase office furniture and equipment (see p. 6 of the Activity Report for a list of the equipment, etc., which will be purchased).

The total cost of this Activity is \$1,061,000, of which A.I.D. will fund \$543,000 and the GOH \$518,000.

5. Sub-Purpose - System for Delivery of Services and Related Inputs Component.

This Program component seeks to develop mechanisms through which agricultural services, genetic material, improved technology and infrastructure can be provided at low cost to the rural poor in both the reform and non-reform sub-sectors. The principal conclusions of the Assessment bearing on delivery systems can be summarized as follows:

- The focus of attention by all public sector agencies is on a portion of the reformed sector production units, with the remaining asentamientos and small/medium independent traditional farmers receiving little or no services. Coverage of the target group is, consequently, very limited.
- There is a good deal of overlap and duplication even within special types of services provided by sector agencies; e.g., farmer training.
- There is an appreciation of the need for coordinating different types of services in a systems approach, but very little practical application of the concept.
- It is desirable to develop separate, parallel delivery systems for the reformed and non-reform sub-sectors, tailored in each case to their distinct problems and opportunities.

The combination of the poor performance of the delivery systems, the limited experience in Honduras with anything other than conventional methods, and the reluctance of the GOH to seek new systems in view of scarce resources in both the public and private (small farmer) sectors, all militate against sweeping, radical changes in the delivery system modes. Therefore, the underlying strategy for this component of the program is to strengthen critical elements of existing programs (i.e.,

Extension and Credit) while introducing innovation in delivery system models (i.e., Service Cooperatives) on a modest, manageable scale with a view to improving services provided to agrarian reform beneficiaries while expanding services to the heretofore largely neglected small independents. It should be noted that the Service Cooperative instrument is designed not as a parallel service to the extension and credit subsystems, but rather as a device which, inter alia, will permit these two types of services to be delivered more efficiently. The two remaining Activities proposed for financing at this time (Zonal Infrastructure Packages and Small Farmer Consumption Improvement) are not delivery systems per se. Rather they are instruments designed to: (a) link Extension, Credit and other delivery systems to the micro level and regional level planning methodologies being introduced under the Institutional Development System; and (b) to provide the Extension Service with a minimum of new action programs to deliver.

In order to provide a minimum critical mass of all of these innovations in a limited geographical area, so that they can interact with each other, (i.e., to promote a systems approach in depth at the regional level, on an experimental basis), it has been decided to introduce a concentration concept in Program Implementation by establishing certain priorities for 2 of the 7 development regions of the country: East Central and West Central (see attached map). These priorities are as follows:

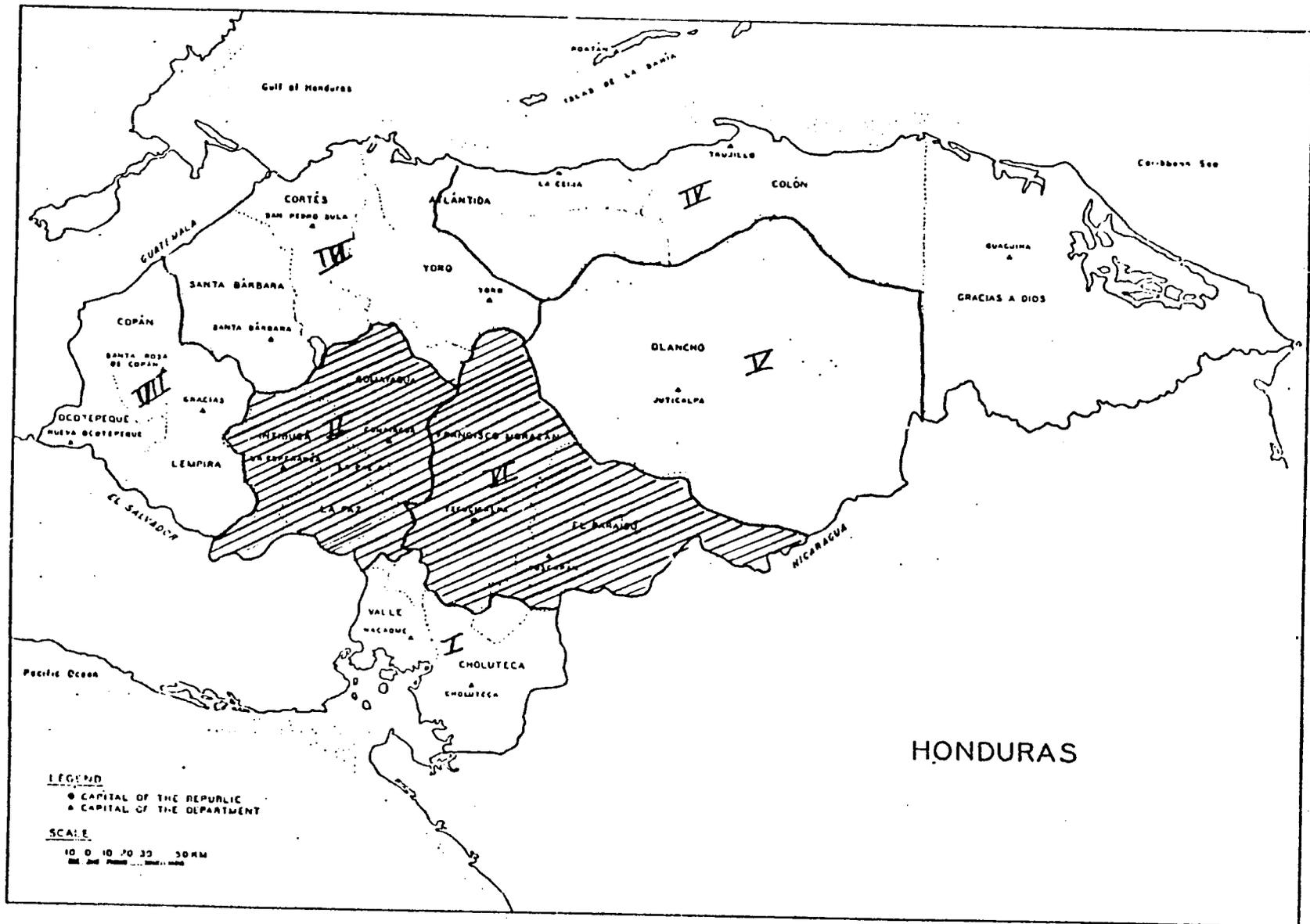
a. Fifty percent of the financial resources programmed for the Zonal Infrastructure Packages, the Sub-Regional Service Cooperatives, and the Small Farmer Consumption Improvement Activities will be used in these two regions. The remaining 50% of the financial resources will be programmed on the bases of need and capacity to implement for the remaining five regions.

b. The resources proposed for Extension Service, National Development Bank Regionalization and strengthening of regional planning units under the Planning Activity will all be programmed on a national basis, i.e., the needs of the seven regions. However, priority in a time sense, e.g., in placing new, additional personnel, will be given to the two regions mentioned above.

The two regions which constitute the Concentration Area contain approximately 30% of the farm units in the country. In terms of farmer size, e.g., proportion of farmers falling into the target group, it is representative of the country as a whole. Average per capita income in 1974 was \$163. As Annex K of the Assessment shows, these two regions have a very low percentage of production marketed; i.e., the farmers are predominately subsistence producers. In general, the West Central Region is representative of the national average, while the East Central Region is considerably below the average. Thus the concentration approach tilts the program in the direction of the neediest of the rural population.

Based on the Assessment findings, the GOH Working Party on the Farmer Training Delivery System has been attempting to design an activity which deals with the following issues:

HONDURAS: AGRICULTURAL REGIONS OF THE MINISTRY OF NATURAL RESOURCES*



* Agricultural Regions II and VI are the Regions of Concentration for the Agriculture Sector II Program.

- The conceptual basis upon which farmer training is to be programmed and undertaken; e.g., as an end in itself or as supportive action to such programs as Extension, Cooperative Development, etc.
- Precise definitions of what kinds of actions fall within or without the scope of the Farmer Training Activity.
- A jurisdictional division of functions among the agencies providing farmer training, including the establishment of clear lines of responsibility for determination of training needs, organization and scheduling of courses, design of course content, execution of the training, follow-up and supervision and evaluation.
- The main lines of the training actions to be undertaken by each implementing agency, pursuant to the above division of functions and responsibilities.
- Reasonably detailed budget projections, supported by descriptions and justifications for the numbers of personnel, amounts and kinds of equipment, construction, etc. reflected in the budgets.
- Coordination arrangements, both for planning and for implementation, including responsibilities and procedures at the national and regional levels.
- Arrangements for support services to the implementing agencies on such matters as methodology, including technical assistance needs and indicating the entity responsible for contracting for same.

This working party has not yet been able to deliver a satisfactory product. On the assumption that the Mission and Honduran Government reach agreement on the nature and scope of this Activity, and considering the importance of this subject matter in terms of the objectives of the Government and the Sector II Program, the Mission will present this Program Activity for AID/W review and approval as an additional element of the Agriculture Sector II Program. (See part I, Section A.3., The Sector Approach, for additional discussion of this Approach.)

Achievement of the Delivery System and Related Inputs sub-purpose component will be verified by the following end-of-program indicators:

- (i) Four reform and four non-reform rural service centers (cooperatives) are operating on a self-sufficient basis.
- (ii) There is improved coordination among Extension and other delivery institutions at the national and regional levels.
- (iii) The Extension Service has improved links with and provides feed-back to the National Research Program and is delivering adapted and improved agronomic and appropriate mechanical technologies to small farmers and reformed groups.
- (iv) A system exists by which zonal infrastructure needs are identified, prioritized and projects implemented within the context of integrated zonal planning.
- (v) The BNF's five regional offices are supervising and advising their respective branch banks and coordinating their activities with other institutions at the regional level.

(vi) The BNF is lending to more small farms by being more innovative in its lending program; e.g., making loans on a solidarity basis, working with cooperatives and other groups, classifying clients for lines of credit, opening small sub-branches, and experimenting with mobile credit units. (vii) Fruit tree seedlings and vegetable seeds have been distributed to at least 24,000 small farmers by the end of the program. (viii) The Extension Service is reorganized internally and providing effective services to at least 26,000 farmers in the reform sector (80%) and 37,000 farmers in the non-reform sector (25%), vs. 66% and 4%, respectively, in 1978. (ix) The Extension Service has reduced its personnel loss rate to less than 10%, vs. 18% in 1978.

The activities, or outputs, outlined below are proposed for achieving this component of the Sector II Program.

Output No. 1: Improvement of the Extension Service

The Extension Service of the MNR, consisting basically of a central office in Tegucigalpa, 7 regional offices and 87 field agencies, is responsible for providing a wide array of crop-related services ranging from general advice to farmers to specific crop promotion projects and including seed distribution. During the latter part of 1978 and the first months of 1979 the Operations Directorate of the MNR undertook an in-depth study of the national Extension Service. The study identified a series of problems and recommended specific actions to resolve them in whole or in part. It also provided a general focus for a "new" Extension Service; i.e., a concentration on the farm family and the production unit as an integral unit, rather than a focus on production per se, and the use of both para-professionals and volunteer, community-based leaders as a device to work with farmers, individually or as groups, to achieve broader coverage among small farmers.

Specifically, this Activity will finance the following improvements in the National Extension Service:

- Establishing a Model Training Agency in each of the seven agricultural regions of the country each with a staff of eight professionals which, in addition to providing services to farmers within its jurisdiction, will also be used for pre-service and in-service training of extensionists in that region. Two additional training Agencies will also be established later in the program's implementation period in zones of high agricultural potential. In addition to an enlarged staff, each of these agencies will be provided additional office and field equipment, two pick-ups, two jeeps and 2 motorcycles, along with demonstration materials, adequate per diem and other required logistical support.
- Thirty-one additional field agencies are slated for improvement in terms of greater logistical and equipment support and a professional staff level of four, vs. one or two currently. The agency will be selected largely on the basis of a given area's agricultural potential and small farmer population.

- The seven regional offices will increase their professional staff from 30 to 49 and be provided with an additional 42 vehicles and other equipment.
- To ensure that the Central Unit of the Extension Service performs its planning, coordinating, supervision and technical support functions in an effective manner, it is necessary to increase this Unit's professional staff from 15 to 30. An additional 20 vehicles will also be purchased, ten in 1980 and ten more over the period 1981-1983, for the Central Unit's staff.
- An extension specialist will be contracted over a two-year period (1980-81) to assist the Director of the Extension Service with the proper implementation of the new program. An additional 10 months of short-term technical assistance will also be financed under this Activity to provide advice and on-the-job training in specific areas of the Extension Service's Program.
- An extensive training program will be realized over the Activity's four year implementation period: 22 technicians will undertake long-term post-graduate training programs in agricultural extension, communications, rural sociology, planning and agricultural economics. An additional 164 technicians will benefit from short-term courses overseas covering specialized subject matter in addition to the study fields mentioned above. In-service training for approximately 450 employees in 94 courses, and pre-service training programs will also be offered.^{1/} (The costs of these training activities are covered in the budgets of the Participant and In-Service Training Activities.)
- 900 Community-based voluntary leaders will be selected and trained to effectively broaden the coverage of extension service and provide a greater degree of permanency in terms of technical advice provided to the target beneficiaries. (See Annex H.3. on Technical Feasibility for more detail on use of volunteers.)
- As incentives to attract and hold more qualified extension agents, hardship post allowances will be provided to approximately 30% of the personnel in the field agencies; merit awards equivalent to one month's salary will be provided to the top 10% of the agencies in terms of performance; and a Civil Service category of Extensionist with its own, suitable salary range will be created. These economic incentives are considered important measures for reducing attrition rates, keeping qualified technicians at the field level for longer periods of time, and improving morale throughout the service.

The Extension Service Reform Program also provides for an organizational and administrative restructuring of the service, under which the so-called "special projects" and their staffs will be organically incorporated into the structure of the Extension Program of the MNR, both at the national and regional levels. Certain of the present special projects personnel will be utilized to strengthen the reorganized central office extension departments, which are scheduled for a major increase from 15

^{1/} Additional training modules for these training programs in the areas of improved technologies for small farmers will be financed by the Rural Technologies and Agriculture Research Projects.

to 30 professionals, and the regional office staffs, each of which is programmed for 8 professionals. By 1983, the Extension Service's technical personnel will have increased to 439, an 80% increase over the 1978 level.

The total cost of this Activity is \$24,536,000, of which A.I.D. will fund \$1,879,000, and the GOH \$22,657,000. The A.I.D. contribution for the expansion and improvement of the Extension Service will be financed entirely with loan funds.

Output No. 2: Cooperatives to Provide Integrated Agricultural Services to Agrarian Reform Groups and Small Independent Farmers.

This is an experimental, pilot Activity designed to create eight sub-regional service cooperatives (four oriented towards group farming units of the Agrarian Reform program and four oriented towards small independent farmers). It is anticipated that a minimum of 2,400 farmers in each category will be benefitted by the fourth year of operation of the cooperatives and that this will result in approximately a 20% increase in production over a 4-5 year period, with the attendant increase in small farmer income and in indirect off-farm income benefits throughout the economy, including substantial additional income gains to farmer participants aside from those resulting from increased production -- e.g., in reduction of input costs and in securing better market prices. The Activity also provides for the development of an institutional capacity in DIFOCOOP (Dirección de Fomento Cooperativo) to both create and supervise the pilot cooperatives and then to replicate the experiment, if results justify this action.

The specific purpose of the Activity will be to introduce and to demonstrate the feasibility of the service cooperative technique to increase small farmer income through:

- (a) providing services to small farmers on a cost efficient basis which will make better use of both Governmental and campesino resources;
- (b) optimizing farm production in relation to market opportunities;
- (c) in the case of cooperatives serving reform groups, improving the administration and economic viability of their group farms; and
- (d) achieving better utilization of the extension and other services of the Government through organized groups with greater capability of receiving and utilizing new agricultural technology developed by the National Research Program.

Criteria for selection of sub-regions are established, e.g., for cooperatives oriented toward independent farmers an area of attraction with a minimum of 5,000 small farmers; for cooperatives oriented towards reform groups, a minimum of 15 groups, with at least 600 members and 1,000 hectares of tillable land.

There will be a separate feasibility study made for each potential cooperative prior to its establishment. In this context, the potential membership, DIFOCOOP and the CAR will reach agreement on the production (or production improvement) projects in which they wish to engage initially. With this as a starting point, the role and requirements of the cooperative will be defined with regard to supply of inputs, agricultural credit, storage facilities, marketing, transport and mechanization, agricultural training, technical assistance and cooperative education, farm planning, accounting, savings and loan schemes. With regard to these potential functions, somewhat different techniques are envisaged for the 2 types of beneficiaries.

Based upon the feasibility studies, which will also be subject to approval by the CPA and the USAID, it is proposed to provide each approved cooperative with an initial grant of L 300,000 (L 2 = \$1) towards its physical capital and working capital requirements, plus an operating subsidy for 5 years, not to exceed L 200,000. Thus the total subsidy proposed per coop is L 500,000 or L 4,000,000 for the 8 pilot coops proposed. It is anticipated that each of the cooperatives will have a core staff including a manager, agronomist, one or two agricultural technicians, and an accountant.

As concerns the establishment of an institutional capacity in DIFOCOOP, it is proposed to create a new unit within that Agency. The unit, consisting of professionals experienced in agricultural economics, cooperativism, farm planning, and marketing, will be responsible for the over-all administration of this Activity, including the preparation of feasibility studies for each proposed cooperative. Outside technical assistance will be provided to support the unit as follows: (i) One full-time advisor with broad experience in agricultural cooperative organization and management, preferably in developing countries. (ii) Shorter-term advisors for such periods as may be needed to deal with specific problems such as the design of credit programs and the development and organization of marketing projects. Moreover, the unit will also have a special advisory committee consisting of one representative each from INA, BNF, CPA, and the MNR (Extension Service). The purpose of this committee would be (i) to coordinate the service of their organizations with the Project; (ii) to provide advice to DIFOCOOP in the organization and development of the cooperatives; and (iii) to review the progress indicators set forth in the Evaluation Plan (p. 38 of the Activity Report) for each service cooperative.

In addition to funding the salaries of professionals and support staff assigned to the DIFOCOOP Unit, this Activity will also finance the initial capital and operating subsidy requirements for each of the cooperatives and technical assistance as outlined above; per diem and other travel costs, office supplies, materials, and other miscellaneous costs, machinery and equipment, including 5 vehicles for the DIFOCOOP Administrative Unit.

The total cost of this program Activity is \$3,700,000 of which A.I.D. will provide \$2,448,000 and the GOH \$1,252,000. In view of the experimental

nature of the Activity and the relatively high risk factor it entails, it is proposed that almost the entire A.I.D. contribution be grant-financed -- i.e., all foreign exchange costs, which include technical assistance, machinery and equipment and vehicles, all likely to be purchased in the U. S.

Output No. 3: Regionalization and Strengthening of the Field Operations of the National Development Bank.

The National Development Bank (BNF) was created in 1950 and charged with two broad responsibilities: 1) to serve as an agricultural bank, and 2) to serve as a development bank and to carry out certain development functions in the agricultural sector. For many years, the BNF was the only GOH agency charged with rural development and consequently was assigned several socio-economic functions, in addition to those of a strictly banking nature. By 1976 the Bank's disparate functions included: 1) agriculture credit and general banking operations; 2) various programs for developing agricultural production and livestock; 3) a basic grain price stabilization program involving the purchase, processing, storage and marketing of both locally produced and imported grains; 4) the procurement and resale at reasonable prices of materials and implements needed by farmers and cattle breeders; 5) the financing of an organization (BANASUPRO) operating an extensive network of stores selling consumer goods at anti-inflation prices; 6) the development of industrial projects; and 7) the acquisition and administration of equity investments in various enterprises, including some agro-industries.

The Credit and Operations Department of the BNF carries out the agricultural credit program for the public sector. The private banking system meets much of the credit needs of the larger farmers. The BNF provides credit to small, medium and large farmers and to agrarian reform farmers, but is required to focus on the credit needs of the reform sector and small farmers generally. The Bank operates 28 agencies widely distributed around the country to provide convenient access to as much of its clientele as possible. As indicated in the Assessment, the Bank continues to play a central role in providing credit to the country's poor farmer class, reaching about 25% of this group annually. Over the past ten years or so, A.I.D. has channeled capital through the Bank for the purposes of providing credit to small farmers, as individuals or groups, and supporting the grain prices stabilization efforts. In addition to capitalizing the BNF, A.I.D. has funded technical analyses of the Bank with a view to improving operational efficiency and strengthening its outreach to small farmers. This effort culminated in a proposal (draft law) to restructure the Bank, giving major emphasis to the provision of agricultural credit, particularly to small and medium farmers, and divesting itself, over time, of most of the remaining non-credit functions. Furthermore, A.I.D. is presently financing a comprehensive technical assistance effort aimed at establishing greater efficiencies and effectiveness in the Bank's operations and procedures.

Within the context of the foregoing evolutionary development of the Bank,

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this Activity of the Sector Program will support the decentralization objectives already established by the Bank, thereby providing complementarity with decentralized structures already established by other public agriculture institutions, principally the MNR and INA. This Activity has three specific output targets:

(a) To create five (5) regional offices. Each will have an Agency Supervision Unit and a Development and Promotion Unit. The Supervision Units will provide administrative and technical guidance to the local agencies to improve portfolios. The Development and Promotion Unit will concentrate on the promotional, budgetary and cash flow implications of the region's existing and planned portfolio growth, in accordance with priorities established for the region's overall agricultural development. A total of 24 new positions; five regional directors, seven agency supervisors, five agricultural economists and seven secretaries will be created to staff the Bank's regional offices. Also, 10 vehicles will be purchased and other support costs incurred.

(b) A second element within this Activity will strengthen the eight agencies which are located in the two concentration regions of the Agriculture Sector II Program and which presently account for approximately 30% of the Bank's credit operations. This will call for increasing the number of credit specialists (peritos valuadores) in eight agencies by 16 over the present level of 32, providing them with vehicles and replacing twenty-five (25) existing vehicles.

(c) The third component of this Activity will strengthen five (5) other BNF agencies in non-Program concentration areas where credit services are supporting activities of special interest to the Government, in particular investment credit needed to finance farm plans developed under the Farm Planning element and improved farm implements developed by the R & D element of the current Small Farm Technologies Project and the proposed Rural Technologies Project. Assistance will consist of vehicle replacement (44 units) and procurement of office equipment.

The basic purpose of this Activity, especially items "a" and "b" above, is to permit the Bank to introduce measures which will both reduce its level of delinquent debt (currently at 35% of the outstanding portfolio) and permit it to be more agile and innovative in providing credit to small farmers; e.g., making loans on a solidarity basis, working through and with cooperatives and other groups, classifying clients for lines of credit, opening small sub-agencies and/or experimenting with mobile units, and developing credit education programs at the grass roots level. It is expected that authorized loans in the two concentration regions will increase substantially to small farmers operating individual or group farmsteads. Since this development is in part a function of capital proceeds available to the BNF, the Mission intends to closely monitor the Bank's capital resources to ensure GOH compliance with covenants in previous Loan Agreements (e.g., 522-T-032) to maintain a certain level of BNF capital available for production and investment credits to target group farms.

The total cost of this Activity is \$11,605,000 of which A.I.D. will fund \$981,000 and the GOH \$10,624,000.

Output No. 4: Zonal Infrastructure Packages

The Assessment found that lack of rural infrastructure such as access roads, local storage, and irrigation constituted a fundamental, serious constraint to target group development. It also found that, to the extent such investments were undertaken, they were not well coordinated with technical assistance, availability of inputs, credit, improved farm technologies and other production factors. Moreover, the Assessment determined that infrastructure planning was undertaken at the national level, rather than at the regional or sub-regional level with the participation of potential beneficiaries. Examining these factors and considering the Government's expressed desire to improve regional planning, the concept of developing integrated agricultural infrastructure investment packages on a zonal basis took form during the Program's intensive review.

This Activity is a pilot effort designed to introduce an organized methodology and institutionalization of spatial planning at a micro level and, also, to provide the resources for constructing integrated packages of small farmer infrastructure at selected sites as an element in the spatial planning. This Activity is closely related to, and in many ways, dependent upon speedy and successful implementation of Agricultural Sector II and other A.I.D. assisted activities; e.g., the regional component of the Planning Activity and the strengthening of the Extension Service and regional/agency offices of the National Development Bank. It is assumed that all GOH personnel and technical assistance costs required will be covered under other activities of the Program. Thus, covered here are only the direct costs associated with the infrastructure packages. A total of approximately sixteen (16) packages are programmed (twelve that include small irrigation development, four that do not), including financing for engineering, environmental and economic feasibility studies.

Guidelines have been established for selecting potential zones as candidates for assistance under this Activity. These eligibility criteria include zones with a minimum of 200 families; a minimum potential of 500 has. (including 200 has. of level ground where crop cultivation is contemplated) for intensive agriculture, with special emphasis on irrigation; an access road requirement not exceeding 25 kms. and connecting to other roadways permitting access to markets; demonstrated interest on behalf of the beneficiary families to provide hand labor and local materials to the construction effort and a willingness to alter their production technology to effect higher production/productivity levels in accordance with improved technologies developed by the National Research Program, with assistance provided by the Extension Service. A methodology for establishing priorities among the zones, involving weighted averages for agricultural development potential, population density, income levels and socio-political factors, has also been established to ensure appropriate benefit incidence as a result of the selection process. Three types of infrastructure, which must also meet the test of communal benefit, are envisaged for each package: the construction or improvement of feeder roads, with a total maximum length of 25 kms. or less; and on-farm land improvements, e.g., drainage, irriga-

tion, terracing, reforestation, small dams for controlling erosion and storing water and grain storage, many of which are as will be developed by the PNIA and the Rural Technologies Program. In addition, off-farm storage and marketing facilities would be included under this activity.

Following the identification and preliminary evaluation of potential priority zones, pre-feasibility zonal development plans will be prepared under the direct guidance and supervision of the CAR (Comité Agrícola Regional). These will include: a production plan; provision for timely services and other inputs to realize the targets established in the production plan; a program for organizing the beneficiaries, as necessary, to facilitate the zonal development package; an assessment of the environmental effects of the proposed plan; and a reasonably detailed and costed plan for constructing the various infrastructure elements in support of the agriculture production plan for the zone.

Upon termination of pre-feasibility studies, the CARs will send to the CPA their candidates for financing, together with a report indicating the basis upon which the selection was made. Approval by the CPA, which will be subject to concurrence by USAID, will provide authorization to the Ministry of Natural Resources to engage in financing detailed feasibility and engineering studies and to proceed with construction expenditure unless the detailed studies result in a higher cost estimate than the amount originally approved, in which case the proposal must return to the CPA. Guidelines to the CARs will provide for a maximum of \$375,000 per package, unless there is special justification.

Since it will be impossible to determine in advance which agency (e.g., the Ministry of Public Works, the Water Resource Department of MNR, a Municipality, etc.) will be given responsibility and provided with funding for constructing a specific element of a given package, it has been determined that a commingled fund should be established in the Central Bank, with contributions made on a pari passu basis of 40% A.I.D. to 60% GOH.

A small initial contribution will be made and replenishment requests will be supported by detailed documentation on actual expenditure. The fund will be managed by the Minister of Natural Resources, with vouchers being processed through the Department of Public Credit of the Ministry of Finance, and allocation made from it to executing agencies or firms.

The total cost of this Activity is \$5,849,000, of which A.I.D. will finance \$2,356,000 and the GOH \$3,493,000. The entire A.I.D. contribution is proposed for loan financing.

Output No. 5: Small Farmer Consumption Improvement

As part of the Sector Assessment, an evaluation was undertaken to assess the nutritional status of Hondurans and the nutritional impact of current and proposed agricultural policies and programs, particularly for the nutritionally at risk population, which comprises more than 60 percent of all urban families and more than 90 percent of all rural families. 1/
1/ Agriculture Sector Assessment for Honduras, Annex Q, p.1.

The nutritional assessment found that Honduras faces serious nutritional problems; that the main causal factor is low income; that inflation is worsening the nutritional prospects for both urban and rural poor; that the rural population at risk nutritionally corresponds quite precisely to the target groups identified for A.I.D. assistance; and that both GOH policies and A.I.D. program strategies, if successfully implemented, will have a significant and beneficial effect on the nutritional status of the population. While other elements of the Sector II Program will impact both directly and indirectly on the nutritional status of the rural target groups, this Activity merits financial support under the Program as well since it will help to ensure a continuous, readily available source of fruits, vegetables and other foodstuffs for a significant portion of rural poor families, including many new beneficiaries rarely, if ever, currently reached by public agricultural services.

This Activity is intimately related to the Extension Service Activity in that: (a) the latter will be the implementing agent; and (b) it will provide a focus for certain aspects of the remodeled Extension Service. Specifically, this Activity has as its main objectives improving the diet and real income of 24,000 small farm families; and distributing improved genetic material throughout the country. Approximately 360,000 units of germ plasm, including 200-300,000 seedlings will be distributed. Four thousand families, of which 80% will be from agrarian reform group farms, will be dealt with on an "intensive" basis; i.e., with a considerable amount of technical assistance and follow-up. The remaining 20,000 beneficiaries, of which it is estimated that 70% will be small, independent farmers, will be dealt with on an "extensive" basis; i.e., with minimal technical advice and follow-up. Most of the material, except vegetable seeds, is available in-country and will be propagated here -- the bulk in Government nurseries and a small part on contract with private growers.

A small central unit within the MNR composed of two technicians will supervise and coordinate the Activity, using the Regional Extension Service personnel for implementation. The Activity's Coordinator will make the necessary arrangements for supply, transport and distribution of seeds and fruit tree seedlings, ensuring that the individual packages are prepared in accordance with the ecology and food preferences of the specific zones targeted for assistance under the Program. Each package, consisting of from 10-21 varieties of seeds and seedlings, will be sold for \$5.00 (at a 50% subsidy). It is expected that campesino women will manage the planting, cultivation and harvesting and, consequently, will be the focus of technical assistance and promotional efforts under this Program Activity.

In the interest of administrative simplification, payment for packages--including the down payment--will be taken by Municipal Treasurers. These officials will also collect the balance due when packages are delivered to beneficiaries. The proceeds of the sales will remain in the Municipalities for their use. Reports on collections and disposition of the funds will be required through the Ministry of Government. A covenant is proposed to ensure the continuation of the distribution activity by the GOH upon completion of this Program.

Prior to initiating this Activity, the National Coordinator and Regional Supervisor, in consultation with the MNR, INA, the Ministry of Government, Cooperative Federations and other participating public and private sector entities, will develop a detailed implementation plan to help ensure the timely, progressive development of the Activity and achieve the established targets.

This Activity will finance the salaries of two full-time technicians and support staff responsible for overall supervision, including in-country travel expenses, office equipment and supplies, and one pick-up truck. Included also is financing for four (4) months of technical assistance to be provided by a horticulturist to assist in the initial planning phase.

The total cost of this Activity is \$448,000, of which A.I.D. will grant finance \$367,000 and the GOH will contribute \$81,000. A.I.D. has encouraged the introduction of this Activity and, in view of its heavy subsidy aspect, it is proposed to grant finance the A.I.D. contribution to it.

PART II PROJECT ANALYSES - SUMMARY

A. Economic Analysis

An initial review of the twelve activities included in Agricultural Sector Program II revealed that in five cases the type of activity being considered and the type of data that was available were such that an individual economic analysis could be made.

These five activities are as follows:

- CURLA
- Zonal Infrastructure Packages
- Service Cooperatives
- Small Farmer Consumption Improvement
- Extension Service

This same approach could not, however, be used for the other seven activities because the benefits from these seven can not be quantified in objectively, verifiable forms. It was therefore decided that these seven should be combined and evaluated as an institutional development package of activities. Included in this package are six activities which are designed to improve the planning capability, personnel skills and coordination among agricultural sector institutions, and a seventh activity concerned with overall Program coordination. These seven activities represent important investments in organizational and human resource development which will generate a sector-wide increase in efficiency, and improved services for Honduran marginal farmers. The seven activities which have been combined into the institutional development economic analysis are as follows:

- Participant Training
- In-Service Training
- Planning
- The Information System
- The Marketing Analysis System
- National Development Bank Regionalization
- Coordination Unit

Analyses

The type of analysis used for each activity was determined by availability of data and the type of activity being analyzed. In cases where quantifiable benefits and costs could be assigned, the analytical methods used were: Benefit/Cost Analysis; Computation of the Internal Rate of Return; or Cost Effectiveness Analysis. Other types of analyses were employed when quantitative estimates of costs and benefits could not be accurately estimated or were not applicable. Table A presents information on the types of analysis used for each activity, the computed values of important coefficients, and a short summary of results. Readers desiring more information for any specific activity or for all

activities are referred to Annex H.1. which contains additional information regarding data, background information, analytical methods, and assumptions used for each analysis.

In summary: The Program is required in order to improve services delivered to farmers with low-income and to increase the numbers of farmers being benefitted by public agricultural sector programs. Therefore it meets, both in the short and long-term, AID's mandate to benefit the rural poor majority.

C. Technical Feasibility

Given the institutional development nature of many of the constituent activities of the Agricultural Sector II Program, "technical" analysis in some cases is not appropriate. In some instances topics were dealt with is the technical analysis which while not strictly technical in nature, seemed to require further clarification and amplification beyond what is presented in the Project Description or in other analytical sections of this Paper.

In general, there are no severely constraining technical issues which will seriously impede or jeopardize the execution of the activities proposed in the Agriculture Sector Program II.

In the Human Resource Development System, the level, amount and mix of training proposed is consistent with the country's needs for agricultural skills. The Participant Training Activity is in some respects a continuation of an element began under Agriculture Sector I. This program adds an institutional mechanism to improve on the predecessor by more systematically tying the training to sector manpower needs. The physical plant improvement program for CURLA has been found to be sound from an engineering standpoint, achievable and reasonable in terms of costs and cost estimates.

The success of the activities proposed under the Institutional Development System, i.e., Planning, Information, and Marketing Analysis, is clearly more a function of institutional/organizational capabilities rather than technical issues. The information gathering methods and approaches, e.g., CRIES, area frame sample, have been tried and found to be valuable in other countries. The state of readiness within the Honduran agricultural sector institutions for applying and managing these tools is sufficient to allow them to be adequately developed and used. Much of the institutional system's improvement depends on the availability of additional personnel. While not feasible immediately, past experience and current knowledge of manpower expected to be available point to no important problems in obtaining appropriate personnel over the period contemplated.

The activities proposed within the System for Delivery of Services and Related Inputs in general represent an effort to back up and strengthen a number of basic program or program approaches which already are underway (i.e., Extension Service, National Development Bank Regionalization) or which have been initiated in part or for which some previous experience exists (i.e., Service Cooperatives and Zonal Infrastructure Packages). The methodologies and agricultural practices to be used, the construction techniques and costs, the logistical and vehicle requirements, and the management capabilities have all been reviewed and found satisfactory and adequate for accomplishing the objectives of the various subsystem activities.

A more complete discussion of the points summarized in the Technical Feasibility Section is contained in Annex H.3.

D. Administrative Feasibility

In a sense, Administrative Feasibility is one of the main purposes of this Program. The Second Agricultural Sector Program seeks to make feasible the administration of service delivery and outreach systems by continuing to strengthen a wide number of Honduran institutions, building in many instances on the results of prior A.I.D.-assisted programs in the sector. At the same time, additional organizations will be participating in this Sector Program together with a few new administrative or advisory units in existing institutions created within the context of this Program.

Administrative considerations are addressed here both in terms of overall Program administration and in terms of individual executing agencies. Arrangements for Program administration have been made in the form of an Administration and Coordination Office newly created under the First Agriculture Sector Program and located in the MNR, which will organize and manage implementation actions as well as Program evaluation across the sector. Administrative procurement and budgeting actions will be carried out on a periodic, standardized basis to allow maximum control, planning time and uniformity in the course of Program implementation, not only for the Second Sector Program but all other A.I.D.-supported projects in the sector, and possibly, in the future, other international donor-assisted projects.

In conjunction with aid to the Coordination Office, technical assistance under this Program, and to a certain extent under the First Sector Program, is being rendered to the Proveeduría General, the Honduran General Procurement Office, to improve its purchasing capabilities vis-a-vis international procurement in general and Sector Program II in particular. Improved procurement procedures and capabilities, together with coordinated administrative procedures will serve to enhance the Government's ability to administer this Program and other programs of a similar nature on a more effective basis.

While efforts are being made to assist units which are responsible for coordination or implementation of the Program, the bulk of assistance will be going to help individual institutions both centrally and in the field in planning, operations, budgeting and programming areas within the institution. Assistance here should improve the administrative situation in these institutions, thus enabling them to plan and manage their services more productively.

In summary then, these institutions, old and new, together with planning and coordination mechanisms being established and the human and financial resources being marshalled under this Program, constitute an administratively feasible and viable mechanism capable of assuring effective and efficient delivery of services and credit to the target population in Honduras.

E. Other Donors

Activity in this area can be divided into two areas in terms of time: external assistance to the Sector other than provided by A.I.D. to the time of the Agriculture Sector Assessment (in this case, the analysis of external assistance up to January 1, 1978); and assistance planned or provided to the Sector thereafter.

With respect to other donor activity covered in the Assessment, A.I.D.'s conclusions were that in the main, other donor assistance was designed for forestry projects or agrarian reform-created group farms, with respectable amounts programmed for agricultural credit and technical assistance for specific crop, livestock and fisheries projects. On the other hand, the area of activity with the least amount of external assistance in relation to potential need was agricultural education at the university level. In sum then, A.I.D. found that its program strategy was not in conflict with nor duplicative of the efforts being made by other international donors.

Since the time of the Agricultural Assessment, three additional projects financed by international donors have come to the attention of A.I.D./Honduras: 1) an agricultural credit loan from the World Bank (IBRD) through the Honduran Central Bank to the BNF and commercial bankers for \$15.0 million; 2) an agricultural credit loan from the Interamerican Development Bank (IDB) to the BNF for \$10.0 million, and 3) an integrated regional development project in western Honduras sponsored by the OAS and the International Agricultural Development Fund (FIDA) for approximately \$20.0 million.

The IBRD Loan is the second in a series of credit loans to the BNF and is designed for use on agrarian reform settlements and in commercial farming. This project is still in the preparation stages so the breakdown by type of credit is unavailable at this time. The project is scheduled for approval in late 1979 with implementation to begin in 1980. Given the fact that agricultural production credit provided to agrarian reform groups under various A.I.D. projects will terminate in late 1980, and the fact that assistance provided under the Second Sector Program should begin to have full impact on quality of service delivery and stimulate demand, credit under the IDB program should arrive at just about the right time.

The IDB Project is the fourth in a series of loans to the BNF and is to be used primarily for small individual farmers and cattlemen. As with the IBRD Loan, this project is still in the design stages, thus further details are unavailable to us at this time. Assuming no undue delays in initiation of this Project, Loan disbursements should begin at about the same time as those of the IBRD Loan. This Project is obviously a complement to the intent of the IBRD Loan, in that it will provide needed capital assistance to the non-reform sector in conjunction with that provided to the reform sector under the IBRD Loan.

The Regional Development Project, formally known as the Western Region

Development Project (PRODERO), is a joint effort between the GOH, the OAS and FIDA, which is an assistance arm of the United Nations designed to work with developing nations in increasing food production. Essentially a two-step project, the planning and design stage is being carried out between the OAS and CONSUPLANE and will lead to a series of projects in crop production, institutional support in the zone, infrastructure, health and education. The bulk of PRODERO money will be provided by PRODERO for the implementation of the projects identified in the planning stage. Implementation of the various projects should begin sometime in the middle of 1981. The timing of the project and its specific, regional aspects (the western frontier area only) are such that the project should not conflict with or in any important way duplicate any of the activities contemplated under the Second Sector Program, since the Sector Program will be concentrated in basically separate geographic areas and will precede the PRODERO effort. Indeed, PRODERO may well benefit from experiences gained under the Sector Program, and in that sense, it represents a follow-on, financially complementary effort.

In summary, a review of other donor projects, both on-going and contemplated, indicates that the Government of Honduras is working to use A.I.D. funds and other international donor funds in such a way as to make maximum, effective use of international assistance with a minimum of duplication. The Mission sees no conflict or undue duplication between this Program and those of other international donors.

PART III. IMPLEMENTATION ARRANGEMENTS

A. Financial Plan

1. Analysis of Program Costs and Basic Concepts Used

Annex H-5 contains 6 Tables which provide detail on the following summaries:

a. Total Cost Concept

The Program cost, to be reflected in the Project Agreement, is the total value of the GOH and the AID contributions, i.e., U.S. \$98,859,000. This amount was arrived at by adding the total budgets of each Department or equivalent unit of the Implementing Agencies involved in execution of the various Activities programmed, with a few exceptions where only the direct costs of the Activity were included, i.e., Zonal Infrastructure Packages; Small Farmer Consumption Improvement, where the administrative and activity direction costs were covered under other Activities; and the Participant Training Activity, which is administered outside of the normal Government organizational structure. This is believed appropriate for a Sector Program as defined in Section IA 2, above. Total costs of the full Program, including the three systems, the 11 Activities of which those systems consist, and the costs of the Program Administration and Coordination Unit are as follows:

Costs by System and Activity

	<u>Total</u> <u>(Thousands of US\$)</u>	<u>Percentage of</u> <u>Total</u>
<u>HUMAN RESOURCES SYSTEM</u>		
1. Participant Training	9,634	9.8
2. In-Service Training	3,483	3.5
3. CURLA	<u>15,728</u>	<u>15.9</u>
Sub-Total	28,845	29.2
<u>INSTITUTIONAL DEVELOPMENT SYSTEM</u>		
1. Planning	16,187	16.4
2. Information System	5,295	5.4
3. Marketing Analysis System	<u>1,061</u>	<u>1.0</u>
Sub-Total	22,543	22.8
<u>SYSTEM FOR DELIVERY OF SERVICES AND RELATED INPUTS</u>		
1. Extension Service	24,536	24.8
2. Service Cooperatives	3,700	3.7

Costs by System and Activity (continued)

	<u>Total (Thousands of US\$)</u>	<u>Percentage of Total</u>
3. National Development Bank Regionalization	11,605	11.7
4. Zonal Infrastructure Packages	5,849	5.9
5. Small Farmer Consumption Improvement	448	0.4
Sub-Total	<u>46,138</u>	<u>46.7</u>
Coordination Unit	1,333	1.3
TOTAL	<u>98,859</u>	<u>100.0</u>

Since the A.I.D. contribution to the Program is \$25 million, on a total cost basis, the ratio of U.S. to Honduran financing is 25.3% to 74.7% when the entire departments are included.

b. Local and Foreign Exchange Costs

The local and foreign exchange components of the Program break down as follows:

	<u>Value (in thousands of US\$)</u>	<u>Percentage</u>
Local Costs	82,737	83.7
Foreign Exchange Costs	<u>16,122</u>	<u>16.3</u>
Totals	<u>98,859</u>	<u>100.0</u>

The local costs are composed largely of personnel costs, as can be seen from the following table. Over 60% of the foreign exchange costs are for technical assistance and participant training. The equipment component, other than vehicles, is almost entirely laboratory equipment for CURLA.

	<u>Value (in thousands of US\$)</u>	<u>Percentage</u>
<u>Local Costs</u>		
Technical and Professional Personnel	34,669	41.9
Support Personnel	5,834	7.1
Technical Assistance and Special Studies	3,178	3.8
Travel and Per Diem	5,410	6.5
Supplies and Other Consumables	12,820	15.5
Machinery and Equipment	1,385	1.7
Construction	11,920	14.4
Living Allowances for Scholarship Recipients	2,319	2.8

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	<u>Value</u> (in thousands of US\$)	<u>Percentage</u>
Other	5,202	6.3
Total	<u>82,737</u>	<u>100.0</u>
<u>Foreign Exchange Costs</u>		
Technical Assistance	3,721	23.1
Scholarships	6,169	38.2
Machinery and Equipment, excluding vehicles	2,415	15.0
Vehicles	3,334	20.7
Other	483	3.0
Total	<u>16,122</u>	<u>100.0</u>

c. Incremental Cost Concept

Since total Departmental costs 1/ were used in arriving at the value of the Program, it is desirable to determine how much of that total should be attributed to the continuation of on-going activities and how much to new activities and their expansion of current programs. For this purpose: (i) All foreign exchange costs were considered to be attributable to expansion of the Activity since these are nearly totally non-recurrent and (ii) In the case of local costs, 1979 was used as a base year. The difference between the 1979 cost (upward adjusted annually for contingencies and inflation 2/) and the total cost in each successive year is defined as the cost of expansion of the Activity. 3/ Thus, the total local costs of US\$82,737,000 are equivalent to \$49,848,000 of continuing costs and \$32,889,000 for initiation of new Activities and/or expansion of Activities. Of the \$98,859,000 total program cost, the break is as follows:

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- 1/ e.g., Total costs for the Department of Agricultural Planning of the Economic Planning Council were included, not costs of any other CONSUPLANE office.
 - 2/ In preparing the budget of each Activity an annual inflation and contingency factor of 10% over the figure for the previous year was built into the local cost component, except for the construction component of CURLA, where a 12% factor was applied.
 - 3/ For some Activities (Service Cooperatives, the Technical Secretariat of the Participant/In-Service Training Committee, and Participant Training) and also for the Coordinating Unit, small expenditures (US\$ 1,367,000 or equivalent) are programmed for CY 1984. All other Activities are programmed for expenditure during the 4-year period CY 1980-83. For the purpose of calculating incremental costs, the 1984 expenditure was included in the programmed expenditure for 1983.

	<u>Value</u> <u>(in thousands of US\$)</u>	<u>Percentage</u>
<u>Program Expansion</u>		
Local Costs	32,889	33.3
Foreign Exchange Costs	<u>16,122</u>	<u>16.3</u>
	49,011	49.6
<u>Continuing Costs</u> (all local currency)	<u>49,848</u>	<u>50.4</u>
Total	98,859	100.0

If one calculates the relationship of the A.I.D. financial contributions only to the incremental or program expansion costs, the ratio of U.S. to Honduran financing is 51% to 49%. (See Annex H-6, Table 3 for further details.)

d. Operational vs. Investment Costs

Another way to look at the Program is in terms of the inputs related to investment vs. the inputs related to operational costs. A very narrow definition of investment was used, i.e., only construction and machinery and equipment procurement are considered as investment. All other costs, including participant training programs and technical assistance are designated as operational costs. Using this definition, 81% of the total program cost is for operations and 19% for capital investment. The following table shows the distribution for each of the three systems.

	(in thousands of US\$)				
	Total Cost	Operational Costs Value	Investment Costs %	Investment Costs Value	Operational Costs %
Human Resources System	28,845	21,042	26.3	7,803	41.4
Institutional Development System	22,543	21,605	27.0	938	5.0
Delivery of Services System and Related Inputs	46,138	36,036	45.0	10,102	53.6
Coordination Unit	<u>1,333</u>	<u>1,333</u>	<u>1.7</u>	<u>--</u>	<u>--</u>
Totals	<u>98,859</u>	<u>80,016</u>	<u>100.0</u>	<u>18,843</u>	<u>100.0</u>

If technical assistance and participant training are considered as investment, the ratio changes considerably, to 35% for investment and 65% for operations.

e. A.I.D. and GOH Contributions

The following tables show the relative shares of financing the program both as regards total program costs and incremental program costs.

Total Program Costs
(000 dollars)

	<u>Total Cost</u>	<u>GOH Financing</u>	<u>AID Financing</u>	<u>AID as % of Total</u>
<u>Human Resources System</u>				
Participant Training	9,634	3,465	6,169	64
In-Service Training	3,483	2,852	631	18
CURLA	<u>15,728</u>	<u>11,317</u>	<u>4,411</u>	<u>28</u>
Sub-Totals	28,845	17,634	11,211	39
<u>Institutional Development System</u>				
Planning	16,187	12,684	3,503	22
Information System	5,295	4,249	1,046	20
Marketing System	<u>1,061</u>	<u>518</u>	<u>543</u>	<u>52</u>
Sub-Totals	22,543	17,451	5,092	23
<u>Delivery Systems and Related Inputs</u>				
Extension Service	24,536	22,657 ^{1/}	1,879	8
Service Cooperatives	3,700	1,252	2,448	66
National Development Bank Regionalization	11,605	10,624	981	8
Zonal Infrastructure Packages	5,849	3,493	2,356	40
Small Farmer Consumption Improvement	<u>44^r</u>	<u>81</u>	<u>367</u>	<u>82</u>
Sub-Totals	46,138	38,107	8,031	17
Coordination Unit	1,333	667	666	50
GRAND TOTAL	<u>98,859</u>	<u>73,859</u>	<u>25,000</u>	<u>25</u>

^{1/} Includes \$1,493,000 of IDB financial assistance.

Incremental Costs

	Total Cost	GOH Financing	AID Financing	AID as % of Total
<u>Human Resources System</u>				
Participant Training	9,639	3,470	6,169	64
In-Service Training	1,419	778	631	48
CURLA	<u>9,399</u>	<u>4,988</u>	<u>4,411</u>	<u>47</u>
Sub-Totals	20,447	9,236	11,211	55
<u>Institutional Development System</u>				
Planning	4,612	1,109	3,503	76
Information System	3,609	2,653	1,046	29
Marketing System	<u>949</u>	<u>406</u>	<u>543</u>	<u>57</u>
Sub-Totals	9,170	4,078	5,092	56
<u>Delivery Systems and Related Inputs</u>				
Extension Service	6,814	4,935	1,879	28
Service Cooperatives	3,700	1,252	2,448	66
National Development Bank Regionalization	1,983	1,002	981	50
Zonal Infrastructure Packages	5,848	3,492	2,356	40
Small Farmer Consumption Improvement	<u>448</u>	<u>81</u>	<u>367</u>	<u>82</u>
Sub-Totals	18,793	10,762	8,031	43
Coordination Unit ^{1/}	601	(65)	666	111
GRAND TOTAL	49,011	24,011	25,000	51

^{1/} AID funds will cover 50% (\$666,000) of the total cost of the Coordination Unit (\$1,333,000). Consequently, the AID contribution exceeds the incremental costs (\$601,000- See Section A.1.c. of the Implementation Plan for the definition of incremental costs) of this activity by \$65,000. This does not represent a decrease in GOH support of the Coordination Unit since GOH funds will be used to cover a portion of the basic unit costs adjusted upward for inflation over the life of the program.

A detailed table showing the specific inputs for each Activity to which A.I.D. financing is to be applied will be found in Annex H-6, Table 4. This table also indicates where loan as opposed to grant funds are to be used.

f. Expenditures by Fiscal Year

The disbursement schedule is designed to allow a steady increase in GOH participation so that at the end of the Program they will have assumed financial responsibility for the major part of the costs. The figures by fiscal year, are as follows:

(in thousands of U.S. dollars)

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>TOTALS</u>
AID						
Loan	4,247	5,708	5,161	4,288	1,596	21,000
Grant	854	1,123	1,105	654	264	4,000
Total AID	<u>5,101</u>	<u>6,831</u>	<u>6,266</u>	<u>4,942</u>	<u>1,860</u>	<u>25,000</u>
GOH	11,363	16,872	18,645	20,941	6,038	73,859
Totals	16,464	23,703	24,911	25,883	7,898	98,859

2. Recurrent Cost Implications of the Program

As shown in section A.1.c above, the total incremental local cost over the life of the Program related to the Activities contained therein comes to US\$ 32,889,000. Only \$ 3,878,000 of this increment will be absorbed by A.I.D. and the remaining \$24,011,000 will be paid by the GOH during Program execution. Thus the recurrent cost implications of the Program after it ends are limited to \$ 3,878,000, or on an annual basis, to \$ 2,219,500. Since during the life of the Program the GOH will be increasing its expenditures in the sector at almost three times this rate, it is reasonable to conclude that recurrent costs will not be a major problem.

3. Financial Administration Concepts and Procedures

Studies were carried out under contract 1/ to determine how to improve the effectiveness of the implementation of Agricultural Sector Program I. The majority of the new mechanisms and the related institutional arrangements are being tested in the implementation of the remaining activities in the First Sector Program. 2/

1/ -Shepard J. Hollander: "Report of Performance A.I.D. Contract 522-T-448," April 2, 1979.

-Leonard Kornfeld and Shepard J. Hollander: "Proposed Implementation Procedures for A.I.D. Financed Agricultural Sector Program," A.I.D. contracts 522-T-432 and 522-T-433, December 14, 1978.

2/ See Implementation Letter No. 166, dated April 10, 1979 and No. 164, dated April 20, 1979 for details.

Implementation procedures proposed for the Second Sector Program offer several significant improvements in relation to the implementation arrangements for the previous Sector Program.

a. Flow of Funds

All A.I.D. funds will be channeled to implementing agencies through the Ministry of Natural Resources. These A.I.D. funds will be identified in the MNR annual budget under the section devoted to transfers and the specific department within each implementing agency will be identified. The counterpart funds will be listed under the budget of each implementing agency. This procedure on the part of the GOH will permit improved control by the Coordination Unit which reports to the Minister of Natural Resources.

b. Budgeting

Implementation proposed for the Second Sector Program is grounded on the principle of periodic budgetary control. Procedures which have been agreed upon with the GOH provide for the development by the Hondurans of a Program budget for each three-month period over the life of the Program.

Each participating agency will, in the final instance, be responsible for drafting its original budget proposals. These will include the amounts required for professional or technical services, construction, commodities, or budget support.

It is anticipated that Mission personnel will actively participate with the concerned agencies in the formulation of the budgetary proposals.

Each budget will be broken down according to discrete Program elements. Information to be provided according to Program elements will include, for prior periods, the amount programmed, cumulative budgetary amounts approved against the programmed amount, and cumulative obligations. For the current period the budgets will provide details on new obligational authority requested, such as, for example, the purpose and estimated cost of individual contracts for personal services or for construction, commodities to be purchased, or the identities of employees whose salaries are to be topped. Information on cumulative and current disbursements will also be provided.

Following review and approval by the Coordination Unit of the budgetary proposals of the participating agencies, the Coordination Unit will prepare a consolidated budget for submission to the Mission. Because of the participation of Mission personnel in the development of the proposals that are incorporated in the consolidated budget, there should be no surprises for the Mission when its turn to review the budget documents comes around.

An important feature of the budgetary process is the explanation that will be required for amounts that have been budgeted in prior periods but have not been obligated as of the current budgetary review. This feature will compel the periodic review of Program performance which should prove as useful to the Hondurans as to the Mission in monitoring the Program.

The proposed procedures provide that Mission review and approval of a budget will constitute full authority of the Coordination Unit to proceed with the implementation of all budgetary items up to \$ 50,000. Where proposed procurement actions such as construction are above \$ 50,000, the Mission will require prior review and approval of procurement actions, such as, for example, the issuance of invitations to bid, analysis of bids, and the award and negotiation of contracts.

c. Coordination Unit

The establishment of the Coordination Unit will assume from the Mission the responsibility for much of the day-by-day implementation action. The authority of the Coordination Unit with respect to the participating agencies will be reinforced by making all commitments and disbursements of A.I.D. funds subject to the prior review and approval of the Coordination Unit.

The Coordination Unit will oversee Program execution as carried out by the participating agencies. The following are the principal responsibilities of the Coordination Unit:

1. Work with the various GOH participating agencies in specifying activities, goals and periodic budgets within the framework of the Project Agreement;
2. Review and approve the periodic budgets as proposed by the participating agencies, and prepare consolidated budgets for submission to the Mission;
3. Arrange for transfer of GOH funds (to be later reimbursed by A.I.D.) to participating institutions;
4. Review and approve all procurement actions proposed by the participating agencies, such as, for example, the contracting of professional or technical services, construction or the procurement of materials and equipment;
5. Audit all requests for reimbursements as submitted by the participating agencies;
6. Carry out annual evaluations of the Program jointly with the participating agencies, and recommend possible changes in emphasis or objectives;

7. Maintain financial controls with respect to the Sector program.

The Coordination Unit has been structured into three basic departments: the planning and control department, which will be responsible for matters leading to the review and approval of the periodic budgets of the participating agencies and for the review and approval of the technical aspects of requests for the procurement of goods and services; the administration department, which will be responsible for the review and approval of the financial aspects of budgets and requested procurement actions, for examining documentation supporting requests for payments, and for the maintenance of financial controls over Program operations; and the legal advisor who will be responsible for the review and approval of the legal aspects of procurement, and for such other legal matters that pertain to the Program.

The budget for the Coordination Unit beginning in 1980 provides for a total of 11 employees, including administrators, programmers, accountants, and a lawyer. In relation to the responsibilities to be assumed by the Coordination Unit the staffing pattern appears reasonable. The cost of the Coordination Unit over the life of the Program will amount to \$1,332,500 and will be absorbed 50% by the GOH and 50% by A.I.D.

d. Reimbursement Procedure

As in the First Sector Program, the GOH will continue to meet Program expenditures with its own budgeted funds, and seek reimbursement for those Program expenditures to be covered with Loan/Grant funds, with the exception of a commingled fund for infrastructure packages, where the initial disbursement to set up the fund will be on a pari-passu basis.

All expenditures will be documented by the agencies effecting the procurement (e.g., MNR, INA, the Department of International Bidding of the Proveeduría General, or SECOPT), with documentation subject to the review and approval of the Coordination Unit. The Unit will then send the documentation to the Office of Public Finance and Credit in the Ministry of Finance for its review and subsequent payment. The Office of Public Finance and Credit will then send the documentation to the Mission in support of its claim for reimbursement.

Sufficient details will be included in the request for reimbursement to permit a ready identification of each claim with the corresponding item in a previously approved budget. Requests for reimbursement will be submitted by the Office of Public Credit no less frequently than once each month.

e. Advances

Given the substantially larger flow of funds anticipated under the Second Sector Program it is possible that the GOH will from time to time request an advance of funds. If this becomes necessary, the advance will be made on a Program wide basis, rather than for individual activities, and will be progressively reduced as reimburse-

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ment documentation is received.

f. Post-Audit Program

All reimbursements of loan funds in the First Sector Program have been subject to a 100 percent pre-audit. Past audit experience with expenditures in those program areas in the First Sector Program where implementation authority is now being transferred to the Coordination Unit has been favorable.

In view of the fact that in the Second Sector Program all documentation supporting claims for reimbursement will have been examined by two separate Honduran agencies prior to submission to the Mission, it is believed that the 100 percent pre-audit can be discontinued, and replaced by an active post-audit program on a test basis.

Documentation covering all requests for reimbursement will continue to be sent to the Mission in order to avoid any problems concerning the ready availability of the documentation for post audit by the Mission or its representatives.

4. Review and Adjustments during Implementation

A Program as complex and experimental as the one being proposed will require a considerable degree of flexibility during implementation. For this purpose, and with regard to the detailed description of A.I.D. inputs shown in Annex H-6., Table 4, it is proposed that the Mission be authorized to:

a. Approved reallocation of funds within any individual Activity, up to 100%.

b. Approve the transfer of up to 50% of the funds within any System from one to another Activity, including the financing of new Activities 1/, as described in this Project Paper, within a given System.

c. Approve the transfer of up to 15% of the funds from one System to another, including transfers for the purpose of financing new Activities 2/.

1/
2/ Once such new activities have been authorized by A.I.D./W.

B. Implementation Plan

The implementation period for the Agricultural Sector Program is designed to complement the GOH five year Development Plan (1979-1983). Nine of the eleven Program activities are programmed for implementation over a four year period (1979-1983); i.e., designed to coincide with the last four years of the Government's five year plan. Two activities, Participant Training and Sub-Regional Service Cooperatives, are programmed for a five-year implementation period due to the longer time required to implement these activities (see Financial Plan for complete details). The activities of the Program Administration and Coordination Unit also will continue into the fifth year and probably beyond, although not as a part of this Program.

Implementation arrangements for the various Program elements are described in the respective detailed Activity Reports submitted as a supplement and to a lesser extent in the Technical Feasibility Section of this paper. While of varying detail, the implementation arrangements coupled with financial plans and, where appropriate, a detailed list of work to be accomplished on a priority basis, present a clear picture of implementation actions for the life of the Program. Agencies or units responsible for implementation are identified as are the commodity requirements. An approximate six months mobilization period is built into the Program between Project Agreement signature and initiation of implementation on or about January 1, 1980. During this period final detailed implementation plans for the first year will be completed as will the detailed procurement plans. It should be noted that while the present implementation plans are in general well developed, they tend to be overly ambitious during the initial phases of the Program; e.g., the time envisioned for bringing new personnel on board, obtaining technical assistance, procuring commodities, etc., is in some cases programmed too tightly. Final implementation plans will require modifications to assure realistic scheduling of events. It is the Mission's judgment that the implementation plans, with minor adjustment during the mobilization phase, represent a realistic schedule of actions which can be effectively accomplished over the programmed implementation period. Annex H.5. contains a graphic illustration of the implementation plans for the eleven activities by year.

An important implementation feature of the Sector Program will be the Program Administration and Coordination Unit located in the Ministry of Natural Resources. This Unit, established under the First Agricultural Sector Program and recently expanded, will be the main contact point between A.I.D. and the GOH for implementation activities. A more detailed description of this Unit, and its responsibilities and procedures is presented in the Administrative Feasibility and Financial Plan Annexes as well as the supplemental Activity Reports. In addition to the administrative responsibilities discussed in the Administrative Feasibility Annex of this paper, the Unit will be the focal point for coordinating the development of the final detailed implementation plans of the various activities and presenting them to USAID for approval.

Due to the fact that the Coordination Unit was established during the final year of Sector Program I, the Unit will be fully operational and sufficiently staffed with trained personnel to facilitate timely implementation of Sector Loan II. Although Mission personnel will maintain close working relationships with the specific implementation units for each activity, formal coordination and communications for the total Program will be directed through the Program Administration and Coordination Unit. This arrangement offers several advantages to Program implementation. First, those special skills and operating procedures unique to A.I.D. assistance can be specifically developed in one location and kept at an effective minimum; e.g., procurement and contracting capabilities are being developed in the Coordination Unit and these skills in turn will be made available to other implementation units as needed.

Secondly, both the GOH and USAID will have one contact point which will be current on the status of the implementation of the total Sector Program, thus facilitating communication efficiency. Implementation problem areas can be identified rapidly and corrective action swiftly initiated. Similarly, this Unit will be the control point for evaluation of the Program, ensuring that all inputs are made from the several sector institutions and so be able to prepare the overall Program evaluation for the GOH.

The Sector Program will be monitored by the USAID Office of Rural Development with assistance as appropriate and needed from the Office of Program and Capital Development, Office of Development Engineering, Office of Human Resources Development, Office of the Controller, and the Executive Office.

The Office of Rural Development is currently monitoring three loan projects (025, 030, 032) and four grant projects (0118, 0120, 0123, 0139). The largest of the loans, 025 (Agricultural Sector Program I), is expected to be fully disbursed by the end of CY 1979 coinciding with the start-up of the new Sector Program. The remaining two loans are well into implementation and no inordinate problems are expected. Of the four grant projects, one will be completed this year and the remaining three are well into implementation with no unusual problems anticipated. The Office of Rural Development presently has vacant U.S. Direct Hire positions as well as provisions for PASA personnel. It is expected that at least the USDR slots will be filled before initiation of the Sector Program. With a near full staff complement, sufficient resources will be available to the Mission for effective monitoring of the new Sector Program in addition to on-going activities.

C. Evaluation Plan

Two processes of evaluation will be conducted for this Program. One will focus primarily on the effects of the Program on its target population, the other on implementation of Program components. The first will be carried out at mid-term and toward the end of the Program while the second will be continuous throughout the life of the Program and summarized on an annual basis.

1. Summative Evaluation

Summative Program Evaluation attempts to measure the contribution of attainment of Program purposes to achievement of the Program goals. The two goals of this Program, increase in rural incomes and increase in GOH absorptive capacity, will require different evaluation methodologies.

The evaluation of the Program's contribution to an increase in incomes will be based on comparison of baseline income data to income data for 1982. The baseline data is contained in farm surveys conducted for the 1977 crop year, in the principal Program areas as part of the Agriculture Sector Assessment for Honduras. The data for 1982 will be obtained from the sample-frame of farms to be implemented as part of the information component of this Program. Appropriate statistical procedures will be followed to disaggregate, by means of control groups, the effect of various Program components, especially extension and infrastructure. Farms in zones of Program concentration will be compared to farms in other regions with similar characteristics.

The evaluation of this Program's contribution to increase the capacity of the Honduran agricultural sector to absorb and efficiently use resources will be based on annual GOH budget data, foreign donor records, and official publications. The indicators selected for this part of the evaluation are enumerated in the Program description, i.e., increase in expenditure levels (both of GOH and external funds), increase of the agriculture sector's contribution to the GDP, and increase in public investment over the life of the Program.

The Summative Evaluation will take place at two points in Program implementation. The first, toward the end of 1981, will focus principally on the establishment of appropriate measures methodologies. It will be the joint responsibility of the Program Administration and Coordination Office and contracted outside evaluation specialists with the assistance and support of the USAID/H. At this same time, these individuals will collaborate in assessing the progress of the Program in achieving its outputs, detailed below as part of the formative evaluation process. The second, in the last year of Program implementation, will apply the evaluation methodologies to carry out the evaluation comparisons outlined above.

2. Formative Evaluation

There are evaluation plans provided in each of the particular Program components, detailing the methodology to be followed for the formative

evaluation, that is, the relative progress of activities in achieving the outputs desired in each, as well as broad guidelines on methodology. The focus in this Section of the Project Paper is on classifying the types of evaluation contemplated in the Program.

One Program component (the human resources system) will be evaluated in both qualitative and quantitative terms on its contribution to achievement of Activity inputs. The participant training, in-service training, and URLA Activities fall in this category. Academic performance and absorption of trainees by the public agricultural sector will be measured for all three components. Their contribution to attainment of Program purposes cannot be quantified in the time-frame of the Program.

Another Program component, the system for delivery of services and related inputs component, will be evaluated in terms of its achievement of outputs and also in terms of the contribution of those outputs to achieving Program purposes. Its effect in increasing the number of beneficiaries can be directly quantified, as can its fulfillment of specific output measures.

The remaining Program component -- including agricultural planning, information, and market policy development -- will be evaluated both in terms of its achievement of expected outputs and the contribution of those outputs to the Program purposes. Thus, for example, the market policy component can be evaluated in terms of its internal achievements (such as the improved collection, analysis and distribution of commodity prices to both producers and consumers) and the effect that these have in reducing marketing costs.

Formative evaluation will be conducted on two levels throughout the life of the Program. Administrative evaluations, taking the form of quarterly Program reviews, will serve as a means of improving Program implementation performance. Institutional or component evaluations, carried out for each component separately and resulting in an overall evaluation of the Program annually (third quarter), will focus on the qualitative aspects of Program implementation. Both levels will feed into the summative evaluation of the entire Program.

D. Conditions, Covenants, Negotiation Status

The Mission proposes that the conditions and covenants set forth in the Draft Project Authorization and Request for Allotment of Funds, Annex C, be included in the Project Agreement.

As discussed in the Background section of this Paper, the Program has evolved over the past two years in a collaborative effort between A.I.D. and the Government of Honduras. The Program design, as reflected herein, is the final product resulting from this joint planning/programming effort. The CPA has reviewed and approved the substantive terms and conditions of the Program and the Minister of Finance and Public Credit has formally requested A.I.D.'s assistance in carrying out the Program (see Annex A).

E. The Project Committee

William Janssen, ORD, USAID/Honduras
Barry Burnett, OPCD, USAID/Honduras
Lawrence Klassen, OPCD, USAID/Honduras
Robert Thurston, ORD, USAID/Honduras
David Johnston, ORD, USAID/Honduras
Aaron Williams, ORD, USAID/Honduras
Ralph Conley, ORD, USAID/Honduras
Luis Zelaya, ORD, USAID/Honduras
Thomas Fallon, CONT, USAID/Honduras
James Callaway, ENG, USAID/Honduras
Roger Russell, ENG, USAID/Honduras
Francisco Figueroa, ENG, USAID/Honduras
John Kelley, HRD, USAID/Honduras
Ambrosio Ortega, HRD, USAID/Honduras

Leonard Kornfeld, Principal Consultant.



SECRETARIA DE HACIENDA Y CREDITO PUBLICO
REPUBLICA DE HONDURAS

Tegucigalpa, D. C.,

Nº...S-238.....

Tegucigalpa, D.C. 8 de Junio de 1979

Señor
John B. Robinson
Director Agencia para el
Desarrollo Internacional
Presente.

Estimado Señor Robinson:

El Plan Nacional de Desarrollo (PND) para 1979-1983 requiere, para su ejecución, de grandes esfuerzos por parte del Gobierno y pueblo, así como también de una asistencia sustancial por parte de instituciones internacionales de financiamiento, sobre todo en cuanto a la asignación de recursos se refiere.

El PND, en lo relacionado con el Sector Agrícola, se deriva sustancialmente del Diagnóstico del Sector que fue llevado a cabo el año pasado con la ayuda de la A.I.D. De acuerdo con el objetivo del Gobierno de Honduras de mejorar las condiciones y la calidad de la vida de la población más pobre en las áreas rurales, se incluye en el PND el Segundo Programa Sectorial que enfatiza proyectos dirigidos al desarrollo de los recursos humanos profesionales y técnicos del sector; al desarrollo institucional, especialmente en lo referente a planificación del sector; y al mejoramiento de los sistemas de entrega de servicios y operaciones afines. Además este programa sectorial necesita una Unidad de Coordinación para su administración.

El Costo del Programa, definido como el conjunto de recursos y acciones que se requieren para mejorar y ampliar las actividades incluidas por encima del nivel actual, se estima en Lps.98,022.000 (US \$49,011,000) de los cuales la forma de financiamiento se distribuiría de la siguiente forma:



SECRETARIA DE HACIENDA Y CREDITO PUBLICO
REPUBLICA DE HONDURAS

Tegucigalpa, D. C.,

Nº.....

- 2 -

<u>Sistema</u>	<u>(Costos estimados en miles de Dólares)</u>		
	<u>Total</u>	<u>Financiamiento de la A.I.D.</u>	<u>Participación del G.Honduras</u>
Desarrollo de Recursos Humanos	20,449	11,211	9,238
Desarrollo Institucional	9,171	5,092	4,079
Entrega de Servicios	18,793	3,031	10,762
Unidad de Coordinación	598	666	(68)
T O T A L E S	49,011	25,000	24,011

Además, considerando que hay una base de gastos presupuestados en 1979 que proyectada al período del programa, considerando un 10% de incremento anual por inflación y contingencias, asciende a Lps.99,636,000 (US \$49,848,000), haciendo que el costo total absoluto del programa ascienda a Lps.197,713,000 (US \$98,959,000).

El Gobierno de Honduras se comprometería a sostener los niveles actuales de actividad en los rubros del programa, además de asegurar, en el período del Programa, una aportación de Lps.48,022,000 (US \$ 24,011,000) para el incremento y mejoramiento de esas actividades. De este monto, por lo menos Lps. 24,505,500 (US \$ 12,252,750) provendrán de fondos nacionales.

El contenido del Programa y sus costos podrían sufrir pequeñas variaciones entre la fecha de esta nota y la presentación de nuestra solicitud a sus oficinas de la AID en Washington, pero todo parece indicar que el costo del Programa no excederá de noventa y ocho millones veintidos mil lempiras (Lps.98,022,000) equivalentes a cuarenta y nueve millones once mil dólares (US \$49,011,000) y en consecuencia solicitamos a la Agencia para el Desarrollo Internacional el financiamiento para la cantidad indicada.

Varios de los componentes de los tres rubros que conforman el Programa son innovativos y de un cierto riesgo, o contienen subsidios a favor de pequeños agricultores. Por lo tanto, solicitamos que se considere la posibilidad de una donación más bien que un préstamo para estos elementos del Programa.

En cuanto a la suma a ser prestada, tomando en cuenta la demanda financiera sobre el Presupuesto Nacional durante los próximos años, tanto por los aumentos previstos en el gasto corriente y de capital, como por los requerimientos de contraparte para otros proyectos que reciben fi-



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ANNEX A
Page 3 of 3

SECRETARIA DE HACIENDA Y CREDITO PUBLICO

REPUBLICA DE HONDURAS

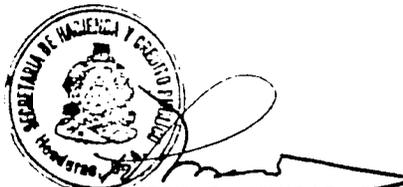
Tegucigalpa, D. C.,

Nº.....

- 3 -

nanciamiento foráneo, solicitamos que el financiamiento de la AID se otorgue en los términos y condiciones más favorables que la AID pueda ofrecer.

En espera de sus prontas noticias, quedo de usted atentamente,



VALENTIN J. MENDOZA
Secretario Hacienda y Crédito Público

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

UNCLASSIFIED

Project Title & Number: Agriculture Sector II Program, N°522-0150 I. Ag. Sector II Program Summary

(INSTRUCTION: THIS IS AN OPTIONAL FORM WHICH CAN BE USED AS AN AID TO ORGANIZING DATA FOR THE PAR REPORT. IT NEED NOT BE RETAINED OR SUBMITTED.)

Life of Project:
From FY 79 to FY 85
Total U.S. Funding \$25,000,000.00
Date Prepared: June 1979

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p>To increase incomes of the rural poor in Honduras.</p>	<p>Measures of Goal Achievement:</p> <p>By 1985:</p> <ol style="list-style-type: none"> 1. Percentage of rural population below \$250 per capita income (1977 prices) drops from 90% to 80%. 2. Average per capita income of small traditional farmers increases from \$135 to \$175 (1977 prices). 3. Average per capita income of agrarian reform farmers increases from \$106 to \$175 (1977 prices). 	<p>Official GOH publications and rural income surveys for all indicators.</p>	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> 1. Adequate financial resources are applied to sector. 2. GOH retains commitment to the rural poor. 3. There is political stability.
<p><u>Sub-Goal</u></p> <p>To increase the capacity of the Agriculture Sector to absorb and efficiently use domestic and foreign resources (human, financial, natural and technological) so that they can be more effectively brought to bear on the problems of the rural poor.</p>	<ol style="list-style-type: none"> 1. GOH expenditure levels in the ag. sector increase from \$162 m in 1979 to \$338 m in 1985. 2. Foreign assistance expenditures in the ag. sector increase from \$65 m in 1979 to \$88 m in 1985. 3. Agricultural GDP increases by at least 6% per annum between 1978 and 1985 (constant terms). 4. Public investment in the ag. sector increases from \$137 m in 1979 to \$202 m by 1985 (1979 prices). 	<ol style="list-style-type: none"> 1. Annual GOH budgets. 2. Annual GOH budgets and foreign donor records. 3. Official GOH publications. 4. Official GOH publications 	<ol style="list-style-type: none"> 1. Sector planning groups and units within individual institutions are given sufficient authority to influence actual allocations of funds. 2. Adequate incentives exist -- personnel policies, salaries, advancement -- so that trained people and improved institutional systems can increase absorptive capacity.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number _____ I. Ag. Sector II Program Summary (Cont.)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose:</p> <p>To establish efficient and cost-effective institutional structures and delivery systems to serve the needs of small farmers.</p> <p>(See sub-purposes for each component)</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ol style="list-style-type: none"> 1. There is an increased number and improved quality of trained professionals working in the sector. More specifically: <ul style="list-style-type: none"> - there is a decreased reliance on foreign experts, especially at CURIA; - the percentage of Honduran faculty at CURIA with at least Masters degrees increases to 33%; - at least 45% of the officials working in public agricultural institutions have received in-service training. 2. There are permanent systems to determine agricultural training requirements -- in-country and overseas. 3. There is an in-country capability to train all B.A./B.S.-level technicians required in the ag. sector. 4. There will be improved mechanisms through which agricultural services can be delivered to reform and non-reform sector small farmers. The Ext. Service alone will be reaching at least 80% of all reform sector farmers and 25% of all non-reform farmers. 5. A system exists by which local or zonal infrastructure needs are identified and projects implemented. 	<ol style="list-style-type: none"> 1. GOH records and program progress reports. 2. Program reports. 3. GOH reports. 4. Program reports and GOH records. 5. Program reports. 	<p>Assumptions for achieving purpose</p> <ol style="list-style-type: none"> 1. GOH retains the high commitment in evidence for several years to ag. sector growth and development with equity.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

1. Ag. Sector II Program Summary (Cont.)

Project Title & Number: _____

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose:</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <p>6. The BNF has a strong regional program, and is lending to substantially more target farmers than in 1977. It also has an improved financial position and reduced default rates.</p> <p>7. There is improved regional and national coordination among Extension, Research, INA, the BNF, and other sector institutions.</p> <p>8. There will be increased participation (regional and beneficiary) in the planning and execution of ag. development programs.</p> <p>9. Individual institutions in the sector will have strong analytical and planning units.</p> <p>10. There is an effective sector-wide system for policy analysis, planning, budgeting and evaluation.</p> <p>11. The percentage of actual budget expenditures vs. planned expenditures for all sector institutions will increase from 70% in 1978 to 85% by 1983.</p> <p>12. Agricultural data and information will be more reliable and accessible to public sector institutions and farmers.</p>	<p>6. BNF records and Program reports.</p> <p>7. Program reports and observation.</p> <p>8. Program reports and observation.</p> <p>9. Program reports and observation.</p> <p>10. Observation</p> <p>11. GOH budget reports.</p> <p>12. GOH publications and program progress reports.</p>	<p>Assumptions for achieving purpose:</p>

PROJECT DESIGN SUMMARY

LOGICAL FRAMEWORK

1. Ag. Sector II Program Summary (Cont.)

UNCLASSIFIED

Annex B
Page 4 of 1

Life of Project: _____

From f.y. _____ to f.y. _____

Total U.S. Funding _____

Date Prepared: _____

PAGE 4

Project Title & Number: _____

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Outputs:</p>	<p>Magnitude of Outputs:</p>		<p>Assumptions for deriving outputs:</p>
<p>A. <u>Human Resources System</u></p>			
<p>1. Professionals trained overseas</p>	<p>1. B.A. level: 68 M.A. level: 154 Ph.D. level: 13 235</p>	<p>Periodic program progress reports and GOR reports for all outputs.</p>	<p>A.1. Adequate numbers of qualified people are available for overseas training.</p>
<p>2. Upgraded and expanded CURLA</p>	<p>2. By 1983, CURLA has enrollement of 4,000.</p>		<p>A.2. CURLA able to attract and retain adequate numbers of students.</p>
<p>3. Mid-level technicians trained overseas.</p>	<p>3. 64 in short courses over life of project.</p>		
<p>4. Trained women in ag. subjects.</p>	<p>4. At least 20% of total number trained.</p>		
<p>5. Integrated in-service training programs for major public ag. sector institutions.</p>	<p>5. Continuing, in-service Coordination Committee established in Jan., 1980.</p>		
<p>6. Training of Trainers courses.</p>	<p>6. Five in 1980.</p>		
<p>7. In-service trainees</p>	<p>7. 20, 240 from 1979-1983.</p>		
<p>B. <u>Institutional Development System</u></p>			
<p>1. Planning staff of major ag. sector institutions increased at national and regional levels.</p>	<p>1. From 131 in 1979 to 176 in 1983.</p>		
<p>2. CRIES system operational.</p>	<p>2. By Dec., 1983.</p>		
<p>3. Sector-wide Annual Operational Plan</p>	<p>3. Produced annually beginning in 1980.</p>		
<p>4. Sector planning and budgeting integrated.</p>	<p>4. Beginning 1980.</p>		
<p>5. National Area Frame sampling functioning nationwide.</p>	<p>5. By Dec., 1983.</p>		
<p>6. DGEC reorganized.</p>	<p>6. By March, 1980.</p>		
<p>7. Data bank with terminals to principal sector institutions.</p>	<p>7. By Oct., 1981.</p>		

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

I. Ag. Sector, II. Program Summary (Cont.)

UNCLASSIFIED
Life of Project _____
From FY _____ to FY _____
Total U.S. Funding _____
Date Prepared _____

Project Title & Number: _____

PAGE 3

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Outputs:</p> <p>8. Marketing research/analysis unit in IHMA.</p> <p>9. Marketing studies.</p> <p>10. Marketing Policy Master Plan.</p>	<p>Magnitude of Outputs:</p> <p>8. Jan.-March, 1980.</p> <p>9. Continuing from June, 1980.</p> <p>10. By Jan., 1983.</p>		<p>Assumptions for achieving outputs:</p>
<p><u>C. System for Delivery of Services and Related Inputs</u></p>			
<p>1. Central dept. to manage ag. service center coops.</p>	<p>1. In DIFOCOOP by Jan. 1980.</p>		
<p>2. Multi-purpose ag. coop service centers.</p>	<p>2. Reform sector: 4 by end of 1982 Non reform sector: 4 by end of 1982.</p>		<p>C.2. Farmers in reform and non-reform sectors willing to form service coops.</p>
<p>3. Evaluations of coop service centers.</p>	<p>3. Evaluations conducted by 12/82 and 12/84.</p>		
<p>4. Local-level spatial planning system installed within the CARs.</p>	<p>4. By June, 1980</p>		
<p>5. Small rural infrastructure packages</p>	<p>5. 16 between 1981-1983.</p>		
<p>6. Nutrition packages -- improved germ plasma, seedlings, and vegetable seeds.</p>	<p>6. 24,000 distributed by 1983.</p>		
<p>7. Regional BNF credit offices.</p>	<p>7. 3 by Sept. 1980; 5 by June, 1983.</p>		<p>C.6. Major portion of foodstuffs grown consumed by participating farm families.</p>
<p>8. Model Training Agencies established in Extension Service.</p>	<p>8. 9 by 1983.</p>		
<p>9. Strengthened Extension Service agencies.</p>	<p>9. 31 by 1983.</p>		
<p>10. Voluntary community workers assisting Extension Service.</p>	<p>10. Continuing from 1980; 900 by 1983.</p>		<p>C.10. Availability of qualified campesinos willing to work with Extension Service as para-technicians.</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: _____

11. Human Resources System Component

PAGE 2

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose:</p> <p>Sub-Purpose (Component)</p> <p>To increase the number and improve the quality of trained professionals working in the agriculture sector.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ol style="list-style-type: none"> 1. There is a decreased reliance on foreign experts -e.g., at CURLA the percentage of Honduran faculty is 75% in 1983 vs 44% in 1977. 2. CURLA has adequate faculty and facilities to increase its enrollment to 4,000 students, and to train all required B.S. level professionals in the sector. 3. The percentage of Honduran faculty at CURLA with Master's degrees or higher increases from 16% in 1978 to at least 33% in 1983. 4. The percentage of incoming students graduating from CURLA's professional programs increases from 43% in 1978 to 75% in 1983. 5. There is a permanent unit (Technical Secretariat of Scholarships and In-Service Training Committee) to assess the need and arrange for training in the public agriculture sector. 6. In-service training programs in the agriculture sector are expanded over their 1978 levels, and are using common training methodologies and techniques. 7. At least 45% of the officials in key public ag. sector instits. have received in-service training. 	<ol style="list-style-type: none"> 1. CURLA records. 2. CURLA records; GOH manpower projections. 3. CURLA records. 4. CURLA records 5. Periodic program progress reports. 6. Program progress reports. 7. GOH records, program progress reports. 	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 1. Qualified Hondurans available for training and subsequent employment as CURLA faculty members. 2. Current demand projections for B.S. level professionals required for the agriculture sector remain valid.

PROJECT DESIGN SUMMARY

LOGICAL FRAMEWORK

11. Human Resources System Component (Cont.)

UNCLASSIFIED

Life of Project:

From FY _____ to FY _____

Total U.S. Funding _____

Date Prepared: _____

Project Title & Number: _____

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																																																																						
Outputs:	Magnitude of Outputs:		Assumptions for achieving outputs:																																																																						
A. Participant Training																																																																									
1. Trained professionals.	<table border="1"> <thead> <tr> <th></th> <th>1980</th> <th>1981</th> <th>1982</th> <th>1983</th> <th>1984</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>1. BA level</td> <td>-</td> <td>22</td> <td>23</td> <td>14</td> <td>9</td> <td>68</td> </tr> <tr> <td>MA level</td> <td>-</td> <td>42</td> <td>53</td> <td>38</td> <td>21</td> <td>154</td> </tr> <tr> <td>PhD level</td> <td>-</td> <td>-</td> <td>2</td> <td>7</td> <td>4</td> <td>13</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>235</u></td> </tr> </tbody> </table>		1980	1981	1982	1983	1984	Total	1. BA level	-	22	23	14	9	68	MA level	-	42	53	38	21	154	PhD level	-	-	2	7	4	13							<u>235</u>	All outputs to be verified from periodic program progress reports.	1. Adequate numbers of qualified personnel are available for overseas training.																																			
	1980	1981	1982	1983	1984	Total																																																																			
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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

UNCLASSIFIED

Life of Project: _____

From FY _____ to FY _____

Total U.S. Funding _____

Date Prepared: _____

Project Title & Number: _____

II. Human Resources System Component (Cont.)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																																																	
Outputs:	<p>Magnitude of Outputs:</p> <ol style="list-style-type: none"> (c) Upgraded physical plant <ul style="list-style-type: none"> - 30 new classrooms by 12/81 - expanded library by 12/80 - 10 new academic buildings, including 13 expanded or new labs by 12/82 - new administration building by 6/81 - new auditorium by 12/82 - new cafe. building by 12/81 - new irrigation system by 3/81 650 Ingeniero Agrónomo and 300 Ingeniero Forestal graduates by 1983. <ol style="list-style-type: none"> By Jan. 1980 By Sept. 1980 By Dec. 1980 Education lab. April 1980 Adult Education May 1980 Teaching Methods July 1980 Education Planning Aug. 1980 Education Evaluation Oct. 1980 <table border="1" data-bbox="569 972 1077 1144"> <thead> <tr> <th></th> <th>1979</th> <th>1980</th> <th>1981</th> <th>1982</th> <th>1983</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>INA</td> <td>571</td> <td>340</td> <td>250</td> <td>160</td> <td>-</td> <td>1321</td> </tr> <tr> <td>DIFOCOOP</td> <td>80</td> <td>100</td> <td>100</td> <td>120</td> <td>120</td> <td>520</td> </tr> <tr> <td>MNR</td> <td>-</td> <td>1125</td> <td>1125</td> <td>1125</td> <td>1125</td> <td>4500</td> </tr> <tr> <td>BNF</td> <td>1340</td> <td>2020</td> <td>2680</td> <td>3360</td> <td>4020</td> <td>13420</td> </tr> <tr> <td>INFOP</td> <td>115</td> <td>85</td> <td>100</td> <td>90</td> <td>90</td> <td>480</td> </tr> <tr> <td></td> <td>2106</td> <td>3670</td> <td>4255</td> <td>4855</td> <td>5355</td> <td>20241</td> </tr> </tbody> </table> 		1979	1980	1981	1982	1983	Total	INA	571	340	250	160	-	1321	DIFOCOOP	80	100	100	120	120	520	MNR	-	1125	1125	1125	1125	4500	BNF	1340	2020	2680	3360	4020	13420	INFOP	115	85	100	90	90	480		2106	3670	4255	4855	5355	20241		<p>Assumptions for achieving outputs:</p>
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C. <u>In-Service Training</u>																																																				
1. In-service Coordination Committee, with members from all major agriculture sector institutions, and Technical Secretariat are established.																																																				
2. In-service training policies on priorities, methodologies, and areas of individual institution responsibilities.																																																				
3. Uniform system to evaluate results of in-service training programs.																																																				
4. Training of Trainers Courses.																																																				
5. Trainees.																																																				

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: _____
From FY _____ to FY _____
Total U.S. Funding _____
Date Prepared: _____

Project Title & Number: _____ III. Institutional Development Component

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose:</p> <p><u>Sub-Purpose (Component)</u></p> <p>To establish an effective sector-wide system for policy analysis, planning, budgeting, coordination, operations follow-up, and evaluation at central and regional levels.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ol style="list-style-type: none"> 1. One comprehensive Annual Operating Plan for the Agriculture Sector and used by sector agencies will be produced annually, vs. the current multiplicity of such plans. 2. The planning and budgeting processes, now on separate, parallel tracks, will be integrated. 3. Medium-term plans (5 yr.) will be revised and up-dated on a continuing basis, which is presently not occurring 4. Regional plans, both annual and medium-term, will be produced on a regular basis. 5. Systematic evaluations of programs and projects will be undertaken and acted upon. 6. The CRIES System will be operational. 7. A National Agricultural Bibliography, a National Directory of Sources of Information, and a Collective Catalogue for Periodical Publications will be published and updated periodically. 8. An Area Sample Frame Survey System will be in place nationally. 	<p>Official GOH publications; annual GOH budgets; Program progress reports; and observation.</p>	<p>Assumptions for achieving purpose:</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

III. Institutional Development Component

Life of Project: _____
From FY _____ to FY _____
Total U.S. Funding _____
Date Prepared: _____

Project Title & Number: _____

PAGE 2

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose:</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <p>9. Regional documentation centers will be in existence.</p> <p>10. A reorganization of the DGEC will have been effected.</p> <p>11. A Central Data Bank, with terminals to 4 principal user agencies will be installed and in use.</p> <p>12. There are compatible methodologies and procedures for the collection, processing, classification, coding, and storage of information among the institutions of the SNIAH.</p> <p>13. A series of studies will be produced and regularly disseminated on marketing problems, such as processing policies, backhaul possibilities, improvement in municipal markets, grain storage facilities and handling of perishable products.</p> <p>14. IHMA has the capacity to analyze agricultural marketing systems--e.g., current channels and costs; physical and institutional infrastructure; and costs of production and price responsiveness.</p> <p>15. Decision-makers in the sector have increased access to up-to-date and accurate information.</p>		<p>Assumptions for achieving purpose:</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

UNCLASSIFIED
Life of Project: _____
From FY _____ to FY _____
Total U.S. Funding _____
Date Prepared: _____

Project Title & Number: _____

III. Institutional Development Component (Cont.)

PAGE 11

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Outputs:	Magnitude of Outputs:		Assumptions for achieving outputs:
A. <u>Planning</u>	1. <u>CONSUPLANE</u> CPA MNR INA BNF		
1. National and regional level staffs of major agriculture sector institutions increase, in total, by about 33% during period 1979-1983.	1979 17 13 48 32 21 1983 41 15 64 28 28	All outputs to be verified from periodic program progress reports.	1. Qualified individuals available and willing to work for GOH.
2. The CAIES system of natural resources planning will be established and operational.	2. By December, 1983.		
3. Sector-wide Annual Operating Plan produced on annual basis.	3. Beginning 1980		
4. Regional plans, annual and medium-term, produced regularly.	4. Beginning 1981.		
5. Sector planning and budgeting processes integrated.	5. Beginning 1980.		4. Planning technicians willing to live and work in rural areas of the country.
6. Medium term plans (5 yr.) will be revised and updated on continuing basis.	6. Beginning 1981.		
B. <u>Information System</u>			
1. Law defining institutional responsibilities of SNIAH.	1. March 1980.		
2. Finish construction of National Area Sample Frame.	2. For regions 1 and 6 - by Dec. 1980 For regions 1, 6, 2, 3 - by Dec. 1981 For regions 1, 6, 2, 3, 4 - by Dec. 1982 Nation-wide by Dec. 1983.		
3. Creation of the Area Sample Frame Const. by the Agricultural/Rural Survey Dept., and the Sampling Dept. in DGEC.	3. March 1980.		
4. Implementation of the National System of Agricultural/Rural Surveys.	4. National outlook surveys begin in April of 1980. Socio-economic, technical and other data will be collected only for regions where the area frame is functioning.		

PROJECT DESIGN SUMMARY
 LOGICAL FRAMEWORK

111. Institutional Development Component (Cont.)

Project Title & Number: _____

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Outputs:</p> <p>5. Regional Ag. Documentation Centers.</p> <p>6. Ag. Sector Numerical Data Bank with terminals to 4 principal user agencies begins operations.</p> <p>7. National Agricultural Documentation system.</p> <p>8. Consolidation and Dissemination Department established in Ext. Service of MNR.</p> <p>9. National Ag. Bibliography, a National Directory of Sources of Information and a Catalogue of all publications and periodicals in the national agricultural documentation system.</p> <p>C. Marketing Analysis System</p> <p>1. Marketing Research and Analysis Dept. created and staffed within HMA.</p> <p>2. Specification of Marketing Data needed for the Numerical Data Bank, and coordination of data collection activities.</p> <p>3. Preparation of descriptive and analytical reports on Honduran Marketing Systems for selected commodities.</p> <p>4. Formulate a preliminary Master Plan for implementing national marketing policies.</p>	<p>Magnitude of Outputs:</p> <p>5. Feb-Aug. 1981.</p> <p>6. Oct. 1981.</p> <p>7. Initiated: April 1982; completed: Dec. 1983.</p> <p>8. April 1980.</p> <p>9. Oct. 1982.</p> <p>1. Jan - March 1980.</p> <p>2. Beginning June 1980.</p> <p>3. Continuing from June 1980.</p> <p>4. January, 1983.</p>		<p>Assumptions for achieving outputs:</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

IV. System for Delivery Services and Related Inputs Component

Project Title & Number: _____

PAGE 2

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose:</p> <p><u>Sub-Purpose (Component)</u></p> <p>To develop mechanisms through which agricultural services and infrastructure can be provided at low cost to significantly more of the rural poor in both the reform and non-reform subsectors.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ol style="list-style-type: none"> 1. Four reform and non-reform zonal service centers (cooperatives) operating on self-sufficient basis. 2. There is improved coordination among Extension and other delivery institutions at the national and regional levels. 3. A system exists by which rural zonal infrastructure needs are identified, prioritized and projects implemented. 4. The BNF's regional offices are supervising and advising their respective branch banks and coordinating activities with other institutions at the regional level. 5. The BNF is lending to more small farmers by being more innovative in its lending program; e.g., making loans on a solidarity basis, working with coops and other groups, classifying clients for lines of credit, opening small sub-branches, and experimenting with mobile credit units. 6. Fruit tree seedlings and vegetable seeds have been distributed to at least 24,000 small farmers. 	<p>1. Service cooperatives' records; evaluations of service coops.</p> <p>2. Program progress reports and observation.</p> <p>3. Same as 2 above.</p> <p>4. Same as 2 above.</p> <p>5. BNF records and Program progress reports.</p> <p>6. BNF and Municipal Treasurer records; Program progress reports.</p>	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 1. Service cooperatives identify and implement production projects which earn sufficient profits to ensure financial viability of coops. 2. GOH retains interest in regionalization. 5. BNF remains committed to these goals.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

IV. System for Delivery Services and Related Inputs Component (Cont.)

Project Title & Number: _____

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose:</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <p>7. The Extension Service is re-organized internally and providing effective services to at least 26,000 farmers in the reform sector (80%) and 37,000 in the non-reform sector (25%), vs. 66% and 4%, respectively, in 1978.</p> <p>8. The Extension Service has reduced its personnel loss rate to less than 10%, vs. 18% in 1978.</p> <p>9. The Extension Service has improved links with and provides feedback to the national research program and is delivering adapted and improved agronomic and appropriate mechanical technologies to small farmers and reformed groups.</p>	<p>7. MNR records and Program progress reports.</p> <p>8. Same as above.</p> <p>9. Same as above.</p>	<p>Assumptions for achieving purpose:</p> <p>7. GOH remains committed to extend services to reform and non-reform sector small farmer class.</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

IV. System for Delivery Services and Related Inputs Component (Cont.)

Project Title & Number: _____

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																								
<p>Outputs:</p> <p>A. Extension Service</p> <ol style="list-style-type: none"> Model Training Agencies established. Strengthened regional-level Agric. agencies. Regional and Central Unit staff levels strengthened (professionals) Community-based voluntary leaders selected and trained for Extension Service work. Economic incentives established for Extension Service personnel assigned to rural areas. <p>B. Service Cooperatives</p> <ol style="list-style-type: none"> Unit established within DIFOCOOP to administer the agricultural services cooperatives. Feasibility studies for coops in priority areas. Coop Service Centers. Production improvement projects. Evaluation of Pilot coops. 	<p>Magnitude of Outputs:</p> <ol style="list-style-type: none"> One in each of the 7 agricultural regions in 1980-81; 2 additional in the country during 1982-83. 21 in the 2 areas of concentration during 1980-81; 10 more in the other 5 regions during 1982-83. Regional Offices staff increase by 19 and Central Unit's staff increases by 15 by 1983. 900 voluntary community leaders working with Extension Service by 1983. A combination of merit awards, hardship allowances, and position classification changes will be effected by 1980 for rural-based Extension personnel. <ol style="list-style-type: none"> By January 1980. First two by March 1980. <table border="1" data-bbox="549 956 1073 1050"> <thead> <tr> <th></th> <th>1980</th> <th>1981</th> <th>1982</th> <th>1983</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>For reform sector</td> <td>1</td> <td>2</td> <td>1</td> <td>-</td> <td>4</td> </tr> <tr> <td>For non-reform sect.</td> <td>1</td> <td>1</td> <td>2</td> <td>-</td> <td>4</td> </tr> <tr> <td></td> <td>2</td> <td>3</td> <td>3</td> <td>-</td> <td>8</td> </tr> </tbody> </table> <ol style="list-style-type: none"> At least one per coop. Major evaluations conducted at end of 1982 and 1984. 		1980	1981	1982	1983	Total	For reform sector	1	2	1	-	4	For non-reform sect.	1	1	2	-	4		2	3	3	-	8	<p>All outputs to be verified through periodic program progress reports.</p>	<p>Assumptions for achieving outputs:</p> <ol style="list-style-type: none"> Qualified community leaders available and willing to work with Extension Service. GOH Civil Service agrees with proposed incentives program. Farmers willing to form and participate in service coops.
	1980	1981	1982	1983	Total																						
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PROJECT DESIGN SUMMARY
 LOGICAL FRAMEWORK

UNCLASSIFIED
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IV. System for Delivery Services and Related Inputs Component (Cont.)

Project Title & Number: _____

PAGE 1

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Outputs:</p> <p>C. National Development Bank Regionalization</p> <p>1. Regional offices established.</p> <p>2. 8 BNF agencies strengthened in two regions: Centro-Oriental and Centro-Occidental.</p> <p>3. 5 additional BNF agencies strengthened.</p> <p>4. Regional reporting and budgeting procedures.</p> <p>5. New credit manuals and procedures.</p> <p>D. Zonal Infrastructure Packages</p> <p>1. Two person planning teams assigned to CARs.</p> <p>2. Planning instructions to CARs.</p> <p>3. Feasibility studies.</p> <p>4. Small Infrastructure Packages.</p> <p>E. Small Farmer Consumption Improvement</p> <p>1. Distribution of plant materials (nutrition packages) as part of Intensive Program.</p> <p>2. Distribution of plant materials (nutrition packages) as part of Extensive Program.</p>	<p>Magnitude of Outputs:</p> <p>1. Centro-Sur-Oriental office by June 1980 Nor-Occidental office by June 1980 Litoral Atlántico office by Sept. 1980 Sur office by June 1983 Oriental office by June 1983</p> <p>2. 16 additional credit specialists, 57 vehicles and office equipment will be furnished by 1981.</p> <p>3. 44 vehicles and office equipment furnished to BNF agencies in Tocoa, San Pedro Sula, El Progreso, La Ceiba and Choluteca.</p> <p>4. By Dec., 1980.</p> <p>5. By March, 1981</p> <p>1. By Nov. 1979 to Centro Occidental and Centro Oriental.</p> <p>2. By Dec. 1979.</p> <p>3. By Dec. 1980.</p> <p>4. 16 between 1981-1983.</p> <p>1. Packages to: 1980 1981 1982 1983 Total Reform farms 600 720 840 1040 3200 Non-reform farms 150 180 210 260 800 750 900 1050 1300 4000</p> <p>2. Packages to: 1980 1981 1982 1983 Total Reform Farms 1125 1350 1575 1950 6000 Non-Reform Farms 2625 3150 3675 4550 14000 3750 4500 5250 6500 20000</p>		<p>Assumptions for achieving outputs:</p>

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ANNEX C

Page 1 of 9

DRAFT PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

PART II

Name of Country: HONDURAS

Name of Project: Agriculture Sector
II Program

No. of Project: 522-0150

Pursuant to Part I, Chapter I, Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a Loan and a Grant to the Republic of Honduras the "Cooperating Country" of not to exceed Twenty Five Million United States Dollars (\$25,000,000) the ("Authorized Amount") to help in financing certain foreign exchange and local currency costs of goods and services required for the project as described in the following paragraph.

The project consists of human resource training and institutional development and improvement to build the expertise and organizational structure in the cooperating country to adequately analyze, plan, and implement agricultural projects impacting on the rural poor (hereinafter referred to as the "Project"). Of the Authorized

UNCLASSIFIED

ANNEX C

Page 2 of 9

Amount, Twenty-One Million Dollars ("Loan") will be lent to the Cooperating Country to assist in financing certain foreign exchange and local currency costs of goods and services required for the Project. The entire amount of the A.I.D. financing herein authorized for the Project will be obligated when the Project Agreement is executed.

I hereby authorize the initiation of negotiation and execution of the Project Agreement by the Officer to whom such authority has been delegated in accordance with A.I.D. regulations and Delegations of Authority subject to the following essential terms and covenants and major conditions; together with such other terms and conditions as A.I.D. may deem appropriate.

a. Interest Rate and Terms of Payment

The Cooperating Country shall repay the Loan to A.I.D. in United States Dollars within forty (40) years from the date of first disbursement of the Loan, including a grace period of not to exceed ten (10) years. The Cooperating Country shall pay to A.I.D. in United States Dollars interest from the date of first disbursement of the Loan at the rate of (a) two percent (2%) per

annum during the first ten (10) years, and (b) three percent (3%) per annum thereafter, on the outstanding disbursed balance of the Loan and on any due and unpaid interest accrued thereon.

b. Source and Origin of Goods and Services

Goods and services, *except for ocean shipping*, financed by A.I.D. under the Project shall have their source and origin in the Central American Common Market or in countries included in A.I.D. Geographic Code 941 except as A.I.D. may otherwise agree in writing. Ocean shipping financed under the Loan *shall be procured in the U.S. or the Central American Common Market, except as A.I.D. may otherwise agree in writing.*

c. Condition Precedent to Disbursement for Transportation Equipment

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the purchase of vehicles, motorcycles or trucks, Borrower/Grantee shall furnish, in form and substance satisfactory to A.I.D., a plan detailing the procedures for allocating and maintaining all transportation equipment to be procured under the Program.

d. Conditions Precedent to Disbursement for Participant Training and In-Service Training Activities

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance

Participant Training and In-Service Training Activities, Borrower/Grantee shall furnish in form and substance satisfactory to A.I.D.:

- (1) Evidence that the Committee for Scholarships and In-Service Training and its Technical Secretariat have been officially established, and
- (2) A staffing plan and budget for the first year of operation of said Technical Secretariat.

e. Conditions Precedent to Disbursement for the Atlantic Coast Regional University Center (CURLA) Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the CURLA Activity (other than for technical assistance and training), Borrower/Grantee shall furnish in form and substance satisfactory to A.I.D., a time-phased plan for:

- (1) The construction or remodeling of CURLA's physical plant pursuant to this Program Activity, and
- (2) The procurement of equipment to be used in connection with this Activity.

f. Conditions Precedent to Disbursement for the Information System Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the Information System Activity (other than for technical assistance

and training), Borrower/Grantee shall furnish in form and substance satisfactory to A.I.D.:

- (1) Evidence that the Department of Agricultural and Rural Surveys has been officially established within the General Directorate of Statistics and Census, and
- (2) A staffing plan and budget for the first year of operation of the Department of Agricultural and Rural Statistics.

g. Conditions Precedent to Disbursement for the Marketing Analysis System Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the Marketing Analysis System Activity (other than for technical assistance and training), Borrower/Grantee shall furnish in form and substance satisfactory to A.I.D.:

- (1) Evidence that the Marketing Research and Analysis Department has been officially established within the Honduran Agricultural Marketing Institute, and
- (2) A staffing plan and budget for the first year of operation of the Marketing Research and Analysis Department.

h. Conditions Precedent to Disbursement for the Service Cooperatives Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the Service Cooperatives Activity (other than for technical assistance and training), Borrower/Grantee shall furnish in form and substance satisfactory to A.I.D.:

- (1) Evidence that a unit has been officially established within the Directorate for Cooperative Development to administer this Activity on a full-time basis, and
- (2) A staffing plan and budget for the first year of operation of this administrative unit.

Upon satisfactory compliance with the conditions (1) and (2) above, prior to the funding of each service cooperative under this Activity, the Borrower/Grantee shall furnish in form and substance satisfactory to A.I.D. an economic/financial feasibility study of such individual service cooperative to be financed.

i. Conditions Precedent to Disbursement for the National Development Bank Regionalization Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the National Development Bank Regionalization Activity (other than for technical assistance and training), Borrower/Grantee shall furnish in form and substance satisfactory to A.I.D., evidence

that a new law setting up a Bank for agricultural lending has been promulgated for the National Development Bank.

j. Condition Precedent to Disbursement for the Zonal Infrastructure Packages Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the Zonal Infrastructure Packages Activity, Borrower/Grantee shall furnish in form and substance satisfactory to A.I.D.:

- (1) A description of the criteria used in selecting each infrastructure package and its beneficiaries, and
- (2) A plan setting forth the administrative, procedural and financial arrangements for implementing zonal agricultural development plans and related infrastructure packages.

k. Conditions Precedent for the Small Farmer Consumption Improvement Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the Small Farmer Consumption Improvement Activity (other than for technical assistance), Borrower/Grantee shall furnish in form and substance satisfactory to A.I.D.:

- (1) Evidence that an administrative unit has been established within the Ministry of Natural

Resources to coordinate the implementation of the Activity, and

- (2) A detailed time-phased implementation plan covering actions to be effected during the first two years of the Activity's execution period.

1. Conditions Precedent to Disbursement after April 1, 1982

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant after April 1, 1982, Borrower/Grantee shall furnish in form and substance satisfactory to A.I.D.:

- (1) An evaluation, conducted by the Program Administration and Coordination Unit of the Ministry of Natural Resources, of activities effected during the previous two years pursuant to the Program, and
- (2) The Borrower/Grantee and A.I.D. shall have jointly programmed in writing the manner in which the Loan/Grant funds will be used during the subsequent Loan Grant disbursement period under the Program.

m. Special Covenants

The Borrower/Grantee shall covenant as follows:

- (1) To establish additional economic incentives for Extension Service personnel stationed in rural areas of Honduras;

- (2) That the effect of the Program upon the natural environment will be taken into consideration prior to and during the implementation of the Program, in order to minimize any potentially harmful effects upon the natural environment;
- (3) To provide production and investment credits to the Sub-Regional Service Cooperatives established pursuant to the Program based on appropriate studies and reasonable repayment prospects;
- (4) To continue the Small Farmer Consumption Improvement Activity for an additional four year period beyond the completion of the Activity's implementation under the Program at approximately the same level of effort achieved during the implementation period of this Program Activity, except as A.I.D. may otherwise agree in writing.

n. The following waiver of A.I.D. regulations is hereby approved: the purchase of off-the-road motorcycles from A.I.D. Geographic Code 935 Countries in an amount not to exceed US \$ 75,000.

Dated: _____

ABELARDO LOPEZ VALDEZ AA/LAC

COUNTRY CHECKLIST

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FAA Sec. 116. Can it be demonstrated that contemplated assistance will directly benefit the needy? If not, has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights?
2. FAA Sec. 431. Has it been determined that the government of recipient country has failed to take adequate steps to prevent narcotics 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?
3. FAA Sec. 620(b). If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement?
4. FAA Sec. 620(c). If assistance is to a 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?
5. FAA Sec. 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?
6. FAA Sec. 620(a), 620(f); 22 U.S.C. 1431, 1432 and 1435. Is recipient country a Communist country? Will assistance be provided to the Socialist Republic of Vietnam, Cambodia, Laos, Cuba, Uganda, Mozambique, or Angola?
7. FAA Sec. 620(g). 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?

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. The Project Paper demonstrates that the assistance will directly benefit the needy.
2. No such determination has been made.
3. The Secretary of State has determined that Honduras is not controlled by the international Communist movement.
4. A.I.D. knows of no such cases.
5. There is no evidence of such action.
6. Honduras is not a Communist country. Assistance will not be provided to any of the countries indicated.
7. A.I.D. has no evidence of any subversion or aggression or of plans for such action.

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8. FAA Sec. 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?
8. In the past there have been incidents where the GOH has been unsuccessful in containing demonstrations aimed at the U.S. Embassy. This has not been the case for many years.
9. FAA Sec. 620(l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, inconvertibility or confiscation, has the AID Administrator within the past year considered denying assistance to such government for this reason?
9. The OPIC Investment Guaranty Program is in operation in Honduras.
10. FAA Sec. 620(o); Fishermen's Protective Act of 1907, as amended, Sec. 5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters,
10. Honduras has not seized or imposed any penalties or sanctions against U.S. vessels because of their activities in international waters during recent years.
- a. has any deduction required by the Fishermen's Protective Act been made?
- b. has complete denial of assistance been considered by AID Administrator?
11. FAA Sec. 620; FY 79 App. Act Sec. 603. (a) Is the government of the recipient country in default for more than six months on interest or principal of any AID loan to the country? (b) Is country in default exceeding one year on interest or principal on U.S. loan under program for which App. Act appropriates funds?
11. (a) No.
11. (b) No.
12. FAA Sec. 620(s). If contemplated assistance is development loan or from Economic Support Fund, has the Administrator taken into account the percentage of the country's budget which is for military expenditures, the amount of foreign exchange spent on military equipment and the amount spent for the purchase of sophisticated weapon systems? (An affirmative answer may refer to the record of the annual "Taking Into Consideration" memo: "yes, as reported in annual report on implementation of Sec. 620(s)." This report is prepared at time of approval by the Administrator of the Operational Year Budget and can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)
12. Yes.
13. FAA Sec. 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?
13. No.
14. FAA Sec. 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 AID Administrator in determining the current AID Operational Year Budget?
14. Honduras is not in arrears to the extent described in Article 19 of the U.N. Charter.

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15. FAA Sec. 620A, FY 79 App. Act, Sec. 607. Has the country granted sanctuary from prosecution to any individual or group which has committed an act of international terrorism? 15. No.
16. FAA Sec. 666. Does the country object, on basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. there to carry out economic development program under FAA? 16. No.
17. FAA Sec. 669, 670. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? Has it detonated a nuclear device after August 3, 1977, although not a "nuclear-weapon State" under the nonproliferation treaty? 17. No.

B. FUNDING CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria.

- a. FAA Sec. 102(b) (4). Have criteria been established and taken into account to assess commitment progress of country in effectively involving the poor in development, on such indexes as: (1) increase in agricultural productivity through small-farm labor intensive agriculture, (2) reduced infant mortality, (3) control of population growth, (4) equality of income distribution, (5) reduction of unemployment, and (6) increased literacy.

- b. FAA Sec. 104(d)(1). If appropriate, is this development (including Sahel) activity designed to build motivation for smaller families through modification of economic and social conditions supportive of the desire for large families in programs such as education in and out of school, nutrition, disease control, maternal and child health services, agricultural production, rural development, and assistance to urban poor?

2. Economic Support Fund Country Criteria.

- a. FAA Sec. 502B. Has the country engaged in a consistent pattern of gross violations of internationally recognized human rights?
- b. FAA Sec. 533(b). Will assistance under the Southern Africa program be provided to Mozambique, Angola, Tanzania, or Zambia? If so, has President determined (and reported to the Congress) that such assistance will further U.S. foreign policy interests?
- c. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have

B. FUNDING CRITERIA FOR COUNTRY ELIGIBILITY

- 1.a. Criteria for assessing progress in involving the poor in development have been set through sector and sub-sector assessments in agriculture, education, and nutrition, and will be set through urban-regional and health sector assessments planned in the near future.

- 1.b. Over the long-term, improved economic conditions for rural poor, promoted by development assistance programs such as this one, are expected to impact positively on reductions in family size.

2.a. No.

2.b. Not applicable.

2.c. Not applicable.

Special Account (counterpart)
arrangements been made?

- d. FY 79 App. Act Sec. 113. Will assistance be provided for the purpose of aiding directly the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights?
- e. FAA Sec. 620B. Will security supporting assistance be furnished to Argentina after September 30, 1978?

2.d. No.

2.e. Not applicable.

PROJECT CHECKLIST

A. GENERAL CRITERIA FOR PROJECT.

1. FY 1979 App. Act Unnumbered; FAA Sec. 653(b); Sec. 634A
 - (a) Describe how Committees on Appropriations of Senate and House have been or will be notified concerning the project;
 - (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that figure).
2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,000, 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 U.S. of the assistance?
3. FAA Sec. 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 the assistance?
4. FAA Sec. 611(b); FY 79 App. Act Sec. 101. If for water or water-related land resource construction, has project met the standards and criteria as per the Principles and Standards for Planning Water and Related Land Resources dated October 25, 1973?
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?
6. FAA Sec. 209. Is project susceptible of execution as part of regional or multilateral project? if so why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.
7. FAA Sec. 601(a). Information and conclusions whether project 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

A. GENERAL CRITERIA FOR PROJECT.

1. A Congressional Notification will be transmitted by A.I.D. to the Congress indicating funding requirements for this assistance program.
2. Yes.
3. While some elements of the proposed assistance program will require further actions of a legislative nature, such actions have been agreed to in principle by key GOH officials and will be stipulated, as appropriate, in the Project Agreement.
4. Not applicable.
5. Yes.
6. The program is not suitable for execution as part of a regional or multilateral project.
7. The program will: (a) increase imports of goods and services from the U.S. and other Code 941 countries; (b) foster the development of individual and group farmsteads; (c) promote the establishment and growth of farm services and production cooperatives; (d) encourage competitive business structures through use of competitive bidding procedures; and (e)

and commerce; and (f) strengthen free labor unions.

stimulate the use of appropriate farm technology.

8. FAA Sec. 601(b). Information and conclusion on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

9. A significant portion of A.I.D. assistance will be used to import goods and services from the U.S. and other eligible countries.

9. FAA Sec. 612(b); Sec. 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 U.S. are utilized to meet the cost of contractual and other services.

9. The GOH has agreed to contribute substantial counterpart funding for services and other program costs.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency and, if so, what arrangements have been made for its release?

10. The U.S. does not own such excess currency.

11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

11. Yes.

12. FY 79 App. Act Sec. 608. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

12. Assistance under this program is not directed at promoting commodities for export.

B. FUNDING CRITERIA FOR PROJECT

B. FUNDING CRITERIA FOR PROJECT.

1. Development Assistance Project Criteria

a. FAA Sec. 102(b); 111; 113; 291a. Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

1.a. The program's central focus seeks to promote the participation of the rural poor in the benefits of development through a range of policy, institution and self-help mechanisms, with appropriate assistance from U.S. and other institutions. (b) The establishment and strengthening of both services and production cooperatives will be fostered by the proposed program. (c) The program, in large measure, is designed to assist those elements of the rural poor farming class prepared to help themselves achieve improved living standards. (d) Several elements of the program promote the status and participation of women in the national economy. (e) It is expected that many of the participants funded under the program will receive training at Central American educational institutions.

b. FAA Sec. 103, 103A, 104, 105, 106, 107. Is assistance being made available: (include only applicable paragraph which corresponds to source of funds used. If

1.b. (103) The program's objective is to increase the productivity and income of the rural poor farming class and the

more than one fund source is used for project, include relevant paragraph for each fund source).

program's various components support this objective both directly and indirectly.

- (1) [103] for agriculture, rural development or nutrition; if so, extent to which activity is specifically designed to increase productivity and income of rural poor; [103A] if for agricultural research, is full account taken of needs of small farmers;
- (2) [104] for population planning under Sec. 104(b) or health under Sec. 104(c); if so, extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems and other modes of community research.
- (3) [105] for education, public administration, or human resources development; if so, extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, or strengthens management capability of institutions enabling the poor to participate in development;
- (4) [106] for technical assistance, energy, research, reconstruction, and selected development problems; if so, extent activity is:
 - (i) technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations;
 - (ii) to help alleviate energy problems;
 - (iii) research into, and evaluation of, economic development processes and techniques;
 - (iv) reconstruction after natural or manmade disaster;
 - (v) for special development problem, and to enable proper utilization of earlier U.S. infrastructure, etc., assistance;
 - (vi) for programs of urban development, especially small labor-intensive enterprises, marketing systems, and financial or other institutions to help urban poor participate in economic and social development.

c. [107] is appropriate effort placed on use of appropriate technology?

d. FAA Sec. 110(a) Will the recipient country provide at least 25% of the costs

l.c. Appropriate technology concepts will be introduced to both Government technicians working in the agriculture sector and rural farm families participating in various activities under the program and related ones.

of the program, project, or activity with respect to which the assistance is to be furnished (or has the latter cost-sharing requirement been waived for a "relatively least-developed" country)?

e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"?

f. FAA Sec. 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 civil education and training in skills required for effective participation in governmental and political processes essential to self-government.

g. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

2. Development Assistance Project Criteria (Loans Only)

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan, including reasonableness of repayment prospects.

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete in the U.S. with U.S. enterprise, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

3. Project Criteria Solely for Economic Support Fund

a. FAA Sec. 531(a). Will this assistance support promote economic or political stability? To the extent possible, does it reflect the policy directions of section 102?

b. FAA Sec. 533. Will assistance under this chapter be used for military, or paramilitary activities?

1.d. The recipient country will provide at least 25% of the program's costs, and such contribution will be reflected in the Project Agreement.

1.e. No.

1.f. The program is based on a comprehensive agriculture sector assessment which examined sectoral needs and local capacities to meet those needs. All of the program's activities will draw upon Honduras talent to establish, improve or expand institutional mechanisms supportive of agricultural development objectives bearing on the rural poor.

1.g. The program will establish a stronger basis for securing more optimal utilization of production factors in the agricultural sector.

2.a. It is reasonably certain that the GOH will be able to repay the loan. The proposed loan is legal under Honduran and U.S. law and the proposed terms are reasonable for Honduras.

2.b. The assistance is not being provided to an enterprise which will compete in the U. S. with U. S. enterprise.

3.a. Yes.

3.b. Not applicable.

STANDARD ITEM CHECKLISTA. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small businesses to participate equitably in the furnishing of goods and services financed?
2. FAA Sec. 604 (a). Will all commodity procurement financed be from the U. S. except as otherwise determined by the President or under delegation from him?
3. FAA Sec. 604 (d). If the cooperating country discriminates against U. S. marine insurance companies, will agreement require that marine insurance be placed in the U. S. on commodities financed?
4. FAA Sec. 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?
5. FAA Sec. 608 (a). Will U.S. Government excess personal property be utilized wherever practicable in lieu of the procurement of new items?
6. FAA Sec. 603. (a) Compliance with requirement in section 901 (b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.
7. FAA Sec. 611. If technical assistance is financed, will such assistance 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, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

A. Procurement

1. Yes.
2. Yes.
3. Yes.
4. No such procurement is contemplated.
5. Yes.
6. The project agreement will provide for compliance with this requirement.
7. Technical assistance to be financed under the program will be furnished to the fullest extent practicable by private organizations or individuals.

8. International Air Transport. Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will provision be made that U. S.-flag carriers will be utilized to the extent such service is available?

8. Yes.

9. FY 79 App. Act. Sec. 105. Does the contract for procurement contain a provision authorizing the termination of such contract for the convenience of the United States?

9. Yes.

B. Construction

B. Construction

1. FAA Sec. 601 (d). If a capital (e.g., construction) project, are engineering and professional services of U. S. firms and their affiliates to be used to the maximum extent consistent with the national interest?

1. Yes.

2. FAA Sec. 511 (c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

2. Yes.

3. FAA Sec. 620 (k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U. S. not exceed \$100 million?

3. Not applicable.

C. Other Restrictions

C. Other Restrictions

1. FAA Sec. 122 (e). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter?

1. Yes.

2. FAA Sec. 301 (4). If fund is established solely by U. S. contributions and administered by an international organization, does Comptroller General have audit rights?

2. No international organization will have administrative responsibilities under this program.

3. FAA Sec. 620 (h). Do arrangements preclude promoting or assisting the foreign aid projects or activities of Communist-bloc countries, contrary to the best interests of the U. S.?

3. Yes.

4. FAA Sec. 576 (i). Is financing not permitted to be used, without waiver, for purchase, long-term lease, or exchange of motor vehicle manufactured outside the U. S., or guaranty of such

4. Yes.

transaction?

5. Will arrangements preclude use of financing:

a. FAA Sec. 104 (f). To pay for performance of abortions or to motivate or coerce persons to practice abortions, to pay for performance of involuntary sterilization, or to coerce or provide financial incentive to any person to undergo sterilization?

b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property?

c. FAA Sec. 660. To finance police training or other law enforcement assistance, except for narcotics programs?

d. FAA Sec. 662. For CIA activities?

e. FY 79 App. Act Sec. 104. To pay pensions, etc., for military personnel?

f. FY 79 App. Act. Sec 106. To pay U.N. assessments?

g. FY 79 App. Act. Sec. 107. To carry out provisions of FAA sections 209 (d) and 251 (h)? (Transfer of FAA funds to multilateral organizations for lending.)

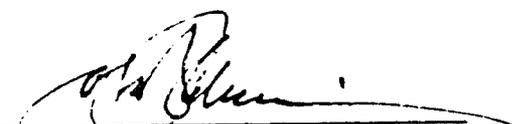
h. FY 79 App. Act. Sec. 112. To finance the export of nuclear equipment, fuel, or technology or to train foreign nations in nuclear fields?

i. FY 79 App. Act Sec 501. To be used for publicity or propaganda purposes within U. S. not authorized by Congress?

5. The project agreement will provide for specific use of A.I.D. funds for agreed upon purposes and thus preclude allocation of such funds for the purposes covered by the legislation cited in items 5.a. through 5.i.

Certification Pursuant to Section 611(e) of the Foreign
Assistance Act of 1961, as Amended

I, John B. Robinson, the principal officer of the Agency for International Development in Honduras, having taken into account, among other factors, the maintenance and utilization of projects in Honduras previously financed or assisted by the United States, do hereby certify that in my judgment Honduras has the financial and human resources capabilities to effectively maintain and utilize the capital assistance project: Agriculture Sector II Program.



John B. Robinson
Director, USAID/Honduras

June 6, 1979

Date

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Department of State

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ANNEX F
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TION. HOWEVER, COMPLEXITY INHERENT IN MISSION'S SYSTEMS APPROACH RAISES QUESTIONS REGARDING WHAT IS FEASIBLE AND WORKABLE IN HONDURAS. ACCORDINGLY, TO DEMONSTRATE FEASIBILITY OF CARRYING OUT PROPOSED SECTOR PROGRAM, PP SHOULD LAY OUT PRELIMINARY PLAN OF WHAT IS TO BE DONE AND HOW, EVIDENCING THAT THE PROTECTIVE ELEMENTS HAVE BEEN THOUGHT THROUGH WITH THE HONDURANS AND THAT THE PROSPECTS FOR THEIR TIMELY IMPLEMENTATION ARE GOOD. FINAL REFINED IMPLEMENTATION PLAN WOULD PRESUMABLY BE PREPARED BY BORROWER AS A

CP TO DISBURSEMENT.) IN THE CASE OF THE ZONAL SERVICE CENTERS WE EXPECT THE PP TO REFLECT AGREEMENT WITH GON ON ADMINISTRATIVE ARRANGEMENTS--I.E., WHERE ADMINISTRATIVE UNIT(S) WILL BE LOCATED, BUDGET AND PERSONNEL REQUIRED, AND OPERATING PROCEDURES. HOWEVER, SINCE ONE OF THE OBJECTIVES OF THIS ACTIVITY IS TO TEST VARIOUS DELIVERY SYSTEM MODELS, WE WOULD NOT EXPECT PP TO SPECIFY THE PRECISE MODEL TO BE SELECTED, ALTHOUGH IT SHOULD DESCRIBE ALTERNATIVES TO BE TESTED AND SHOW BASIS OF COST ESTIMATES FOR THIS COMPONENT. PP SHOULD ALSO SPECIFY CRITERIA TO BE USED IN SELECTING SERVICE CENTER SITES. SIMILARLY, WITH REGARD TO ZONAL INFRASTRUCTURE PACKAGES, WE DO NOT EXPECT THE SPECIFIC ZONES AND SUBPROJECTS TO BE IDENTIFIED IN PP, BUT DO EXPECT PP TO DESCRIBE FINANCIAL ARRANGEMENTS FOR INFRASTRUCTURE PROJECTS, CRITERIA FOR SELECTION OF ZONES AND SUBPROJECTS, AND THE DEMAND ANALYSIS FOR PROPOSED SUBPROJECTS WHICH UNDERGIRD FUNDING ALLOCATED TO THIS COMPONENT.

-- (D) PROJECT MANAGEMENT: WE AGAIN AGREE WITH THE MISSION'S DESIRE TO ELIMINATE BUREAUCRATIC BOTTLENECKS, AND ENDORSE YOUR EFFORTS TO DEVELOP INNOVATIVE PROCEDURES TO ACCELERATE PROJECT IMPLEMENTATION. HOWEVER, IN ORDER TO ENSURE THAT PROPOSED ADMINISTRATIVE PROCEDURES ARE CONSISTENT WITH AID REGULATIONS, THE PP SHOULD CLEARLY SPELL OUT THE SYSTEMS AND PROCEDURES TO BE USED. FINAL DECISIONS ON FINANCIAL ADMINISTRATION AND IMPLEMENTATION PROCEDURES WILL BE MADE DURING REVIEW OF THE PP.

ALTHOUGH RECOGNIZING THAT A SPECIAL IMPLEMENTATION UNIT WOULD PROBABLY FACILITATE THE ADMINISTRATION OF AID AGRICULTURAL PROJECTS, THERE WAS CONCERN THAT CREATION OF THIS UNIT IS NOT ENTIRELY COMPATIBLE WITH THE INSTITUTIONAL OBJECTIVES OF AG SECTOR II. THEREFORE, WE SUGGEST THAT THE UNIT BE DESIGNED AND USED TO DEMONSTRATE IMPROVED ADMINISTRATIVE PROCEDURES WHICH CAN BE ADOPTED OVER TIME BY THE GON FOR MORE GENERAL USE. IN ORDER TO CLARIFY PROJECT MANAGEMENT IN GENERAL, THE PP SHOULD DESCRIBE IN SOME DETAIL THE FUNCTIONS AND EXPECTED LIFE OF THE SPECIAL UNIT.

(E) AGRARIAN REFORM: IN DESCRIBING THE PROBLEMS HONDURAS HAS IN IMPLEMENTING ITS AGRARIAN REFORM PROGRAM, THE ASSESSMENT AND IR EMPHASIZE THE INADEQUATE DELIVERY OF SERVICES TO REFORM SETTLEMENTS. DURING THE DAEC REVIEW, THE BASIC VIABILITY OF THE GROUP FARMING APPROACH TO AGRARIAN REFORM WAS ALSO QUESTIONED. THEREFORE IN PROPOSING ASSISTANCE TO THE AGRARIAN REFORM SUBSECTOR, THE PP WILL NEED TO LOOK AT THE VIABILITY OF GROUP FARMING AND AT THE VARIOUS CONSTRAINTS--INCLUDING

PSYCHOLOGICAL FACTORS--LIMITING ITS SUCCESS. GIVEN THESE CONCERNS, THE MISSION SHOULD ALSO EXAMINE WHETHER LOAN OR GRANT FUNDING IS MORE APPROPRIATE FOR THE AGRARIAN REFORM SERVICE CENTERS COMPONENT OF THE PROJECT.

-- (F) ECONOMIC ANALYSIS: BECAUSE OF THE INSTITUTIONAL DEVELOPMENT NATURE OF THE PROJECT, IT WILL BE DIFFICULT TO DETERMINE THE ECONOMIC VIABILITY OF PROJECT ELEMENTS. THEREFORE, PER DISCUSSIONS WITH JANSSEN, DR' ECONOMIC ANALYSIS DIVISION IS READY TO ASSIST THE

MISSION IN DEVELOPING A METHODOLOGY FOR THE REQUIRED ANALYSIS.

-- (G) TITLE XII: DURING INTENSIVE REVIEW THE MISSION SHOULD LOOK CAREFULLY AT THE POTENTIAL TA ROLE OF TITLE XII INSTITUTIONS IN PROJECT IMPLEMENTATION, AND DISCUSS THE APPROPRIATENESS OF SUCH ASSISTANCE WITH GON OFFICIALS. YOUR CONCLUSIONS ON THE POTENTIAL ROLE OF TITLE XII SHOULD BE INCLUDED IN THE PP. IF AREAS OF ASSISTANCE ARE IDENTIFIED, WE WILL ASSIST WITH FORMAL TITLE XII ARRANGEMENTS.

4. DUE TO A TIGHT FY 79 BUDGET, WE CAN BE ASSURED OF NO MORE THAN DOLS. 10 MILLION LOAN AND DOLS. 1 MILLION GRANT THIS YEAR FOR AG SECTOR II. BECAUSE OF THE EXTREME COMPLEXITY OF THE PROJECT AND CONCERN THAT ALL PROPOSED ACTIVITIES CANNOT BE IMPLEMENTED SIMULTANEOUSLY BY HONDURAN INSTITUTIONS, WE PROPOSE THAT THE AG SECTOR II PROGRAM BE PHASED IN TWO YEAR TRANCHES: DOLS. 11 MILLION IN FY 79 AND THE BALANCE IN FY 81. IN THIS CASE, THE PP WOULD COVER THE ENTIRE FOUR YEAR IMPLEMENTATION PERIOD AND DESCRIBE THE OVERALL SYSTEMS APPROACH TO BE FOLLOWED, ALTHOUGH IT WOULD EMPHASIZE AND INCLUDE MORE DETAILED PRE-PROJECT PLANNING FOR ACTIVITIES PROPOSED FOR IMPLEMENTATION IN THE FIRST TWO YEARS. AFTER 1 TO 2 YEARS, AND FOLLOWING EVALUATION OF THE PROGRAM, THE MISSION WOULD SUBMIT A PP AMENDMENT DETAILING ACTIVITIES TO BE IMPLEMENTED DURING THE SECOND PART OF THE PROJECT. IN PREPARING THE ADD-ON, THE MISSION SHOULD TAKE ADVANTAGE OF EVALUATION RESULTS AND, AS REQUIRED, REALLOCATE FUNDS AMONG COMPONENTS, MODIFIED AS MAY BE APPROPRIATE.

IN DETERMINING ACTIVITIES FOR IMPLEMENTATION IN PHASE I, WE SUGGEST THAT THE MISSION ASSESS CAREFULLY THE INSTITUTIONAL CAPABILITIES OF THE GON AND INCLUDE NO MORE THAN THE GON CAN REALISTICALLY BE EXPECTED TO IMPLEMENT. IN LIGHT OF THE PAST DIFFICULTIES IN IMPLEMENTATION OF AID PROJECTS, YOU MIGHT WANT TO

INITIALLY EMPHASIZE INSTITUTION-BUILDING ACTIVITIES WHICH EXPAND GON CAPABILITIES. HOWEVER, REGARDLESS OF EVENTUAL TIME PHASING AND PACKAGING OF COMPONENTS, THE PP WILL NEED TO DEMONSTRATE THAT THE PROJECT IS MANAGEABLE AND THAT THERE WILL NOT BE EXCESSIVE DELAYS IN IMPLEMENTATION.

5. PER DISCUSSIONS WITH JANSSEN, WE ARE READY TO ASSIST THE MISSION IN PREPARING THE SECTOR ASSESSMENT SUPPLEMENT, AND IN DESIGNING AND PREPARING THE PP FOR AG SECTOR II. PLEASE ADVISE IF ASSISTANCE NEEDED. CHRISTOPHER

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H.1. ECONOMIC ANALYSIS

A. Economic Analysis for the Atlantic Coast Regional University Center (CURLA) Activity

The 1978 Sector Assessment found that a lack of properly trained and oriented personnel is probably the most serious limiting factor in improving the situation of A.I.D.'s target groups. The assessment went on to point out that assistance to CURLA would be desirable because CURLA's physical plant is inadequate for the level of graduates it was intended to produce. Consequently, present operating circumstances do not allow CURLA to provide graduates with the practical education needed when they take their positions as planners, administrators and implementators of future agricultural development programs. This Activity is designed to improve the present situation by providing budgetary support for upgrading CURLA's physical facilities and providing additional training for CURLA's faculty.

It is anticipated that the primary benefit for this Activity will be an improvement in the quality of education offered at CURLA, although it is recognized that the Activity will also permit increases in enrollments. Given that improved quality of education is the primary benefit, the economic analysis will demonstrate that the proposed assistance to CURLA is a cost effective means of improving the quality of agronomists, foresters, and other agricultural professionals needed in years to come.

The fact that CURLA has been in existence since 1968, and that it is the official agricultural campus of the National University of Honduras, places some parameters on alternatives to the plan for improving CURLA. Any alternative which calls for a change in CURLA's mission, i.e., to provide university level training for agricultural professionals, might well be politically unacceptable. Consequently, all alternatives to the proposed plan would have to include CURLA in one way or another. Given this constraint, the present analysis compares three alternatives which would improve the quality of agricultural graduates.

The first alternative is to up-grade CURLA's five-year program of study as specified in the Activity Report, "Development of the Atlantic Coast Regional University Center (CURLA)". This alternative calls for substantial budgetary increases in 1980-83 and a leveling off of constant dollar expenditures after 1983.

The second alternative calls for a leveling off of CURLA (constant dollar) expenditures at the 1980 level and sending limited numbers of qualified students abroad for two years to finish their undergraduate work (B.S. or Licenciado degrees). The number of scholarship recipients to be sent abroad would be equal to the difference between the number of graduates CURLA was projected to produce and the number of graduates man-power projections identify as being necessary to assure an adequate supply of agricultural professionals. Two disadvantages for this second alternative are that it does not really propose actions which would

improve the quality of CURLA graduates, and it stipulates that CURLA enrollments would not be allowed to increase above 1979 levels. Restricting enrollments probably would, however, provide some protection against declines in the quality of CURLA graduates caused by an additional over-supply of students vis-a-vis faculty and physical facilities.

The third alternative calls for CURLA to limit the scope of its educational program for the next ten (or perhaps more) years and concentrate on developing a quality three-year program of study instead of the present five-year program. It seems likely that present facilities and faculty would be adequate to provide for the first three years of university training without large increases in budgetary support because all fourth and fifth year courses would be phased out during the period 1980-82, which would allow existing resources to be redirected to the improved three-year program. A precedent for a high quality three-year program exists in Honduras because this is the type of program offered by the Panamerican Agricultural School (EAP) at Zamorano. Under this alternative, the total requirements for agricultural professionals with five years of university training would be met by providing two year scholarships to qualified students who would be sent abroad to finish their undergraduate work (Licenciado or B.S. degree). As in Alternative Two, the number of scholarship recipients to be trained abroad would be determined from analyses of manpower projections for the agricultural sector.

A cost effectiveness comparison of these three alternatives has been prepared in Table 1. Table 1 shows that Alternative One is a cost effective means of improving the quality of agricultural graduates. In addition, projections for number of graduates and costs/graduate (Table 2) indicate that after 1987, Alternative One will turn out more graduates at a lower cost per graduate than either of the other two alternatives.^{1/} These extra graduates projected for Alternative One are regarded as an important additional benefit.

^{1/} The other two alternatives were designed to produce only the minimum number of agricultural professionals required for agricultural development programs.

TABLE 1

COST EFFECTIVENESS ANALYSIS FOR CURLA ^{1/}

YEAR	ALTERNATIVE ONE: IMPROVE FIVE-YEAR PROGRAM AT CURLA		ALTERNATIVE TWO: MAINTAIN CURRENT CURLA AT PRESENT ENROLLMENT AND BUDGETARY SUPPORT LEVELS AND TRAIN ADDITIONAL GRADUATES ABROAD				ALTERNATIVE THREE: IMPROVE THE THREE YEAR PROGRAM AT CURLA AND SEND STUDENTS ABROAD FOR THE LAST TWO YEARS			
	Estimated Costs for Alternative One ^{2/}	Present Value of Estimated Costs for Alternative One ^{3/}	Estimated Costs of Program at CURLA ^{4/}	Estimated Costs of Foreign Training ^{5/}	Estimated Total Cost for Alternative Two	Present Value of Estimated Total Costs for Alternative Two ^{3/}	Estimated Cost of Three-Year Program at CURLA ^{4/}	Estimated Costs of Foreign Training ^{5/}	Estimated Total Cost for Alternative Three	Present Value of Estimated Total Costs for Alternative Three ^{3/}
1980	4184.3	4184.3	1428.2	2052.0	3480.2	3480.2	1428.2	2754.0	4182.2	4182.2
1981	2777.6	2480.1	1428.2	1494.0	2922.2	2609.2	1428.2	2754.0	4182.2	3734.3
1982	2479.5	1976.7	1428.2	1422.0	2850.2	2272.2	1428.2	2808.0	4236.2	3377.1
1983	2331.8	1659.8	1428.2	1278.0	2706.2	1926.3	1428.2	2862.0	4290.2	3053.8
1984	2331.8	1481.9	1428.2	1332.0	2760.2	1754.1	1428.2	2916.0	4344.2	2760.7
1985	2331.8	1323.1	1428.2	1404.0	2832.2	1607.0	1428.2	2988.0	4416.2	2505.8
1986	2331.8	1181.3	1428.2	1458.0	2886.2	1462.1	1428.2	3042.0	4470.2	2264.6
1987	2331.8	1054.7	1428.2	1512.0	2946.2	1329.9	1428.2	3096.0	4524.2	2046.3
1988	2331.8	941.7	1428.2	1584.0	3012.2	1216.7	1428.2	3168.0	4596.2	1856.4
1989	2331.8	840.8	1428.2	1638.0	3066.2	1105.7	1428.2	3222.0	4650.2	1676.9
Totals		17124.4				18763.4				27458.1

^{1/} All cost estimates are presented in thousands of constant, 1980, U.S. dollars.

^{2/} Costs for 1980-83 from the CURLA Budget have been converted to constant 1980 dollars. It is assumed that real costs for 1983-89 will remain constant.

^{3/} A 12% discount rate was used to calculate present value.

^{4/} Projections of past budgeting data suggest that CURLA's budget in absence of this project would have been approximately \$1,428,200. Under Alternative Two, this budget for training at CURLA is assumed to remain constant because additional education funds would be used to send graduates abroad. Under Alternative 3, it is assumed that this budget would be held constant, and that it would be sufficient to meet the budgeting demands of an improved three-year program. (in 1979 this amount covered the costs of CURLA's five year program).

^{5/} Foreign training costs are the product of an \$18,000/student cost for two years training and an estimate of the number of students being sent for foreign training. The \$18,000 figure is taken from the participant training paper, as a recommended figure. The number of students being sent for foreign training is the number needed to meet manpower estimates of the number of agricultural graduates required for implementation of national development programs, and is taken from Appendix N of the Sector Assessment. See Table 2 for more information on graduate requirements and estimated numbers of graduates for each alternative.

TABLE 2

GRADUATE PROJECTIONS AND COST/GRADUATE ESTIMATES FOR EACH ALTERNATIVE

YEAR	ESTIMATED RE- QUIREMENTS FOR AGRICULTURAL GRADUATES NEEDED FOR DE- VELOPMENT PRO- GRAMS <u>1/</u>	ALTERNATIVE ONE		ALTERNATIVE TWO				ALTERNATIVE THREE			
		Projected Number of CURLA Gra- duates <u>2/</u>	Present Value of Costs Per Graduate (\$1000) <u>3/</u>	Projected Number of CURLA Graduates <u>4/</u>	Projected Number of Foreign Graduates <u>5/</u>	Projected Number of Total Graduates	Present Value of Cost Per Graduate (\$1000) <u>3/</u>	Projected Number of CURLA Graduates	Projected Number of Foreign Graduates <u>5/</u>	Projected Number of Total Graduates	Present Value of Costs Per Gra- duate (\$1000) <u>3/</u>
1980	153	25	167.4	25	0	25	139.2	25	0	25	167.3
1981	153	12	206.7	12	0	12	217.4	12	0	12	311.2
1982	153	39	50.7	39	114	153	14.9	0	153	153	22.1
1983	153	71	23.4	70	83	153	12.6	0	153	153	20.0
1984	156	78	19.0	77	79	156	11.2	0	156	156	17.7
1985	159	90	14.7	88	71	159	10.1	0	159	159	15.8
1986	162	118	10.0	88	74	162	9.0	0	162	162	14.0
1987	166	149	7.0	88	78	166	8.0	0	166	166	12.3
1988	169	185	5.0	88	81	169	7.2	0	169	169	11.0
1989	172	228	3.6	88	84	172	6.4	0	172	172	9.7
Total		995	507.5			1327	436.0	37	1290	1327	601.1
1980-89 Average Present Value Cost/Graduate			17.2				14.1				20.7
1987-89 Average Present Value Cost/Graduate			5.1				7.2				11.0

1/ These are the minimum number of graduates needed for projected agricultural development programs. The figures for 1980-83 are taken from Appendix N of the Sector Assessment. After 1983, it is assumed that the minimum number of agricultural graduates required for development programs will increase at a rate of 2% per year.

2/ CURLA graduate projections are based on historical data from CURLA. Normally it takes seven years to graduate, five years to finish course work and an average of two years to finish the thesis. Most students take jobs after their course work, and work on a thesis in their spare time.

3/ Present value data is taken from Table 1.

4/ Alternative two assumes that CURLA enrollments do not increase above 1979 levels and that graduates consequently level off after 1984.

5/ Foreign graduate projections are calculated as a residual by subtracting CURLA graduates from estimated requirements for graduates.

B. Economic Analysis For The Zonal Infrastructure Packages

The Zonal Infrastructure Packages Activity is divided into two elements: (1) Zones where irrigation can be included as part of the infrastructure package and (2) Zones where irrigation will not be included as part of the infrastructure package. The benefits which will accrue to the recipients of the infrastructure investments in roads, irrigation systems and crop storage will continue long after the implementation period under Sector Program II, and in order to validly assess the magnitude of these benefits a realistic time horizon must be adopted. It is assumed that a period of fifteen years would be sufficient to measure the effect of the activity, and also represents a reasonable time for depreciating the irrigation and storage facilities. In calculating the relative costs and benefits of the activity the following assumptions and information were used:

1. An interest rate of 12% was used to calculate the discounted present value of future costs and benefits.
2. When farmers use improved technology cropping systems, irrigated farmland yields a net return of \$187.50 / ha/yr, and non-irrigated land provides a net return of \$112.50/ha/year. The average net return for traditional systems is \$25.00/ha/year, and consequently the additional net return accruing to users of improved technology is \$162.50/ha/year on irrigated land, and \$87.50 on non-irrigated land.^{1/}
3. Irrigated zones each have a minimum of 500 cultivated has., of which 200 are irrigated and 300 are non-irrigated.^{2/}
4. Non-irrigated zones each have a minimum of 200 has. of cultivated land.^{2/}
5. There will be a total of 12 irrigated zones and 4 non-irrigated zones.^{2/}

The following table shows the gross and discounted costs and benefits of the activity over a 15 year period. Using a 12% discount rate, it is seen that the present value of costs and benefits for irrigated and non-irrigated zones are \$3,754,800, and \$4,781,200 respectively. The present value of total net benefits over this period is \$1,026,400, and the Benefit-Cost ratio is 1.27. The Internal Rate of Return is 19% for this activity.

^{1/} These figures represent average net returns. They are taken from the Activity Report, "Zonal Infrastructure Packages."

^{2/} These conditions will be used to help decide which zones will be selected for infrastructure assistance. They are taken from the Activity Report, "Zonal Infrastructure Packages."

TABLE 3: COSTS AND BENEFITS FOR INFRASTRUCTURE INVESTMENTS (1000 US\$)

YEAR	COSTS a/	PRESENT VALUE OF COSTS b/	Number of Hectares Effected in Irrigated Zones			Benefits in Irrigated Zones			Non-Irrigated Zones			PRESENT VALUE OF TOTAL BENEFITS b/	TOTAL NUMBERS OF HECTARES EFFECTED
			IRRIGATED HECTARES	NON-IRRIGATED HECTARES	TOTAL	ON IRRIGATED HECTARES	ON NON-IRRIGATED HECTARES	TOTAL BENEFITS IN IRRIGATED COMPONENT	NUMBER OF HECTARES EFFECTED	BENEFITS IN NON-IRRIGATED COMPONENT	TOTAL BENEFITS IN BOTH COMPONENTS		
1980	55.5	55.5	0.	0.	0.	0.	0.	0.	0.0	0.0	0.0	0.0	0.0
1981	1088.6	972.0	480.	720.	1200.	78.0	63.0	141.0	160.0	14.0	155.0	138.4	1360.0
1982	1508.3	1202.4	1200.	1800.	3000.	195.0	157.5	352.5	400.0	35.0	435.0	346.8	3400.0
1983	2142.3	1524.9	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	619.3	6800.0
1984	0.0	0.0	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	552.9	6800.0
1985	0.0	0.0	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	493.6	6800.0
1986	0.0	0.0	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	440.7	6800.0
1987	0.0	0.0	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	393.5	6800.0
1988	0.0	0.0	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	351.4	6800.0
1989	0.0	0.0	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	313.7	6800.0
1990	0.0	0.0	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	280.1	6800.0
1991	0.0	0.0	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	250.1	6800.0
1992	0.0	0.0	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	223.3	6800.0
1993	0.0	0.0	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	199.4	6800.0
1994	0.0	0.0	2400.	3600.	6000.	390.0	315.0	705.0	800.0	70.0	870.0	178.0	6800.0
TOTALS		1754.8 c/				390.0	315.0	705.0	800.0	70.0	870.0	4781.2 c/	

a/ In constant 1980 US dollars, assuming an inflation rate of 10% per year for the period 1980-83

b/ A 12% discount rate was used to compute present values.

c/ Benefits exceed costs by \$1,026,400 to yield a Benefit/Cost ratio of 1.27. The internal rate of return is 19%.

C. Economic Analysis for the Service Cooperatives

1. Introduction

The potential benefits of cooperative action for small farmers are often dependent upon the cooperative's success in finding or developing skilled managers and mobilizing sufficient resources for managers to work with. The present Activity is designed to relieve these constraints by helping cooperative managers improve their administrative skills, and by obtaining capital and equipment which the cooperative needs to operate effectively. The benefits which will accrue to cooperative members from this Activity will flow from two principal sources: adoption of improved technology, and cooperative organization.

2. Returns to Technology

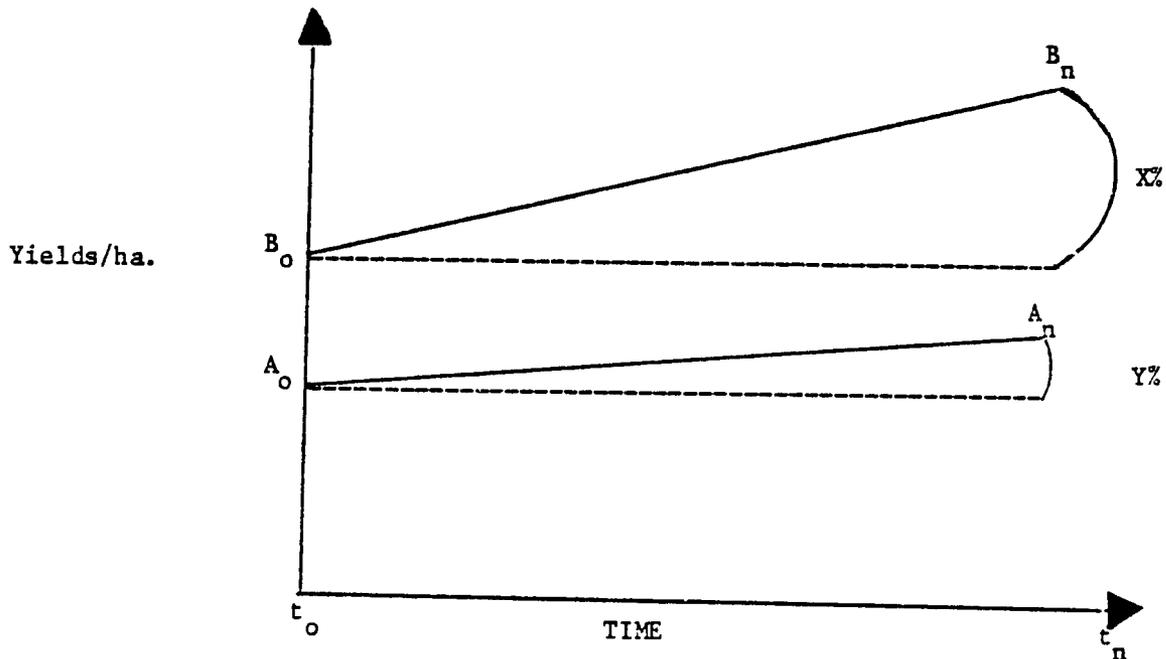
The improvement of agricultural technology is reflected in farm output by an immediate shift in the production function, as well as an increase in its slope. The practical benefits of these changes are a greater initial yield level and a higher incremental growth in yields over time. Figure 1 illustrates these effects graphically. It is easy to visualize the continuously increasing advantage derived by the farmer using improved technology over the traditional farmer. The immediate jump from the traditional yield (A_0) to the new level (B_0) is shown for time period t_0 .

From this higher beginning level the outputs with improved technology increase at a greater rate than is the case with traditional technology. The average annual growth rates in Figure 1 are shown as $X\%$ and $Y\%$ where $X > Y$. Data taken from the Honduran experience reflect this difference in both yield levels and growth rates, and are summarized in Table 4.

3. Returns to Cooperative Organization

Cooperative organization assists members in learning of and adopting improved technologies because the cooperative serves as a focal point for technical assistance visits. It also allows the small farmer to achieve benefits often associated with larger producers by exploiting economies of scale and marketing economies in the production, purchase, transport and sale of agricultural products and inputs. In some cases, an interaction exists between marketing economies and adoption of improved technologies when these improved technologies are embodied in improved inputs that are more readily obtained by group purchases. Consequently, the advantages of cooperative organization may have an effect on yields which is similar to the effect described in Figure 1. In addition to this effect, cooperative organization will cause per hectare costs to decline as is shown in Figure 2. This decline results from the aforementioned economies of scale in production and marketing of agricultural products and inputs.

FIGURE No. 1: RETURNS TO TECHNOLOGY



- WHERE: A_0 = Yield levels at time t_0 with a traditional production system.
 B_0 = Yield levels at time t_0 with an improved technology production system.
 A_0A_n = Trend line for yield increases in the traditional system.
 B_0B_n = Trend line for yield increases in the improved system.
 $X\%$ = Average annual yield increase in the improved system.
 $Y\%$ = Average annual yield increase in the traditional system.

TABLE 4 YIELD LEVELS AND RATES OF INCREASE
IN HONDURAS

CROPS	Yield in 1978		Rate of Increase in Yields from 1972-78 ^{a/}	
	Traditional Technology (MT/ha)	Improved Technology (MT/ha)	Traditional Technology (%)	Improved Technology (%)
Corn	1.3	3.4	2.3	8.7
Rice	0.8	3.9	1.8	13.5
Sorghum	1.9	2.9	4.9	7.2
Beans	0.6	1.3	1.4	3.8

^{a/} The weighted average yield increases are:

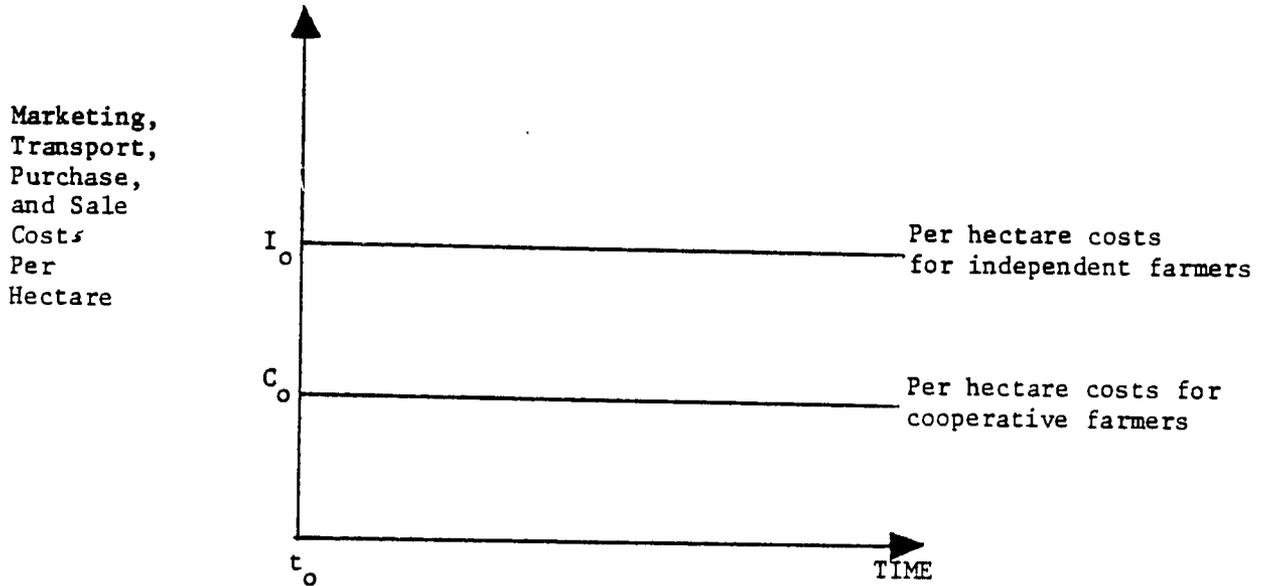
Traditional Technology, 2.5%

Improved Technology, 8.8%

The difference in the rate of increase for traditional and improved technologies is 6.3%

Source: GIDA/ALC - Honduras: Proyecto de Sistemas para la Reducción de Pérdidas después de la cosecha - Granos Básicos: Maíz y Frijol, p. 47.

FIGURE No. 2: IMPACT OF COOPERATIVE ORGANIZATION ON COSTS PER HECTARE



WHERE: I_o Represents the marketing, transport, purchase and sale costs per hectare for independent small farmers.

C_o Represents the lower marketing, transport, purchase and sale costs per hectare for cooperative farmers who enjoy marketing economies and/or economies of scale in production of basic grains.

Figure 3 depicts the impact of both improved technology and cooperative memberships on net farm income/ha. As can be seen in Figure 3, adoption of improved technology causes a one time increase in net farm income equal to $A_0 B_0$. If in addition to adopting improved technology, a small farmer joins a viable cooperative and experiences the per hectare cost reductions depicted in Figure 2, net family income/ha. is increased from B_0 to C_0 . Over time, both independent farmers and cooperative farmers that use improved technology will experience higher average growth rates in net farm income/ha than will independent traditional farmers (X_1 and $X_2 > Y$ in Figure 3). In cases where cooperative farmers have access to improved technologies which are embodied in new inputs that are unavailable to independent farmers, the average growth rate in net farm income for cooperative farmers (X_2) will be greater than the average growth in net farm income for independent small farmers using improved technologies (X_1). If, however, cooperative membership fails to give cooperative farmers a technological advantage over their independent farmer counterparts, X_1 and X_2 will be equal.

4. Benefit/Cost Analysis

The benefit/cost analysis for this activity is based upon the interaction of, and complementarity between adoption of improved technology and cooperative organization as illustrated in Figure 3. Data and assumptions used in the analysis are as follows:

- (1) The activity will be directed toward 4 cooperatives in the traditional sector and 4 cooperatives in the reform sector.
- (2) Each traditional cooperative will include a minimum of 600 farms (families) and will have a total of at least 2,000 has. Consequently average land holding in the traditional sector is about 3.3. has/family. Data taken from the Agricultural Sector Assessment for Honduras (Annex K, Table 2.18) indicate that the annual net farm income/ha for this size farm is \$141.00/ha.
- (3) Each reform cooperative will include at least 600 farms (families) with a combined holding of at least 1000 has. Average land holding /family in these reform coops is approximately 1.7 has. Data from the Sector Assessment (Annex K, Table 2.18), indicate that annual net farm income/ha on reform cooperative farms is \$205/ha.
- (4) It is estimated that net farm income can be increased by 20% over present levels if farmers become members of viable agricultural cooperatives, and if these cooperatives serve as a focal point for technical assistance visits which result in the adoption of improved agricultural technologies.^{1/} In terms of Figure 3, this would represent the increase in net farm income/ha from A_0 to C_0 . In traditional farms this would cause average family incomes to in-

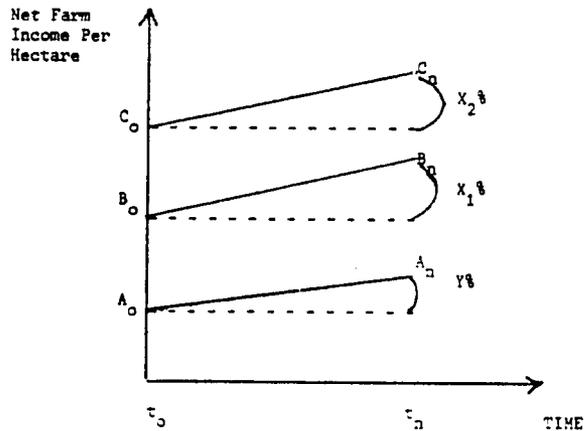
^{1/} This estimate is taken from the Activity Report, "Service Cooperatives".

crease by \$93.06 ($\$141.00/\text{ha} \times 20\% \times 3.3 \text{ ha/family}$). On reform farms, average family income would increase by \$69.70 ($\$205.00/\text{ha} \times 20\% \times 1.7 \text{ ha/family}$).

- (5) Based upon the information in Table 4, it is assumed that farmers using improved technology will have an average annual yield increase (and consequently a net family income increase) which is 6% higher than the average annual yield increase for traditional farmers. In terms of Figure 3, this means that X_1 is equal to X_2 and that both X_1 and X_2 are 6% higher than Y .
- (6) A 12% interest rate is used to estimate the opportunity cost of capital, and to discount constant dollar costs and benefits to their present value in 1980.

Table 5 presents estimates of the increase in family incomes which will come about on traditional and reform cooperatives as a result of this Activity. This data is then used in Table 6 to compare benefits and costs. From Table 6 one sees that with a 12% discount rate, the present value of costs is \$ 2,415,800, and the present value of total benefits is \$3,441,400. The present value of net benefits is \$1,025,600, and the benefit/cost ratio is 1.42. The internal rate of return is 20.3%.

FIGURE 3: RETURNS TO TECHNOLOGY AND COOPERATIVE ORGANIZATION



- Where: A_0 = Net farm income per ha at time t_0 for independent farmers with a traditional production system.
- B_0 = Net farm income per ha at time t_0 for independent farmers with an improved production system.
- C_0 = Net farm income per ha at time t_0 for cooperative farmers with an improved production system and the cost reductions identified in Figure 2.
- A_0A_n = Trend line for increases in net farm income/ha for independent traditional farmers.
- B_0B_n = Trend line for increases in net farm income/ha for independent farmers using improved technology.
- C_0C_n = Trend line for increases in net farm income/ha for cooperative farmers using improved technology.
- $X_2\%$ and $X_1\%$ are the average annual increases in net farm income/ha for cooperative and independent farmers using improved technology.
- $X_2 > X_1$ when cooperative organization allows cooperative members to buy improved inputs embodying more recent technological advances that are unavailable to small independent farmers.
- $X_2 = X_1$ when cooperative members and independent small farmers both have access to the same (or equivalent) improved technologies.
- $Y\%$ = The average annual increase in net farm income/ha for independent farmers using traditional technologies.

TABLE 5. PER FAMILY BENEFITS ASSOCIATED WITH USING IMPROVED TECHNOLOGY AND BEING A MEMBER OF A COOPERATIVE

YEAR	Traditional Cooperatives using improved technology			Reform Cooperatives using improved technology		
	Net Farm Income Per Ha. <u>1/</u>	Twenty percent Increase due to Cooperative Advantages <u>2/</u>	Additional Family Income <u>3/</u>	Net Farm Income Per Ha. <u>1/</u>	Twenty percent Increase due to Cooperative Advantages <u>2/</u>	Additional Family Income <u>4/</u>
1980	141.00	28.20	93.06	205.00	41.00	69.70
1981	149.46	29.89	98.64	217.30	43.46	73.88
1982	158.43	31.69	104.58	230.34	46.07	78.32
1983	167.93	33.59	110.85	244.16	48.83	83.01
1984	178.01	35.60	117.48	258.81	51.76	87.99
1985	188.69	37.74	124.54	274.34	54.87	93.28
1986	200.01	40.00	132.00	290.30	58.16	98.87
1987	212.01	42.40	139.92	308.24	61.65	104.81
1988	224.73	44.95	148.34	326.74	65.35	111.10
1989	238.22	47.64	157.21	346.34	69.27	117.76
1990	252.51	50.50	166.65	367.12	73.42	124.31
1991	267.66	53.53	176.65	389.15	77.83	132.31
1992	283.72	56.74	187.24	412.50	82.50	140.25
1993	300.74	60.15	198.50	437.25	87.45	148.67
1994	318.79	63.76	210.41	463.49	92.70	157.59

1/ Net farm income/ha. is increased by 6% per year due to the adoption of improved technology.

2/ It is assumed in the Activity Report, "Service Cooperatives" that cooperative organizations will increase net farm income by 20%.

3/ The typical family in the traditional cooperative has 3.3 ha. of land.

4/ The typical family in the Reform Sector has 1.7 ha. of land.

TABLE 6. BENEFITS AND COSTS FOR THE SERVICE COOPERATIVE ACTIVITY

YEAR	COSTS ^{1/} (\$1000)	PRESENT VALUE OF COSTS ^{2/} (\$1000)	TRADITIONAL COOPERATIVES			REFORM COOPERATIVES			TOTAL BENEFITS (\$1000)	PRESENT VALUE OF TOTAL BENEFITS ^{2/} (\$1000)
			Number of families benefited	Benefits Per fam. per year ^{3/} (\$)	Benefits Per year (\$1000)	Number of families benefited	Benefits, family per year ^{3/} (\$)	Benefits per year (\$1000)		
1980	677.5	677.5	400	93.06	37.2	400	69.70	27.9	65.1	65.1
1981	865.9	773.2	1000	98.64	98.6	1000	73.88	73.9	172.5	154.0
1982	865.4	689.9	1600	104.58	167.3	1600	78.32	125.3	292.6	233.3
1983	303.8	216.2	2400	110.85	266.0	2400	83.01	199.2	465.2	391.1
1984	75.0	47.7	2400	117.48	282.0	2400	87.99	211.2	493.2	313.4
1985	20.0	11.3	2400	124.54	298.9	2400	93.28	223.9	522.8	296.7
1986	0.0	0.0	2400	132.00	316.8	2400	98.87	237.3	554.1	280.7
1987	0.0	0.0	2400	139.92	335.8	2400	104.81	251.5	587.3	265.7
1988	0.0	0.0	2400	148.34	356.0	2400	111.10	266.6	522.6	251.5
1989	0.0	0.0	2400	157.21	377.3	2400	117.76	282.6	659.9	238.0
1990	0.0	0.0	2400	166.65	400.0	2400	124.81	299.5	699.5	225.2
1991	0.0	0.0	2400	176.65	424.0	2400	132.31	317.5	741.5	213.2
1992	0.0	0.0	2400	187.24	449.4	2400	140.25	336.6	786.0	201.8
1993	0.0	0.0	2400	198.50	476.4	2400	148.67	356.8	833.2	191.0
1994	0.0	0.0	2400	210.41	505.0	2400	157.59	378.2	883.2	180.7
TOTALS		2415.0 ^{4/}								3441.4 ^{4/}

^{1/} Costs are presented in constant 1980 dollars

^{2/} A 12% discount rate was used to calculate present values

^{3/} Benefits per family per year are estimated to include a 20% one time increase in 1980 plus a 6% per year increase caused by adoption of improved technology. See Table 4 and Table 5 for additional information.

^{4/} The present value of net benefits is \$1,025,600, and the benefit/cost ratio is 1.42. The internal rate of return for this activity is 20.3%.

D. Economic Analysis for the Small Farmer Consumption Improvement Activity

1. Introduction

The Sector Assessment pointed out that diets of a high percentage of rural Honduran families are nutritionally deficient. Many of these families have inadequate diets because they are too poor to purchase the varieties and quantities of food they need. This Activity is designed to improve the current situation by distributing seeds and seedlings which will provide farm families with additional quantities, and a greater variety, of food than is presently being consumed. The primary benefits from this Activity will be:

- (1) An increase in real income due to increased production and consumption of income in-kind, i.e., increased amounts and varieties of food grown and consumed on the farm.
- (2) A more balanced and nutritionally adequate diet by increasing the family's intake of proteins, carbohydrates, vitamins and minerals.
- (3) A diversification of small farm crops which will reduce crop risks associated with weather variability, insect plagues or disease problems.

The present analysis is based solely upon the first two benefits because the third benefit is too difficult to quantify.

2. Real Income Benefit

The consumption improvement Activity divides crops into three subgroups based primarily on the time required to bring each crop to maturity and/or harvest. Data on these subgroups is contained in Table 7. Subgroup A consists of vegetables. Subgroup B consists of vegetables, tubers, and fruits. Subgroup C consists of tree crops.

The Activity is divided into an intensive action component and an extensive action component. In both of these components, families would select crops from each subgroup which were appropriate for their farm, i.e., given their individual soil fertility, climatic and water resource situation. In the intensive action component, families will be allowed to choose three to five crops from subgroup A, five to eight crops from subgroup B, and five to eight crops from subgroup C. The package of seeds and seedlings selected by each family can be purchased from local extension agents for L 10.00 (a subsidized price). These families will also receive a series of technical assistance visits from their local extension agents which are expected to resolve any problems which might arise due to inexperience with these crops--particularly the vegetable crops in subgroup A. In most cases, these technical assistance visits will be coordinated with the agent's normal program of work in the surrounding area, and agents will not need to make special or additional

visits to support this Activity.

Families in the extensive action component will not be given technical assistance visits or lectures, but will be allowed to purchase the same package of plant materials at the same price (L 10.00) as families in the intensive action component.

The following analysis assumes that in both components, the average family will choose the average number of crops available for selection from each subgroup. Table 8 presents information regarding number of crops chosen per subgroup and the net in-kind income received by each family from each subgroup. Table 9 shows the ten year stream of in-kind income which will accrue to participating families if they continue to plant and harvest the crops introduced in the first year. Table 9 assumes that the plants and seeds distributed during this Activity survive and receive the minimum amount of care needed to permit normal growth. Table 10 shows the in-kind income streams generated by the Activity for a typical family in 1980, 81, 82, 83. Table 11 estimates the total in-kind income generated during the period 1980-89.

A benefit/cost analysis for this Activity is presented in Table 12. The cost data in Table 12 is based on the estimated current dollar costs for 1980, 81, 82, and 83 which are presented in the Activity Report, "Small Farmer Consumption Improvement." An inflation rate of 10% was used to convert current dollar cost estimates to the constant dollar cost estimates presented in Table 12, and a 12% discount rate was used to calculate the present value of costs and benefits. The benefit/cost ratio is 36.6 which may appear to be high, but which is really quite realistic when one considers:

- (1) Activity costs are minimal because the extension service is used to distribute packages of seeds and seedlings as part of their normal duties.
- (2) The Activity is reaching a fairly large number of beneficiaries, and it is assumed that beneficiaries will continue to care for their gardens and consequently harvest income in-kind in future years.
- (3) The crops included in the Activity are mainly high value crops which require relatively large amounts of labor that is not included in calculating net income/crop.
- (4) Since all production is destined for home consumption, there are no marketing costs to be considered, and there are no marketing problems which must be overcome.
- (5) It is assumed that plants receive sufficient care to ensure their survival until the harvest period has been completed. This is a somewhat unrealistic assumption since some plants would normally die, but one does not know a priori how many plants might succumb.

For purpose of the present analysis, this question is not very important because the benefits are so large relative to the costs that the Activity would still be acceptable if only 10% of the plants reached maturity and harvest.

3. Nutritional Benefits

Home grown produce makes an important nutritional contribution to family diets by providing vitamins, minerals, proteins and carbohydrates. A rough estimate of the importance of home grown produce is presented in Table 13 which shows estimates of the calorie and protein content of the crops presented in Table 7. Table 14 then goes on to demonstrate that home gardens and fruit trees would provide approximately 12% of the annual protein and calorie requirements for a family of six. This additional 12% could be the margin which would permit younger children in the family to have an adequate diet instead of being undernourished, and is consequently regarded as a very important benefit.

TABLE 7 - CROP YIELD AND PRICE DATA

SUB-GROUP	CROPS IN SUBGROUP	# OF PLANTS GROWN	YIELD/FAMILY	PRICE (lps.)	VALUE OF IN-KIND INCOME (lps.)	SQUARE METERS OF GARDEN SPACE USED	MONTHS TO MATURITY	PRODUCTIVE LIFE (Years)
A	Tomato	12	216 lbs.	0.30/lb.	64.80	12	3.5	0.5
A	Cabbage	30	24 heads	0.40/head	12.00	7	3.0	0.3
A	Onions, Medium size	100	20 bunches	0.30/bunch	6.00	8	4.0	0.4
A	Carrots	100	15 lbs.	0.40/lbs.	6.00	8	4.0	0.4
A	Bell Peppers	12	30 lbs.	0.25/lb.	7.50	12	4.0	0.5
A	Culantrum	30	10 bunches	0.10/bunch	1.00	3	2.5	0.2
A	Radishes	750	100 bunches	0.07/bunch	7.00	5	2.0	0.1
TOTALS					104.30	55		
B	Sweet Corn	400	600 ears	0.10/ear	60.00	100	3.5	0.4
B	String Beans	15 meters	30 lbs.	0.30/lb.	9.00	15	2.0	0.3
B	Papaya	5	50 units	0.50/unit	25.00	20	16.0	3.0
B	Yuca	25	100 lbs.	0.10/lb.	10.00	20	14.0	1.5
B	Sweet Potato	100	200 lbs.	0.08/lb.	16.00	30	4.5	0.7
B	Bananas	5	1000 units	0.02/unit	20.00	45	18.0	10.0
B	Platanos	5	180 units	0.10/unit	18.00	45	18.0	10.0
TOTALS					158.00	275		
C	Oranges	1	720 units	0.02/unit	14.40	16	60.0	35.
C	Grapefruit	1	300 units	0.05/unit	15.00	16	60.0	35.
C	Lemon	1	720 units	0.05/unit	36.00	16	60.0	35.
C	Mango	1	480 lbs.	0.10/lb.	48.00	16	72.0	25.
C	Avocado	1	150 medium units	0.15/unit	22.50	16	84.0	12.
C	Coco	1	100 units	0.28/unit	28.00	16	84.0	25.
C	Guanabana	1	467 units	0.03/units	14.00	16	60.0	15.
C	Mazapan	1	350 units	0.04/unit	14.00	16	72.0	25.
TOTALS					191.90	128		

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TABLE 8 - INCOME IN-KIND ESTIMATES FOR EACH SUBGROUP

SUB GROUP	TOTAL INCOME IN-KIND (\$)	AVERAGE INCOME IN-KIND (\$)	AVERAGE # OF CROPS SELECTED PER FAMILY	AVERAGE INCOME IN-KIND PER FAMILY (\$)	AVERAGE COST OF INPUTS PER FAMILY a/ (\$)	AVERAGE NET INCOME IN-KIND PER FAMILY (\$)
A	52.15	7.45	4	29.80	9.15	20.65
B	79.00	11.29	6.5	73.39	10.89	62.50
C	95.95	12.00	6.5	78.00	3.00	75.00

a/ Inputs included here are seed, fertilizer, insecticide, fungicide, and herbicide. Amounts assumed spent in this column may be high, in which case Average Net Income In-Kind Per Family is underestimated slightly.

TABLE 9 - INCOME IN-KIND STREAM FOR THE INTENSIVE AND EXTENSIVE COMPONENTS

YEARS	NET INCOME SUBGROUP A (\$/Family)	NET INCOME SUBGROUP B (\$/Family)	NET INCOME SUBGROUP C (\$/Family)	TOTAL NET INCOME/FAMILY (\$)
1	20.65	15.00	0.00	35.65
2	20.65	62.50	0.00	83.15
3	20.65	62.50	0.00	83.15
4	20.65	62.50	30.00	113.15
5	20.65	62.50	50.00	133.15
6	20.65	62.50	75.00	158.15
7	20.65	62.50	75.00	158.15
8	20.65	62.50	75.00	158.15
9	20.65	62.50	75.00	158.15
10	20.65	62.50	75.00	158.15

TABLE No. 10:

NET INCOME IN-KIND ESTIMATES FOR INDIVIDUAL FAMILIES a/ b/

YEAR THE FAMILY BEGINS THE PROGRAM	NET IN-KIND INCOME STREAM PER FAMILY									
	1980 (\$)	1981 (\$)	1982 (\$)	1983 (\$)	1984 (\$)	1985 (\$)	1986 (\$)	1987 (\$)	1988 (\$)	1989 (\$)
1980	35.65	83.15	83.15	113.15	133.15	158.15	158.15	158.15	158.15	158.15
1981	0.00	35.65	83.15	83.15	113.15	133.15	158.15	158.15	158.15	158.15
1982	0.00	0.00	35.65	83.15	83.15	113.15	133.15	158.15	158.15	158.15
1983	0.00	0.00	0.00	35.15	83.15	83.15	113.15	133.15	158.15	158.15

a/ Net income in-kind is calculated as the Value of Fruits, Vegetables and Tubers produced on the farm minus the cost of seeds, fertilizers, insecticide, herbicide, and fungicide used in their production. Produce is valued at rural retail market prices for the Comayagua Valley except in cases where Tegucigalpa prices are lower than Comayagua prices in which case the former are used.

b/ All net income in-kind figures in this Table are presented in constant 1980 U.S. Dollars.

TABLE 11:

NET INCOME IN-KIND ESTIMATES FOR ALL FAMILIES a/ b/

Y E A R	NUMBER OF FAMILIES BEGINNING THE PROGRAM	NET IN-KIND INCOME STREAM FOR ALL FAMILIES									
		1 9 8 0	1 9 8 1	1 9 8 2	1 9 8 3	1 9 8 4	1 9 8 5	1 9 8 6	1 9 8 7	1 9 8 8	1 9 8 9
1980	4,500	160.4	374.2	374.2	509.2	599.2	711.7	711.7	711.7	711.7	711.7
1981	5,400	0.0	192.5	449.0	449.0	611.0	719.0	854.0	854.0	854.0	854.0
1982	6,300	0.0	0.0	224.6	523.8	523.8	712.8	838.8	996.3	996.3	996.3
1983	7,800	0.0	0.0	0.0	274.2	648.6	648.6	882.6	1,038.6	1,233.6	1,233.6
T O T A L S	24,000	160.4	566.7	1,047.8	1,756.2	2,382.6	2,792.1	3,287.1	3,600.6	3,795.6	3,795.6

a/ Net income in-kind is calculated as the Value of Fruits, Vegetables and Tubors produced on the farm minus the cost of seeds, fertilizers, insecticide, herbicide and fungicide used in their production. Produce is valued at Rural Retail Market Prices for the Comayagua Valley except in cases where Tegucigalpa prices are lower than Comayagua Prices in which case the former are used.

b/ All net income in-kind figures in this Table are presented in thousands of constant 1980 U.S. Dollars.

TABLE 12:

BENEFIT/COST ANALYSIS FOR THE SMALL FARMER
CONSUMPTION IMPROVEMENT ACTIVITY

Y E A R S	ACTIVITY COSTS (\$1,000) <u>a/</u>	PRESENT VALUE OF ACTIVITY COSTS (\$1,000) <u>b/</u>	NET INCOME IN-KIND (\$1,000) <u>c/</u>	PRESENT VALUE OF NET INCOME IN-KIND (\$1,000) <u>b/</u>
1980	96.1	96.1	160.4	160.4
1981	95.1	84.9	566.7	506.0
1982	94.1	75.0	1,047.8	835.3
1983	103.2	73.5	1,756.2	1,250.1
1984	0.0	0.0	2,382.6	1,514.1
1985	0.0	0.0	2,792.1	1,584.2
1986	0.0	0.0	3,287.1	1,665.2
1987	0.0	0.0	3,600.6	1,628.6
1988	0.0	0.0	3,795.6	1,533.0
1989	0.0	0.0	3,795.6	1,368.7
T O T A L S		329.5 <u>d/</u>		12,045.6 <u>d/</u>

a/ Constant 1980 Dollars.

b/ A discount rate of 12% was used to compute present values.

c/ This is net family income, i.e., it is the value of produce grown at home minus the costs of seed, fertilizers, insecticides, herbicides and fungicides (assuming these inputs would be used). This series is in thousands of constant 1980 Dollars.

d/ The benefit/cost ratio is 36.6.

TABLE 13 - CALORIE AND PROTEIN CONTENTS

SUB GROUP	CROPS CHOSEN	CALORIES	PROTEIN CONTENT (Grams)
A	Tomato plus any other three	32,535	1,134
B	Corn and beans plus any other three	265,548	6,072
C	Any six	225,384	3,030
TOTALS		523,467	10,236

TABLE 14 - CONTRIBUTION TO MINIMUM DAILY REQUIREMENTS

TOTAL CALORIES IN HOME GARDEN PRODUCE ESTIMAT- ED IN TABLE 13	ANNUAL CALORIE REQUIREMENTS FOR A FAMILY OF SIX <u>a/</u>	PERCENT OF ANNUAL CALORIE REQUIREMENT FOR A FAMILY OF SIX PRODUCED BY THE HOME GARDEN	TOTAL PROTEIN CONTENT OF HOME GARDEN PRODUCE ESTIMATED IN TABLE 13(grams)	ANNUAL PROTEIN REQUIREMENTS FOR A FAMILY OF SIX <u>b/</u> (grams)	PERCENT OF ANNUAL CALORIE REQUIREMENTS FOR A FAMILY OF SIX PRODUCED BY THE HOME GARDEN
523,467	4,380,000	12	10,236	87,600	11.7

a/ This assumes an average minimum calorie intake of 2,000 calorie per day per family member or 12,000 calories per family

b/ This assumes an average minimum protein intake of 40 grams per day per family member or 240 grams per family.

E. Economic Analysis for the Extension Service

The principal function of the agricultural Extension Service is to disseminate information to those farmers whose exposure to improved technology and practices is otherwise extremely limited. The extension component of this Program is designed to improve the range and quality of extension activities, especially with regard to small farmers, by initiating a comprehensive training program, and providing necessary support for field agents.

It is projected that the Extension Service's professional staff will be expanded to 429, and the number of farmers directly contacted will increase from 27,000, at present, to 63,000. The additional contacts will necessitate that the annual work load of each agent will rise from 111 to 144 farmers/agent.^{1/} In large part this will be made possible by improved mobilization of personnel and continued entry through cooperatives and other group farming operations.

The potential secondary or spread effects are also greatly increased. It is estimated that the number of traditional (independent) farmers that are contacted directly by agents will climb from the present level of 6,000 to a projected level of 37,000. If the information delivered by the extension agent is shared (even in part) or observed by three, two or even one other farmer the significance of the number of direct contacts is readily apparent.^{2/}

The quality of the extension agents will be improved through in-service and, when necessary, outside training programs. Professional support staff in agricultural economics, sociology, planning, animal science, etc., will enable more comprehensive assistance to be offered by the extension service; specialists in communication and extension techniques will increase the effectiveness and efficiency of information transmitted by agents.

The two-fold benefit of realizing greater absolute coverage, (coverage is increased from 15% to 35% for farmers with 1.0 to 35.0 has.), while also upgrading the quality of technical assistance provided is achieved with

^{1/} Subsequent to completion of this analysis, it was determined that agent workload would be increased from 126 to 175 farmers/agent. This change does not violate the conclusions derived from the economic analysis of this Activity.

^{2/} The spread effect resulting from direct contacts will probably be somewhat less when direct contacts are made with cooperative members than when the direct contacts are made with independent farmers because the system of information exchange within cooperatives is relatively closed when compared with information exchanges between independent farmers.

only a modest increase in per farmer cost. In 1978 extension activities cost \$119.00 per farmer assisted. In 1983 this cost will be approximately \$125.00, including training costs which are distributed within the life of the project.

F. Economic Analysis for the Institutional Development Activities

Several institutionally oriented Activities in the Program do not generate a readily identifiable stream of benefits by which to measure their effectiveness. By and large, these are investments in improving human resources and building institutional infrastructure which are designed to raise the quality of services offered by the public sector. Given the difficulty of relating the costs associated with these Activities to potential benefits, it was decided to make a determination as to the likelihood that they will result in reasonable returns. The test of reasonableness which is used here considers the increment in benefits to the agricultural sector that is required to justify the proposed expenditures for institutional improvements.

1. The Data Base

The gauge to be used in the present analysis is one which relates potential increases in the gross value of agricultural sector production to the institutional investment made in the following Activities of Agricultural Sector Program II:

- Participant Training
- In-Service Training
- Planning
- The Information System
- The Marketing Analysis System
- National Development Bank Regionalization
- Coordination Unit

Honduran National Income Account Data for the period 1965 to 1977 was used to estimate the gross value of agricultural production. This data was then projected, using a linear trend line, to estimate the gross value of agricultural production for the period 1978 to 1994. The results of this projection are shown in Table 15 which also gives the value of this income stream in constant 1980 dollars. If one assumes that the institutional investments financed in these Activities will result in a one percent increase above the gross value of agricultural production series presented in Table 15, this increase represents an identifiable stream of benefits which will accrue to the agricultural sector, and to those who work in it, as a result of the Program.^{1/}

^{1/} It is very likely that the Program will also result in less duplication of efforts by agriculture sector institutions which will free resources for new tasks. It was decided not to consider this benefit in the following analysis because it is too difficult to quantify or estimate objectively.

Table 16 presents cost data for the Institutional Development Activities. The relevant cost figures for evaluating the impact of these Activities with respect to increases above projected levels for agricultural sector production is the additional amount of money being budgeted over the Program implementation period as compared to the amount budgeted prior to the Program.

2. A Benefit/Cost Comparison

Data on benefits and costs associated with these Activities are combined in Table 17. A twelve percent discount rate was used to calculate the present value of costs and benefits. As can be seen from Table 17, the present value of benefits exceeds the present value of costs by \$26,700,000.00, and yields a favorable benefit/cost ratio of 2.70. This result is of course dependent upon our initial assumption that institutional improvements will have a positive impact upon the sector, and will cause the gross value of agricultural production to increase by 1% above its historical trend. Given the state of institutional development in the agricultural sector, and the Activities proposed in the loan documents, this seems to be a reasonable assumption.

TABLE 15. PROJECTED GROSS AGRICULTURAL PRODUCTION

YEAR	GROSS AGRICULTURAL PRODUCTION IN MILLIONS OF CONSTANT 1966 DOLLARS	IMPLICIT PRICE INDEX USED TO CONVERT CURRENT LPS TO CONSTANT 1966 LPS	GROSS AGRICULTURAL ^{a/} PRODUCTION IN MILLIONS OF CONSTANT 1980 DOLLARS
1965	173.8	1.01	382.4
1966	190.2	1.00	418.4
1967	197.1	1.03	433.6
1968	212.5	1.02	467.5
1969	206.3	1.02	453.9
1970	201.2	1.06	442.6
1971	220.3	1.05	484.7
1972	230.6	1.08	507.3
1973	233.9	1.20	514.6
1974	213.7	1.35	470.1
1975	200.4	1.40	440.9
1976	215.1	1.60	473.2
1977 ^{b/}	231.0	1.78	508.2
1978	231.6	1.92 ^{c/}	509.5
1979	234.7	2.06 ^{c/}	516.3
1980	237.9	2.20 ^{c/}	523.4
1981	241.0	N.A.	530.2
1982	244.2	N.A.	537.2
1983	247.3	N.A.	544.1
1984	250.4	N.A.	550.9
1985	253.6	N.A.	557.9
1986	256.7	N.A.	564.7
1987	253.8	N.A.	571.6
1988	262.9	N.A.	578.4
1989	266.1	N.A.	585.4
1990	269.2	N.A.	592.2
1991	272.3	N.A.	599.1
1992	275.5	N.A.	606.1
1993	278.6	N.A.	612.9
1994	281.7	N.A.	619.7

^{a/} Figures in this column are the product of the constant 1966 dollar value for each year and the 2.20 coefficient for 1980 which transforms 1966 prices into 1980 prices.

^{b/} 1977 is the last year for which data was available. Projections for 1978-1994 were based on a linear trend done for the 1965-77 period. The equation for the trend line is $Y = 137.81 + 3.13t$, $R^2 = 0.49$.

^{c/} These are estimates. It was assumed that the inflation rate for the gross value of Agricultural Production in 1978, 1979, and 1980 would be similar to inflation in the period 1974-77.

TABLE 16 - COST DATA USED IN THE ECONOMIC ANALYSIS FOR THE INSTITUTIONAL DEVELOPMENT
ACTIVITIES a/

ACTIVITIES	YEAR					
	1979	1980	1981	1982	1983	1984
Participant Training	0	1806.5	2849.5	2526.0	1733.5	724
In-Service Training	434.5	804.0	793.5	816.5	865.5	201
Agricultural Planning	2861.5	4472.5	4174.5	4239.0	4582.0	0.
Information System	413.0	1044.5	1292.0	1399.0	1561.0	0.
Marketing System	22.0	242.0	256.5	271.0	291.5	0.
Credit Administration	1884.5	2701.5	2904.5	2827.5	3171.0	0.
Loan Coordination	105.5	295.0	298.5	281.0	218.5	239.5
Total (Current \$)	5721.0	11,366.0	12,569.0	12,360.0	12,423.0	1164.5
Total (Constant 1980 \$)	6293.1	11,366.0	11,426.4	10,300.0	9,556.2	831.8
Additional Costs (Constant 1980 \$) <u>b/</u>	0.	5,072.9	5,133.3	4,006.9	3,263.1	831.8 <u>c/</u>

a/ Costs are given in thousands of U.S. dollars. These costs are taken from the original Activity Reports. While there have been some subsequent adjustments to the original Activity Report budget data shown here, these adjustments do not alter the conclusions of this Analysis.

b/ Additional costs are calculated as the constant dollar increment above what was budgeted for 1979.

c/ The entire 831.8 is included as incremental costs because these are Program related costs which spill over into 1984.

TABLE 17 - BENEFIT/COST ANALYSIS FOR THE INSTITUTIONAL DEVELOPMENT ACTIVITIES a/ b/

YEAR	ADDITIONAL AG. SECTOR II PROGRAM COSTS <u>c/</u>	PRESENT VALUE OF ADDITIONAL AG. SECTOR II PROGRAM COSTS	PROJECTED GROSS VALUE OF AGRICULTURAL PRODUCTION	ONE PERCENT INCREASE IN THE PROJECTED GROSS VALUE OF AGRICULTURAL PRODUCTION	PRESENT VALUE OF A ONE PERCENT INCREASE IN THE PROJECTED GROSS VALUE OF AGRICULTURAL PRODUCTION
1980	5.1	5.1	523.4		
1981	5.1	4.6	530.2	5.2	5.2
1982	4.0	3.2	537.2	5.3	4.7
1983	3.3	2.3	544.1	5.4	4.3
1984	0.8	0.5	550.9	5.4	3.8
1985	0.0	0.0	557.9	5.5	3.5
1986	0.0	0.0	564.7	5.6	3.2
1987	0.0	0.0	571.6	5.6	2.8
1988	0.0	0.0	578.4	5.7	2.6
1989	0.0	0.0	585.4	5.8	2.3
1990	0.0	0.0	592.2	5.9	2.1
1991	0.0	0.0	599.1	5.9	1.9
1992	0.0	0.0	606.1	6.0	1.7
1993	0.0	0.0	612.9	6.1	1.6
1994	0.0	0.0	619.7	6.1	1.4
TOTAL		15.7 <u>d/</u>		6.2	1.3
					42.4 <u>d/</u>

- a/ All benefits, costs and projected values in this table are presented in millions of constant 1980 U.S. Dollars.
- b/ A 12% discount rate is used to calculate present values.
- c/ These costs are calculated as the amount by which the 1980, 1981, 1982, and 1983 budgets exceed the 1979 budgets for these same institutions. Since there is a carryover of some costs from Ag. Sector II in 1984, this carryover amount is used to represent the amount by which the 1984 budgets will exceed the 1979 budgets for this group of institutions.
- d/ The benefit/cost ratio is 2.70.

TABLE A - SUMMARY OF THE ECONOMIC ANALYSES FOR ACTIVITIES IN THE AGRICULTURE SECTOR PROGRAM II

ACTIVITY	TYPE OF ANALYSIS	COMPUTED VALUES FOR IMPORTANT COEFFICIENTS			SHORT SUMMARY OF RESULTS
CURLA	Cost Effectiveness	Alternatives	Present Value of Estimated Costs for the Period 1980-89 (\$)	Average Present Value of Costs Per Graduate For the Period 1987-89 (\$)	Alternative 1, the alternative proposed in the Project Paper, is shown to be a cost effective means of improving the quality of education received by future planners, administrators, and implementors of agricultural development programs.
		1	17,124,000.	5,100.	
		2	18,763,400.	7,200.	
		3	27,458,100.	11,000.	
Zonal Infrastructure Packages	Benefit/Cost	The benefit/cost ratio is 1.27 The internal rate of return is 19%.			The analysis focuses on the increases in farm income made possible when farmers adopt improved cropping systems on irrigated and non-irrigated lands. Irrigation is the principal infrastructure investment considered in the analysis. Other types of infrastructure investment are viewed as being complementary investments which permit farmers to market increased production, thereby making it more profitable for small farmers to adopt improved cropping systems.
Service Cooperatives	Benefit/Cost	The benefit/cost ratio is 1.42 The internal rate of return is 20.3%			Cooperatives serve as a focal point for technical assistance visits which stimulate adoption of improved technology that permits small farmers to achieve increases in yields and net income/ha. Cooperatives also permit small farmers to enjoy economies of scale in production and marketing which reduce per ha. costs. The combination of higher net incomes/ha. from improved technology and lower costs/ha. from economies of scale provide sufficient benefits to make this a competitive agricultural development project.
Small Farmer Consumption Improvement	1. Benefit/Cost 2. Nutritional Benefits	1. The benefit/cost ratio is 36.6 2. Home garden production is estimated to provide about 12% of the annual calorie and protein requirements for a family of six.			1. Seeds and seedlings will be distributed to rural families by local extension agents. Families participating in the activity will plant home gardens which will increase each family's real income by providing additional income in-kind. 2. The activity will provide additional food which will make an important nutritional contribution to the diets of participating families.
Extension Service	Welfare Principles	Type of Information	Old Alternative	Proposed Alternative	This activity calls for a reorganization and expansion of the extension service. The work load of individual agents will be increased from 111 to 144 farmers/agent through use of para-professionals, improved mobilization of personnel and increased contacts with cooperatives. Coverage for farmers with 1.0 to 2.0 ha. will be increased from 15% to 35%, and the quality of technical assistance will be upgraded with only a modest increase in per farmer cost. Principles of welfare analysis state that if greater good can be derived at no increase in cost, total welfare is increased. The essentially constant cost for a higher quality of service implies that this activity will result in an increase in welfare. Subsequent to completion of this analysis, it was determined that agent workload would be increased from 116 to 173 farmers/agent. This change does not violate the conclusions derived from the Economic Analysis of this activity.
		farmers contacted directly per year (1000)	27.	81.	
		Cost per farmer contacted directly per year (\$)	119.	125.	
		Estimated number of indirect contacts per year (1000)	54. to 81.	128. to 189.	
Institutional Development Activities	Test of Reasonableness	The present value of these Agricultural Sector II Program costs is 313,700,000. The present value of a one percent increase in the projected gross value of agricultural production is 147,400,000. The ratio describing the present value of additional production with respect to the present value of additional costs is 2.70.			The activities included in this analysis are primarily investment in human resources and institutional infrastructure that will increase the efficiency with which agricultural sector institutions and personnel provide improved services to Moroccan farmers. It is assumed that these improved services will result in additional agricultural sector production which represents an identifiable stream of benefits. The analysis demonstrates that if these investments cause agricultural sector production to increase by only one percent, this will be more than sufficient to offset the additional costs proposed in these seven activities.

B. Social Soundness Analysis

The target groups for this Program are individual small farmers and agrarian reform farmers, 90% of whom are in the nutritionally-at-risk population. Approximately 25 percent of individual farmers and 80 percent of agrarian reform farmers will be benefitted by the Program in the time-frame of Project implementation. The Program will assist the GOH to improve services to target group farmers already being assisted by its programs and to provide services to significantly larger proportions of the target groups.

The analysis examines sociocultural feasibility, spread effects, and distribution of intended Program benefits in terms of the sector target groups. Three Program activities (small farmer consumption improvement, zonal infrastructure packages, and service cooperatives) provide benefits to be received directly by agrarian reform and small individual farmers during the time-frame of the Program. Other activities (extension service improvement and National Development Bank regionalization) will also provide benefits to be felt during the Program implementation period. These components will contribute to improving delivery of benefits to the target groups. A third set of activities (CURLA, in-service training, and participant training) will produce benefits over a 5-to-20 year period for the target groups, primarily as qualitative improvements in the service provided by the State to target-group farmers. Finally, some activities (planning, information system, and marketing analysis system) will have both short and long-term impacts, primarily by improving the efficiency and efficacy of programs directed to the agricultural sector target groups.

The Program design is feasible in sociocultural terms, will have beneficial direct impacts on a substantial proportion of poor farmers, and will create the conditions required for diffusion of benefits to farmers not directly benefitted during the life of the Program.

Retrospective analysis conducted in the Agriculture Sector Assessment for Honduras identified a number of on-farm constraints, primarily technological and marketing. The benefits to be delivered by the Program, as detailed in this and the Economic Analysis, include qualitative improvements in the technology delivered to farms and qualitative/quantitative improvements in the ability of the GOH to deliver improved technologies. Some technology (improved seeds) will be directly delivered in the area that will have the most immediate impact on farm family consumption patterns.

The Program will contribute substantially to the nascent process of promoting delivery of services through participatory, grassroots private organizations. This effort, while it is experimental in nature, has great potential for strengthening small farmer organizations over the long-run and reducing needless dependence on public intervention in the sector.

H.2. Social Soundness Analysis

I Background for Long Term Social Impact of Agriculture Sector II

The Agriculture Sector II Program is intended to establish a broader and better base for governmental intervention in the agricultural sector with the objective of extending agricultural services to the mass of farmers and rural peoples not presently reached. The dilemma in Honduras, as in so many developing countries, has been how to achieve this objective, given limited planning capacities, inadequate institutional capabilities, small technological foundation, weak delivery systems, and an antiquated traditional marketing process.

Emphasis in the 1950s and 1960s was primarily production-oriented. The export sector in the main, except for coffee and beef, was in the hands of multinational companies. Whereas their policies, with not a little encouragement from rural organizations and unions, were enlightened, the rewards in terms of farm laborers benefitting were fairly restricted. Beef production has been mainly in the hands of the large Honduran land-owners, i.e, commercial farmers. Much of the country's coffee production, unlike in neighboring Guatemala and El Salvador, was in the hands of the small producer and marketing took place through a marketing federation. Most of the food produced for domestic consumption was--and still is--produced by small traditional farmers who subsist despite low levels of technology and efficiency.

Three significant phenomena have changed, and are changing, the character of agricultural development in Honduras in the past thirty years.

The first was the existence of an export-oriented commercial farming system which was forced by the strikes and organized peasant action in 1954 to distribute benefits more widely, thereby planting seeds of expectation and a certain dissension in the rural sector.

The second was the mobilized peasantry which helped bring the governmental administration down in 1972 and pressured the Government of the Armed Forces to embark on a major agrarian reform program and a significant redistribution of land ownership to date affecting about 10% of the rural population. The momentum of agrarian reform--which was mostly a land distribution effort with provision of only minimal governmental services--diminished by 1976 and the agrarian reform effort, in the absence of the political imperative is proceeding at barely the rate necessary to absorb rural population increases from year to year.

The third was the critical re-examination of governmental agricultural sector objectives, taking place over the past two or so years as a part of the Honduran assessment of the Government's ability to reach the objectives it had identified. In particular, the GOH has taken the decision to develop the institutional capacity to aid the small traditional farmers who heretofore have not benefited significantly from governmental interventions in the sector. The Mission is currently engaged in supporting this third stage.

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The social impact of governmental programs has varied considerably in the past thirty years. The social impact of the production-oriented, i.e., commercial production, of the 1950s and 1960s was very limited. All told, perhaps 5% of the population benefitted, and the effect was mainly for those with medium and large farms. The Government of Honduras had no modern agricultural ministry and functions were pretty much limited to a narrow sector of the agricultural community. The efforts of AID, and predecessor organizations, while advocating a distribution of benefits, in the main were directed toward institution-building and providing some improved technology for commercial crops.

The agrarian reform movement, and adjustments in the Government's policies and programs in the mid-1970s afforded an opportunity for AID, and other international financing agencies, to identify with a larger target group, i.e., about 10% of the population. Extensive resources were made available and the projects were oriented at reaching the target population of the poor majority with more credit and services. What was readily apparent was that the Honduran institutional structure and the human resources base was fragile, weak and inadequate. Hondurans recognized, with advice from the tri-partite commission participants, IDB, IBRD and AID, that the Government had limited capability to achieve its worthy objectives, and severely limited capacity to absorb external assistance prudently and effectively. Evidence was ample in terms of the limited part of the target group actually reached, of the high per capita cost of governmental initiatives--aided and abetted by international financing agencies, and of the great majority of rural peoples untouched by the reform efforts.

The Government had embraced, by the mid-seventies, the objective of reaching as soon as practicable all of the poor majority with programs which had better quality of life opportunities. Expectations had been aroused, but achievement was doubtful unless many readjustments of policies and programs could be made. There had to be a rational and systematic analysis of choices, also based on an objective assessment of institutional capabilities.

The analytical process of the past two years has put Honduras on a firmer foundation in this respect. Actions are in process which will help guarantee a more rational selection of policy and program choices within Honduran institutional and human resource capabilities. Action is contemplated which will expand Honduras' capacity to produce human resources for sector institutions and agencies. The service and credit delivery system, including experimental use of non-governmental service cooperatives has been given high priority.

Governmental programs in the intensive agrarian reform sector, with external aid and assistance, emphasized project activity intended to directly benefit the rural poor. Program implementation was relatively slow and the numbers of rural families benefitting were relatively few, and virtually none of the rural poor outside the small group of reform beneficiaries. The Government, in analyzing agrarian reform costs, discovered that it

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would be impossible for it to replicate these programs. Further, it concluded that public services could no longer ignore the needs of individual small farmers, who had been the objects of benign neglect. It also concluded that there needed to be greater utilization of intermediate, cost-effective technologies. In this latter respect it concluded that the small, but potentially larger, rural private sector, could probably carry an unanticipatedly greater share of the burden for rural development. AID, through the proposed Rural Technologies Program, will strongly support this new GOH initiative.

The Government concluded that future effectiveness of governmental programs in the agriculture sector--indeed progress in the sector and accompanying marked improvement in the quality of rural life--depended on a major investment in improving governmental institutional capabilities.

The major social impact of the present approach of the GOH, supported by Agriculture Sector Program II will be increasingly felt with the passage of time, i.e., when improved institutions and systems are in place. Thus, the major impact can be estimated in five year's time only in aggregate terms, as detailed below.

In terms of impact on small farmers in the rural areas, the context of earlier assistance policies must be clearly kept in mind. To put it succinctly, using an analogy from military and/or chess strategy, the emphasis is, and should be, on building up a position from which more effective attacks on small farm constraints can be launched.

This social analysis proceeds to take a balanced look at some critical aspects of impact and feasibility of the Program. The intent of the analysis is not merely to seek a justification of the Program; this is amply provided by the Assessment and in the foregoing summary of recent sector approaches. Rather, its principal utility is in exploring some of the relationships between Program design and the beneficiary population, thus not only providing a basis for supporting the Program design but also of some utility in its implementation. The critical problem areas noted in the analysis are manageable, given the appropriate attention to behavioral considerations in implementing the Program.

II Summary of Program Benefits

The 1979 CDSS and Agriculture Sector Assessment clearly lay out the broad outlines of agricultural sector strategy, and describe the target groups for the Sector Program II qualitatively and quantitatively as well. Linkages are demonstrable between the outlines of the sector strategy and target group beneficiaries, on the basis of the design of the Program contained in this Paper. The following summary places them in the overall perspective of the sector approach.

a. Infrastructure

One element of the strategy for the sector is to develop community and farm basic infrastructure to facilitate use of land resources, distribution of inputs, and technology, and access to markets and social services. One activity of the Program has been designed to contribute to this strategic objective, i.e. zonal infrastructure packages. Five percent of rural poor farmers will be benefitted by this activity directly during the time-frame of Program implementation. Production will be increased through the use of irrigation on approximately 2,000 farms. Some 8,000 farmers will have improved access to markets. Equally, or perhaps more, important is the medium- and long-term effect of this activity in terms of the capacity of the public sector to provide low-cost infrastructure constructed by labor intensive means. Current capital intensive methods have limited the ability of the GOH to absorb the high cost of providing infrastructure to precisely those areas where the poorest farms tend to be located. Thus, this activity will directly benefit poor farmers and will establish a governmental capacity for continued provision of said benefits at lower cost to other poor farmers.

b. Access to Inputs

Another element of the strategy is to provide rural families with easier access to more reliable technical information, appropriate production inputs, land, capital, and markets. Five of the Program activities are designed to contribute to this strategic objective, i.e. extension improvement, service cooperatives, small farmer consumption improvement, National Development Bank regionalization, and information systems. Approximately 40% of the rural poor target group will be benefitted by one or more of these program activities. Extension improvement will reach 25% of the small individual farmer target group and 80% of the agrarian reform target group. The information systems will develop technical information to which those farmers served by the extension system will have easy access. The development of regional structures for the National Development Bank will increase small farmer access to credit. Improved seed inputs will be delivered to 29% of the agrarian reform target group and 10% of the small individual farmer target group. An activity with great potential long-term social impact is service cooperatives. While less than 5% of the target group will be reached in the Program time frame, the development of a successful and replicable model is potentially useful for the great majority of target group farmers.

At minimum, the estimated 40% of farmers in the target group who already belong to one kind of agricultural organization or another will be potential beneficiaries of the delivery system model developed in the service cooperatives activity.

c. Planning

The target groups for GOH public sector programs will benefit over the medium- and long-term from efficiencies and increased effectiveness of sector programs which will result from the coordinated planning system envisioned in the Program. Deficient and uncoordinated planning has limited the coverage of rural poor farmers and also has reduced the quality of services delivered to farmers. Poor planning, especially with regard to the coordination of production and marketing plans, has had deleterious effects on the agrarian reform target group especially. As detailed in the Economic Analysis, the savings to the sector will permit increased investment in the sector.

d. Human Resource Development

The keystone of the strategy laid out in the CDSS is development of human resources for institutional structures and delivery systems in both qualitative and quantitative terms. The GOH cannot effectively marshal its resources to benefit the rural poor without the requisite number of trained people in its institutions.

Quantifications of the impact on beneficiaries for this component of the Program is difficult, as the time lags involved in each of the activities is somewhat different. In-service training will bring about improvements that will be felt by target group beneficiaries by the end of the Program Implementation Period. Scholarship training will take approximately the same time period. CURLA improvement has the longest maturation period, but it also represents the potential for greatest spread effect, as there will be a continual stream of graduates whose recruitment into operational levels of the various agencies will represent important qualitative improvement in service delivered to rural poor farmers.

III Short and Medium-Term Program Benefits

A. GOH Target Group

The target groups for agricultural sector programs of the Government of Honduras are agrarian reform farmers, small individual farmers and, to a lesser extent, rural laborers.

The principal constraints of the landless sub-sector are access problems, be it to productive resources or relatively constant and remunerative employment. The principal constraints of the reform sector are management, marketing, and technological deficiencies. Small individual farmers constraints are principally technological and marketing, although there are a number of derivative problems related to the lack of infrastructure.

B. Types of Program Benefits

For the sake of clarity and precision, the benefits to be derived from the various components of this Program will be classified into a typology based on two criteria: immediacy and contiguity. Immediacy refers to the time frame within which benefits will be perceived by the target group. Contiguity refers to the directness of the benefit. To illustrate these criteria with a familiar example, let us consider the parable of the native and the fish-- "give me a fish and I will eat tomorrow; teach me to fish and I will eat forever." The first good-- a fish-- is immediate and contiguous. Its benefits are perceived immediately upon delivery, and directly by the recipient. The second is intermediate and contiguous. It is still perceived directly by the recipient but over a longer time frame. However, suppose a project were to train trainers of fishermen. Its benefits are intermediate and non-contiguous, perceived over a longer time frame and requiring a step between Project and beneficiaries.

This Program includes all three types of benefits. Type A benefits are immediate and contiguous. They consist of goods and services that will be directly delivered to Program beneficiaries within the time-frame of Program implementation. Included here are the small farmer consumption improvement, zonal infrastructure packages and service cooperative activities. Type B are immediate and non-contiguous. They will be established within the time frame of Program implementation by the public agricultural sector, which will, in turn, deliver a number of benefits to the target beneficiaries. Included here are the Extension Service and the National Development Bank regionalization activities. Type C benefits are intermediate and non-contiguous, consisting of improvements in the quality of the public agricultural sector which will affect target group beneficiaries over a 5-to-20 year time frame. These include in-service training, CURLA and participant training activities. Three activities, .e., marketing analysis system, agricultural planning and information system, contain mixed benefits.

C. Overall Impact on Target Groups

In general, these three types of benefits will affect both the agrarian reform and small individual farm sub-sectors. The GOH has currently targeted the inclusion of 5,000 families per year in the land reform program. Thus, 25,000 landless families will be brought into the reform sector over the life of the Program, and consequently benefit from it. This pace of land reform is attainable and will not place an undue strain on improved sector delivery mechanisms. However, if there is no improvement in sector institutions, these families will face the same problems noted earlier which affect the majority of the families already in the reform sector, i.e., minimal services and inputs.

D. Composition of the Target Group

The following Table lays out in summary form the distribution of land among different farm groups in the agricultural sector of Honduras:

LAND DISTRIBUTION BY FARM GROUP SIZES AND LANDLESS LABOR - 1974

Group/Farm Size Has.	No. of Farms	% of Total	Area	% of Total	No. of Families	% of Total
Landless Labor	0	0	0	0	119,433	34.5
Less than 1 ha.	33,774	17.3	21,534	0.8	33,774	9.8
From 1 to 35 has.	149,104	76.3	955,862	36.0	149,104	43.1
Agrarian Reform Groups	907	0.5	158,392	6.0	32,165	9.3
35 has. and up	11,512	5.9	1,519,308	57.2	11,512	3.3
Total	195,297	100.0	2,655,096	100.0	345,988	100.0

IV Direct Benefits of the Program

These benefits consist of goods and/or services that will be provided as Program inputs directly to farmers or farm groups in the agrarian reform and small individual farm sub-sectors.

A. Small Farmer Consumption Improvement

1. Feasibility

One feasibility issue is the likelihood that improved seed will be adopted by members of the target group. Does the use of improved seed require a behavioral change or is it compatible with existing farm practices? Current practices among small individual farmers can be discerned by analysis of data from the Small Farmer Survey conducted for the Agriculture Sector Assessment in Honduras. In the 1975 and 1976 crop years, 25% of small farmers were using only purchased basic grain seeds for planting; 30% were using both purchased and farm-produced seed; and 44% were using only farm-produced seed.

Since most purchased seed is improved seed, it can be concluded that no significant behavioral change will be required by more than half of the potential target group for planting of improved seed in terms of their willingness to use it.

The second feasibility issue relates to the consumption aspect of this activity. In terms of current consumption patterns on small farms, there is no feasibility problem, as on-farm consumption of all three types of crops is significantly high. For vegetables, current practices on farms are as follows: 96.6% of the farm families consume and sell their production in roughly equal proportions; 2.7% of the farm families sell a substantially greater proportion than they consume; and 0.7% consume more than they sell. For permanent tree crops, the pattern is that 64.7% consume and market their produce in roughly equal proportions; 26.3% consume more than they sell; and 8.9% sell more than they consume. For basic grains, the pattern reflects the subsistence orientation of most small farms; 86.1% consume more than they market; 12.1% market more than they consume; and 1.9% consume and market in equal proportions. 1/

Since the quantities of each crop produced under this component are relatively small, the activity is not market-oriented per se. Therefore, they will be consumed and sold in proportions similar to those outlined above. The crops that have been selected are already in the diet of rural Hondurans; therefore, no diet practices need to be changed in order to ensure on-farm consumption. The proportion of these crops that is marketed will contribute to an increase in farmer income, the basic objective of Agricultural Sector II Program. 2/

1/ Small Farm Survey, Agricultural Sector Assessment for Honduras.

2/ The income effect of these crops is analyzed in the Economic Analysis.

2. Spread Effect

To judge the likelihood of diffusion of improved seed varieties that are not hybrid, one need only refer to past experience in Honduras. The majority of corn varieties being planted by small farmers now has been introduced over the last two decades and has undergone a process of on-farm adaptation to ecological conditions. Most of the seeds produced on farm are lineal descendants of improved seed varieties introduced in the early sixties. These seed varieties were diffused to other farmers by a process of extension work coupled with demonstration effects.

With the exception of hybrid seeds, which by their genetic nature cannot reproduce for another crop year, improved seed varieties will spread from farm to farm via a similar process. The importance of demonstration effects in the process of diffusion, underscores the need for careful attention to the farmers who receive the improved seed packages. Unsuccessful attempts with improved seed packages will diffuse as rapidly as successful attempts. The more careful attention there is in the first round of introduction of packages, the greater will be the likelihood of eventual diffusion of the innovations. This is ensured in the design of the activity by the intensive and extensive assistance provided with the inputs.

3. Distribution of Benefits

The target group for this activity is explicitly identified in the design; therefore, there is no distributive issue. The transfer is immediate and direct. The minimal price of the package, equivalent to four days wages, is easily within the reach of all farmers, even as a risk venture. Therefore, this component will be accessible to the smallest and poorest farms. The fact that the variety of crops is similar on small farms of different sizes increases the likelihood of participation by poorest farmers.

The division of labor by sex on small farms is such that women do a great deal of home gardening. Improved seed varieties will beneficially affect this economic role of women, as it is common practice for the proceeds of vegetable and fruit gardens to constitute a household fund controlled by women.

B. Zonal Infrastructure Packages

1. Feasibility

Seen from the standpoint of sociocultural practices, this activity is entirely feasible. Similar efforts are already underway and have had initial success in the Rural Trails Project and in the access road component of Hurricane Rural Reconstruction II. This Program widens the scope of infrastructure improvement to include irrigation systems and other types of infrastructure.

2. Spread Effect

The diffusion of benefits from road infrastructure is sufficiently well-established in development projects and literature so as to require no major analysis. The economic analysis of the Rural Trails Project establishes a favorable benefit rate resulting from farm-gate sale of produce as compared to transportation by traditional means.

3. Distribution

The project design weights the distributive effect of infrastructure packages equally with the economic effect for selection of sites. Two of the major types of infrastructure contemplated--roads and irrigation--present different problems in terms of distribution. Roads tend to be indiscriminate, serving rich and poor equally well. That is, the increase in farm-gate prices is equal, in absolute terms, for rich and poor farmers. In relative terms, the richer farmers stand to gain more because of the greater volume of production and possibly different market linkages. It is patently absurd, however, to deny the potential benefits of a road to poor farmers simply because richer farmers will benefit as well.

It is obviously impossible to select zones that include only poor farmers. However, the zones will be selected on the basis of the proportion of poor farmers to be served, and the proportion of total benefits to accrue to poor farmers. Thus, the benefits to be derived from it will accrue primarily to the target group.

C. Service Cooperatives

1. Feasibility

There are already at least three subregional cooperatives in existence and functioning in Honduras. Two of them are of relatively recent origin, and it is difficult to judge their long-term feasibility. These two cooperatives are grass-roots organizations that have been organized by the combined efforts of ANACH local cooperatives and the national leadership of ANACH. They have been formed precisely to fill the needs which this component of the Program is designed to address. They are the sorts of experiments in participatory development which it is clearly AID's mandate to encourage. The organizations are put together by local initiative, yet they will require substantial support and access to resources to get off the ground. Thus, while it is too early to judge their viability, it is not too early to decide whether they are appropriate vehicles for AID and GOH program assistance.

The viability of group farms which will associate together to form sub-regional cooperatives is another indicator of the likelihood of this success. To judge their viability, however, the types of group farms need to be defined. One pattern of group farming is represented by banana-producing coops that are monocrop farms. One such type of group

farm is in the Isletas Area. The Isleta subregional cooperative includes 20 groups that belong to one Empresa Asociativa. Technical, marketing, and managerial assistance is provided by COHBANA, the state-owned banana corporation. This subregional cooperative is financially and socially a viable unit. The feasibility of extending the model is conditioned principally by the existence of similar monocrop situations.

The second type of farm, similar to the first, combines monocrop group cultivation of cash crops with individual family production of subsistence crops. This is the most common pattern in the Honduran Agrarian Reform Program. The viability of these farms is determined by the level of technical, marketing, and financial assistance in its initial stages, on the one hand, and the preparation of the group, on the other. The most successful farms are those with sufficient training in group farm management and with external technical and credit assistance.

A number of farms have received external financial/technical assistance without sufficient preparation as a group. Thus, the first order of business for these groups is to develop the capacity of their human resources prior to or concomitant with other sorts of assistance. This has been done successfully by farmer training programs of INA, DIFOCOOP, and various private agencies. While these programs will continue, it is expected that they will be strengthened with a possible amendment to this Program.

V Immediate Non-Contiguous Benefits

A. Extension Improvement

The extension service activity will improve the quality and widen the distribution of the benefits that currently accrue to target group farmers. The target group for extension agents is, and has been for a number of years, coterminous with the agrarian reform target groups. Under this Program, extension services will be expanded to include more independent small farmers based on the recent GOH decision resulting from the Assessment. This Activity will increase by 23 percent (from its 1978 level of 66 percent to 80 percent) the coverage of agricultural reform farmers and by 500 percent (from its 1978 level of 5 percent to 25 percent) the coverage of small individual farmers. Therefore, assuming no major intervening change in GOH agricultural sector policy, agrarian reform and small individual farmers will benefit. Under the 1979-1983 National Development Plan, greater attention will be given to small individual farmers than has been the case in the past five or six years.

1. Feasibility

Feasibility of this activity can be analyzed in terms of the receptivity of the target group to extension services, their receptivity to peer advice, and the likelihood that real benefits are to be derived from improvement of extension work. That is, since technical assistance to the farmer is a vehicle for a variety of benefits, rather than a good in and of itself, it should be assessed as such. To demonstrate its feasibility it will not be sufficient merely to point to increased numbers of farmers receiving attention from extension agents, but to qualitative improvements in the sorts of services provided.

Twenty percent of all small and agrarian reform farmers have been recipients of technical assistance from extension agents. The great majority consider this assistance to be of average-to-good quality. ^{1/} Very few target group farmers have a negative attitude toward extension assistance received. There is little doubt, then, that better prepared extensionists and expanded extension work will be well received by target group farmers.

The use of voluntary agents from rural community agents is a sound advance in sociocultural terms. Village-level agents have been successfully used in a number of agricultural information and education programs, e.g. the BVE Program in Guatemala. Farmers are receptive to advice from their successful peers; therefore, great care will be taken in the selection of voluntary agents. Communication networks among farmers already exist; therefore, extension agents will select individual farmers

^{1/} Source: Small Farmer Survey, Agricultural Sector Assessment for Honduras. These are value judgements made by small farmers, comparing them to private sector extension advisors in input stores, etc.

who are already links in the informal village communication network. Finally, and most importantly, farmers judge the advice from their peers on its quality and its non-redundancy.

While extension agents are well received, their impact on farm income is harder to discern. There is no significant difference, holding farm size constant, in income per hectare between farmers receiving TA and those not receiving TA. ^{8/} While the factors going into farmers income are very complex, this datum underlines the necessity of improving the quality of extension work, to increase the likelihood of improved small farmer income.

Extension improvement is a critical link in insuring that direct benefits, i.e., improved seed, irrigation practices, etc., make an impact on the target group. Therefore, this component is a key to the entire Sector Program.

2. Diffusion

The Program will support a strategy for utilization of voluntary leaders which is designed to diffuse technical innovations more widely. The sphere of influence of an extension agent who works through the voluntary leaders is potentially much greater than one-on-one assistance alone. Thus, the potential for diffusion is widely increased. In addition, the absolute number of extension agents will be increased substantially (80% over the 1973 level), thus, doubling the number of farmers currently being served can reasonably be expected.

Qualitative improvements are similarly linked to potential spread effects. The results of an extension agent's collaboration with a farmer on a demonstration plot will flow through local communication networks whether or not the attempt is successful. Qualitative improvement of the extension agents' assistance increases the likelihood of favorable diffusion of beneficial innovations.

3. National Development Bank Regionalization

Farmers will have increased and more timely access to credit as a result of this activity. It is estimated that some 11,000 additional small farmers will benefit.

1. Feasibility

This analysis will address the issues pertaining to the feasibility of translating more accessible credit into greater utilization of credit by the target group. The Small Farmer Survey showed that the demand for credit on small farms is 2.5 times greater than the current supply.

^{8/} Source: Small Farmer Survey, Agricultural Sector Assessment for Honduras.

It is reasonable, then, to conclude that increased availability of credit will translate into increased utilization. However, the method of utilization of credit on many small farms and agrarian reform farms that currently use credit leaves much to be desired. Credit education under this activity, and the improvement of extension, will be critical in assuring the feasibility of obtaining benefits from the credit to be disbursed.

The decentralization of the Bank's activities will make it more effective in meeting target group needs by improving coordination with other agencies. Small farmers and agrarian reform groups currently must deal with extension services that are region-specific while credit services are centered in Tegucigalpa. The resulting lack of coordination between credit and extension advice reduces the potential impact of both on the target group. Regionalization and increased BNF agent mobility should ensure increased timeliness of credit and better supervision of use. The complementary regionalization of extension, credit, and planning will provide more focused, and consequently more efficient, service to small farmers and agrarian reform groups.

2. Distribution Effect

Regionalization of Bank services might be considered neutral in terms of the relative distribution of benefits, since the Bank presently serves medium-size farmers who are not poor, as well as poor farmers. However, it is small farmers who are most negatively affected by the long waiting period for current Bank loan approval. Medium-sized farms have access to private banks as well as the BNF; since credit from private banks is more timely, they have the advantage of more efficient alternative credit sources. Most of the members of the Program target group look to the BNF as their sole source of credit. By considering the agricultural credit sector as a whole, rather than the BNF alone, an increase in the efficiency of BNF credit is relatively more important for the target group than for farms not in the target group. This is especially true since an increasing proportion of the BNF's capital is tied to small farmer lending - capital furnished through AID loans which also specify criteria for GOH counter-part funds lending.

VI Intermediate, Non-Contiguous Benefits

A. Training

The CURLA improvement, in-service training, and participant training activities will be considered together because of their similarity.

1. Feasibility

A principal assumption in Program design is that improvement in the quality of human resources serving the public agricultural sector will result in improvement of services delivered to the target group. To test the validity of this assumption, one can compare it to alternative choices. For instance, designers of the Program had the logical choice of assigning project funds to credit rather than institutional improvement through training.

The feasibility of benefitting target group farmers by improving delivery systems is best judged, then, by comparing it to recent efforts to provide a direct input, i.e., credit, without prior efforts to improve the means of input delivery. The Assessment provides abundant evidence of current deficiencies in the delivery system. The extremely slow disbursement of agricultural credit available under Agriculture Sector I is due, in large part, to deficiencies in the delivery system.

In hindsight, this Activity in the Program should logically have preceded Agriculture Sector I. That is, the delivery systems should have been transformed before attempting to reach massive numbers of agrarian reform and/or small individual farmers. While history cannot be rewritten, its mistakes can be corrected.

The appropriate question is not whether it is feasible to assume that farmers will directly benefit from the improved delivery systems that will result from improved human resources, but whether it is feasible to assume that any substantial direct benefits will accrue without improving the human resource base of present delivery systems. Experience in Agriculture Sector I and the findings of the Assessment are sufficiently conclusive, demonstrating that further efforts to provide inputs through the existing delivery system are not feasible, and that this must be improved in order to permit improved utilization of existing and planned investment.

2. Spread and Distribution

The diffusion of benefits to target group farmers rests on linkage to another Program activity and on an assumption. The linkage is to extension improvement. Improvement in technical capacity of researchers, specialized personnel, administrative personnel, etc., will be translated into benefits that diffuse to target group farmers primarily through the extension service. The assumption is that the GOH target group over the next 20

years will continue to be rural poor farmers. Improvement of human resources will take place during the life of the Program, and will begin to impact on farmers only toward the end of the Program.

Some improvements in CURLA will begin to make an impact at the end of the Program period, by which time the improved labs, classroom and demonstration facilities, and improved curriculum will be in place. The improved quality of extension agents and other agricultural personnel graduating from CURLA at that time will have an immediate impact on delivery systems, which should by then have improved substantially as a result of the Program.

The human resource upgrading is vitally necessary in a longer time frame. Some of the achievements of the Program, especially in extension, would be in danger of retrogression after the life of the Program if the quality of personnel recruited into the system is not upgraded.

Certain improvements in CURLA will take almost 10 years to mature and develop to the point that they will begin to reach farmers. However, an in-country capacity for a self-sustaining and constant process of upgrading agricultural skills is necessary in the long run, if future generations of farmers are not to be put at a disadvantage.

B. Information System and Marketing Analysis System

Some of the benefits to be derived from these activities will be direct and contiguous to the farmer. Specifically, market prices and agricultural information communicated to farmers on a regular basis will have immediate impact. However, in both instances there is a considerable amount of institution-building that must precede these two benefits, as the information networks and accompanying research networks are currently very weak.

Investment in the development of a marketing research and analysis capability does not guarantee, in and of itself, any direct benefits to the target group. While this component has the potential of providing more benefit to small farmers than any of the other Program components, it also has the potential of adversely affecting target group farmers. Exhaustive market analysis may lead policy-makers to the conclusion that basic grain prices, for example, are artificially high.

A thorough analysis, therefore of the benefits of this activity to the target group farm is highly speculative, and therefore not worthwhile. Current grain price stabilization policies are not working effectively, and there is no governmental capacity for analyzing its weakness and developing alternative policy measures. A necessary first step to improved marketing is to establish a marketing research and policy making capability.

C. Planning Activity

The planning activity of the Program will have two sorts of impact on the target group. First, the regionalization of planning will effect a more rational deployment of resources, thereby increasing the quality of services offered at the required level. Second, increased efficiencies and greater efficacy of resource use will be achieved throughout the public agricultural sector, by establishing coherent and interrelated policies and strategies and translating these into more focussed Program-implementation efforts. Thus, greater numbers of farmers will be reached with improved programs. The Economic Analysis quantifies the benefits to the sector as a whole of the Institutional Development Activities of the Program, in which planning plays a critical role. The activities yield a highly favorable benefit/cost ratio of 2.7 to the sector as a whole. Since Program target groups are the principal beneficiaries of GOH sector programs, this estimated increase in the value of production will have a very beneficial impact.

H.3. Technical Feasibility

In general, the Agriculture Sector II Program represents a major effort to directly and systematically strengthen the public and, to some extent, private agricultural sectors' institutional capacity from the national planning levels to the farm level. The choice has been made to deal with a number of critical sectoral development constraints simultaneously through a systems approach, as opposed to a more narrow, single issue or geographically determined effort. A beginning has been made through the first Agriculture Sector Program, the results of which have helped ensure a solid base for additional phases of progress such as proposed in this Program. Other past efforts, including Agriculture Sector I to some extent, focusing on isolated projects (e.g., cooperative training) or single problems (e.g., credit), while contributing narrowly to constructing bases for future programs, have not been effective in and by themselves in creating the set of conditions necessary for improving the employment and income conditions of the rural poor. Nor have scarce GOH human and financial resources been utilized in a well conceived and mutually complementary fashion as seen from a longer-run viewpoint.

The conditions are right for this approach. The GOH is continuing to increase public expenditures in the agricultural sector and is manifestly interested in creating a more dynamic, better coordinated and effective agriculture sector with genuine employment and income benefits for the poor majority of rural Honduras. It is clear that the sectoral approach proposed is timely and carries a high degree of likelihood for greatly increasing the efficiency, cost effectiveness and impact of GOH agricultural development efforts.

Given the institutional development emphasis of the Program described above, exhaustive analyses of some aspects and activities would have little practical relevance. Thus, the principal focus of the analysis which follows is on technical issues of central importance. These are discussed below under the system component (e.g., Human Resources) to which they correspond.

A. Human Resources Development System

- General Issues

1. Supply and Demand Analysis for Agricultural Professional and Technical Personnel

The supply and demand for professional and technical personnel in the sector was estimated from two separate studies performed during the Agricultural Sector Assessment^{1/} and is dealt with extensively in the

^{1/} "Escuelas Agrícolas de Honduras, Oferta y Demanda de Recursos Humanos a Nivel Medio Superior", José L. Martínez Picó, Tegucigalpa, December 1977, and; "Estimación de la Demanda de Personal Estratégico de Nivel Medio y Superior para la Evolución del Sector Agropecuario", Ivo de Barreiros, Tegucigalpa, 1977.

body of the Assessment as well as in the Assessment Annexes N and O.

In summary, the findings indicate that the overall supply and demand for agricultural personnel trained at the B.S. and technician levels will be roughly equal through 1983. However, available agricultural specialists will fall short of projected requirements and the need to send a significant number of B.S. level candidates (over 300) abroad for advanced training will tip the balance toward a deficit of personnel over the next four or five years.

The GOH has opted to pursue a policy of investing heavily in training of sector personnel over this period in order to create the critical mass of specialists required to accelerate institutional and program development even though this implies a less than optimal capability to meet sector personnel demands in the short-to-medium term. To help ameliorate any possible negative effects on sector program execution and quality, the following measures will be taken.^{1/}

1. Increased Use of Para-Technicians. The MNR plans to expand the use of paid auxiliaries in the Extension Program (to 96) and of Volunteer leaders at the asentamiento and community levels (to 900). The para-technicians will serve to complement the work of extension agents rather than to take the place of these technicians.

2. Develop an Expanded In-Service Training Program. An estimated 965 in-service training courses will be given benefitting a total of 20,241 participants (roughly 5 courses for each sector technician).

3. An Expanded Use of Technical Assistance. A considerable amount of short and long-term technical assistance is contemplated over the Program period.

4. Contracting of Foreign National Technicians. To a lesser degree, short-falls of specialized personnel will be met by contracting qualified specialists from other countries to fill vacancies (especially for teaching staff).

2. Availability of Candidates for Academic Training

Given the large numbers of personnel to receive academic training through the scholarship activity, a careful examination of candidate availability was called for. Looking at the historical figures over the life of Agricultural Sector Program I, an additional \$ 1,590,500 was transferred to the scholarship activity through transfers in an attempt to meet the personnel training needs of the sector institutions. Given the high degree of priority given to personnel training by most of these

^{1/} The feasibility issues pertaining to these actions are discussed in other sections of this analysis as well as in the Administrative and Social Analyses.

institutions, funding rather than candidate availability would appear to constitute a greater constraint over the next four to five years.

The number of candidates available for training is also augmented for this Program by expanding the number of participating institutions to 11 (versus four in Sector Program I), encouraging the nomination of more female participants, and accepting candidates who are not already employed by agricultural sector agencies. (All participants will have an obligation to work for a sector institution upon graduation.)

Projected enrollment in the CURLA undergraduate program over the next five years was based on a linear regression calculation. The Statistical Section of the National University will begin doing more detailed analysis based on the numbers of high school graduates beginning in 1980. However, given that the annual growth rate of CURLA has exceeded 25% over the past few years a total enrollment figure of 4,000 students in 1983 is reasonable to expect.

3. In-Country Versus Foreign Training

Despite the foreign exchange costs involved, Honduras will continue to rely on foreign training for specialized personnel over the life of the Sector Program. National educational institutions cannot yet provide the diversity and higher levels of training currently needed in the Sector. The assistance programmed for CURLA is aimed toward improving the quantity and quality of B.S. level agronomists and foresters. CURLA's plans to raise academic performance standards next year should also contribute to qualitative improvement. Once the staff and facilities at CURLA are upgraded then post-graduate degree programs at that institution will be feasible.

4. Vehicle Maintenance

Several institutions will receive vehicles under this Sector Program and the arrangements for maintenance and repair vary. Vehicles assigned to the Ministry of Natural Resources, to the extent practical, will receive repair and maintenance services through the MNR Vehicle Maintenance Program established under the previous Agriculture Sector Program. Those to be received by the BNF will be maintained through that organization's regular maintenance program. Other institutions receiving vehicles have maintenance and repair arrangements either as an internal specialized support service or through contracts with private repair shops. In every case funds are budgeted for maintenance and repair on a per vehicle basis.

- Specific Activity Issues

A.1. Participant Training

Based on an analysis of the performance of the scholarship program in Sector Program I, the GOH will continue and strengthen the mechanisms and procedures which were established for scholarship planning, selection

and administration. Under the earlier Sector Program 63 participants obtained degrees and returned to work in their respective institutions.

For Sector Program II the same basic mechanism will be employed, i.e., the Scholarship Committee for the selection of participants and EDUCREDITO for scholarship administration. In addition, the following improvements are planned.

1. The Scholarship Committee will be expanded to include a representative from each of the new participating sector agencies (from 4 to 11).
2. A Technical Secretariat will be set up under the Scholarship Committee to: a) help develop and maintain current a sector-wide academic and in-service training plan based on periodic assessments of manpower and training needs in the sector, b) announce available scholarships and select candidates, and c) provide policy guidance to and monitor the execution of the scholarship program in general.
3. EDUCREDITO will continue financial and records administration of scholarships and assist with placement. It will contract consultants to help strengthen the participant monitoring and scholarship follow-up activities.
4. The Latin American Scholarship Program of American Universities (LASPAU) will assist CURLA in placing, orienting and providing follow-up services to those participants who will study in the U.S. and return as staff members of the University.

Scholarships will be advertised and granted in specific skill areas and specializations which cannot be obtained in-country and which the Secretariat's analysis indicates are important vis a vis sector personnel needs. The same rigor will be applied to the recruitment, selection and placement of participants in those short-courses given abroad which are judged to be highly useful and necessary. The GOH working group put considerable effort into making initial determinations, on an agency-by-agency basis, of the skills lacking and the number of specialized personnel required over the 1980-1983 period.^{1/} These initial determinations will be the subject of analysis by the Technical Secretariat of the Scholarship Committee and that body will periodically review, evaluate and update training plans in collaboration with the participating sector agencies.

While there will be some additional cost of administering the sector training program attributable to the establishment of the Technical Secretariat within the Scholarship Committee, the overall cost effectiveness of training under the Sector Program, as well as for training funded from other sources, will be greatly increased.

^{1/} See Annex B. of the Scholarship Activity Report.

A.2. Atlantic Coast Regional University Center (CURLA)

The objective of improving the quality of training provided to CURLA students as well as the University Center's capacity to accommodate increased enrollments can reasonably be expected to be attained through implementation of the following measures:

a. Improvements in the Curriculum. The new curriculum and course of studies proposed in detail in the CURLA's Development Plan reflects a concerted effort to relate the scientific and technological subjects to the Honduran agricultural setting and to the types of demands made on the B.S. level field technician. While the Ingeniero Agrónomo program will continue to be designed to produce fairly well-rounded agricultural generalists, students will be able to choose a subject matter concentration in one of five fields, i.e., plant science, animal science, agricultural economics, agricultural engineering and soil science.

b. Improvement and Expansion of Facilities. Among the improvements and expansion of the physical and teaching facilities called for in the University development program are: an expansion of the library building and increasing the number of reference books and publications; an expansion and better equipping of the teaching laboratories, and; the construction of an irrigation system to be used for teaching, research and extension purposes.

c. Increase the Number and Qualifications of the Teaching Staff. An ambitious staff improvement program has been developed to further train existing staff or other high potential candidates to serve at the University and will involve 39 B.S., 46 M.S., and 8 Ph.D. level personnel. These 93 professionals plus another 125 currently employed, or to be recruited, specialists will total 218 teaching staff by 1983. The teacher to student ratio will drop slightly (from 1:21 currently to 1:19 in 1983), despite the 153% projected increase in the student body.

Given the above mentioned improvements in the teaching program, teaching facilities and teaching staff, significant improvement in the quality of training offered at CURLA can reasonably be expected.

A limited amount of short-term technical assistance will be required also to help with special problems or provide expert advice in such areas as academic and institutional program evaluation and teaching methodologies.

The Mission Engineering Office has thoroughly examined the construction site, plans and preliminary designs and found them to be appropriate for the projected building and expansion program. The preliminary designs and corresponding cost estimates were prepared by the National University's Physical Plant Development Department and were reviewed in detail by CURLA and the Mission Engineering staff. The cost estimates have been judged to be realistic and reasonably firm for both the physical plant construction and the proposed irrigation system. The

type, quantity and costs of the laboratory and field equipment required are based on an analysis of the teaching program, student load and recent catalogue prices respectively. Equipment and machinery proposed are appropriate to the needs foreseen, and, the cost estimates are reasonable.

B. Institutional Development System

B.1. Strengthening of the Planning Subsystem and Administrative Development of the Agricultural Public Sector

Resource Base Data for Planning

A critical part of the agricultural information base required for sound policymaking and planning will be the data on the natural resource endowment and potential developed through an application of the Comprehensive Resources Inventory and Evaluation System (CRIES Project). CRIES will supply this type of information on national, regional and local bases and will be instrumental in:

1. Organizing natural resource, agronomic and agricultural production data in a logical system which will allow planners to quickly use it and to identify missing information;
2. Identifying policy alternatives and their consequences for a broad range of economic, ecological and development problems which heretofore could not be analyzed, and;
3. Simulating benefits and costs from alternative development programs.

The Sectoral Planning Office (OPS) of the MNR and other data collecting units have reviewed the CRIES Project and met with Program Officials. It has been concluded by all parties that the CRIES approach will be useful and complementary to the planning and data gathering efforts underway. The CRIES methodology can and will be adapted to the area frame sample which is to serve as the principal means of data collecting in the sector. The resource information generated will be fed into the Agricultural Information Data Bank managed for sector institutions by the OPS. CRIES officials and USAID Agricultural Officers familiar with CRIES foresee no major technical or institutional obstacles to adapting and implementing the CRIES approach in Honduras.

B.2. Development of an Information System

a. Data Needs

The establishment of the Honduran National Agricultural Information System (SNIAH) stems from the need for a reliable and regular supply of documentary and numerical data on the behavior and characteristics of the agricultural sector. Without such data sector policies, priorities, investment plans and social objectives are difficult if not impossible

to meaningfully establish or define. For example, without a fairly accurate production and price series for basic grains, setting support prices has in the past been largely a matter of guess work with a number of costly consequences for producers, grain marketing agents, GOH sector institutions and consumers. When the support price has been too high producers have increased production only to find that the GOH storage facilities are quickly filled, or grain buying funds are depleted, leaving them no alternative but to sell their surplus at extremely low prices in the private marketplace. If, on the other hand, support prices are too low there is a risk that production may fall off or slip through borders to neighboring markets to the point where domestic consumer demand can only be met by importing more expensive grains. Good data which is widely available will help reduce risk and allow for more predictable and less uncertain market conditions to the benefit of all.

The Sector Planning Office of the MNR has been acting as the lead agency in development of the SNIAH and as such has begun a sector-wide survey of marketing data producers and users. Preliminary results from this study indicate that the following types of marketing data are needed by the agricultural sector: producer prices; regional wholesale prices; wholesale prices in Tegucigalpa; regional retail prices, retail prices in Tegucigalpa, Government guaranteed prices (for basic grains); international prices; regional and national production estimates; farmer intentions; transport costs; storage and refrigeration facilities; supply and demand estimates; market structure, conduct and performance; and, marketing infrastructure, functions, margins, channels and costs.

The Sector Planning Office also has scheduled workshops for June and July of this year which will define the types of socio-economic, technological and other data needed by agricultural institutions. Preliminary assessment of needs as well as discussion with the various institutional users and the producers of agricultural data indicate that the workshops will recommend systematic collection and compilation of the following types of data (Note: Obviously priorities will need to be set and less critical data phased into the system over time.) Many of the types of data below have been collected or are being collected at present, often however on a one-time basis and with limited distribution.

A. Socio-economic Data Needs

- . Profile of the rural poor
 - . Characteristics of the landless
 - . Role of women
 - . Nutritional indicators
 - . Sources of on-farm and off-farm income
 - . On-farm labor practices
 - . Frequency and types of cottage industries
 - . Land use
 - . Land tenure
- B. Cooperative associations

B. Technological Needs

1. Use of appropriate technology
2. Cost of production
3. Livestock management practices
4. Fertilizer use
5. Improved seed use
6. Access to irrigation
7. Use of technical assistance
8. Use of machinery
9. Access to credit

C. Resources Base Needs (CRIES)

1. Soils
2. Climatological data
3. Hydrological data
4. Current land use
5. Potential land use

b. Data Collection

Key to the success of the SNIAH is the area frame sampling technique. This statistical instrument will permit the collection of a wide range of agricultural and socio-economic information in a cost-effective manner which enhances the probability that the needs for data coverage, completeness, compatibility and comparability are met. The Area Frame Sample already has been recognized as a valuable tool by the GOH and over the past couple of years initial steps have been undertaken to establish the process.

c. Data Processing, Storage and Retrieval

To ensure maximum access to and utilization of the numerical data bank, the acquisition of a mini-computer is required. Four terminals will link the data bank with the principal uses, i.e., MNR, DGEC, IHMA and CONSUPLANE. The estimated cost for a mini-computer, printer, four terminals, a four year supply of materials, and cable to link the mini-computer to the I.B.M. computer at the Ministry of Finance is \$ 190,000. An additional \$110,000 has been budgeted for software, short courses for operators, computer time on the Ministry of Finance computer for those problems which are too large for the mini-computer, technical assistance, and a four year maintenance contract on all parts and labor.

d. Logistical Support

Creation of the Agricultural/Rural Survey Department in the General Office of Statistics and Census is regarded as an important step toward establishment of the information system for two reasons. First, the Department will be implementing the area sample frame as it becomes available in each agricultural region, which will improve the usefulness

and representativeness of agricultural samples. Second, the Department will be given the field staff, equipment and budgetary support commensurate with its responsibilities. It is anticipated that the planned increases in numbers and upgrading of field staff, and the (already begun) improvement of field procedures will be as important for upgrading the quality of sample data as is adoption of the area frame. Twenty-five vehicles will be required to provide adequate coordination of data collection efforts in different regions, and to ensure that survey data is collected quickly enough to be useful for policy decisions. It was determined (with the help of PIADIC/ROCAP consultants) that four Chief-Supervisors would be needed as part of the upgraded field staff. One Chief-Supervisor will be assigned to Region V, Olancho, because of its importance as a grain producing area and because of its poorly developed road system. The other three Chief-Supervisors will each be responsible for overseeing field work in six regions (two regions per Chief-Supervisor). Each Chief-Supervisor will need a four-wheel drive vehicle. Vehicles will also be required to transport supervisors and interviewers within each region. It is estimated that an average of four field supervisors will be needed to monitor data collection efforts within each region. These four field supervisors will need three four-wheel drive vehicles (each supervisor does not need his own vehicle) to provide transportation for supervisors and interviewers, and to assure coordination between supervisors and the Chief-Supervisors for each region.

B.3. Marketing Research and Analysis System

Aside from data collection and policy determination, other complementary elements are needed if the IHMA marketing system is to accomplish its objectives. These are briefly dealt with below.

a. Purchasing Capacity

IHMA's grain purchasing capacity is now equal to about 10% of the basic grain harvest. The PL 480 Title III program will contribute to this capacity by providing additional grain buying funds which will begin to be used in late 1979. The Agricultural Sector Assessment concluded that: "By timing purchases to coincide with primary and secondary harvests and by selling when prices are high, IHMA's ability to handle as little as 14-15% of the harvest is considered to be sufficient to have a marked effect on smoothing out the wide price fluctuations caused by cropping cycles within each year."

b. Storage Capacity and Loss Reduction

Through IDB and CABEI loans for silo construction in five areas of the country, IHMA's grain storage capacity will be increased to 43,214 metric tons, equivalent to about 14% of the 1977-78 basic grain harvest. In addition, the FAO and Swiss Government are providing assistance in the

area of post harvest losses.

c. Other Resources and Conclusions

A.I.D. assistance through PL 480 Title III and this Program complements IHMA's resources and should enable the Institute to use its own resources and those of other donors (e.g., assistance in post harvest loss control) more efficiently. IHMA's budget rises gradually from \$14.5 million in 1979 to \$ 23.2 million in 1983. Of these totals, 73% is budgeted for grain purchasing, which leaves only 23% for purchases of equipment, new construction (rural silos), and recurring costs. The currently approved PL 480 Title III Program funds provide approximately \$2 million per year in 1979 and 1980 for IHMA operations, principally grain purchase, additional personnel and technical assistance. Additional Title III programs are planned to provide further support thereafter. Approximately 75% of these funds will support IHMA's grain buying activities; the remainder will address needs in the areas of repair, operation and management of grain facilities, purchase of equipment, grains procurement and sales program, establishment of grain grades and standards, regulatory functions and staff development for other administrative functions to support operations.

The Agriculture Sector Program II will address a distinct set of priority needs which would otherwise receive considerably less attention. That is, it will focus on creating an analytical capability to develop and support marketing policies and related operational activities. For this purpose a new Department of Marketing Investigation and Analysis will be developed within IHMA. (See Detailed Project Description for further elaboration). The approach and specific activities proposed closely reflect the recommendations made by marketing teams from Kansas State University during two separate visits to assist in the development of this Activity.^{1/}

With the PL 480 Title III program addressing the operational problems which have hindered the establishment of an effective stabilization program and this Program providing technical assistance for establishing an analytical basis for program policy, the inadequacies of previous efforts will be largely addressed and a more viable grain price stabilization program will be implemented.

C. System for Delivery of Services and Related Inputs

C.1. Improvement of the Extension Service

a. Logistical Requirements

The logistical support required to expand out reach to the small farmer

^{1/} The Kansas State recommendations are contained in a report entitled "Support Recommendations for Honduran Grain Marketing Policies and Programs", Food and Grain Institute, Manhattan, Kansas, January 1979.

clientele of the Agricultural Extension Program is sizable, and under the Program will acquire the acquisition of an additional 153 jeeps, 66 pickup trucks and 69 motorcycles during the four year period, and warrants clarification. The total number of vehicles required each year is based on a detailed analysis of the numbers and functions of personnel and their minimum needs for transportation at three levels of the extension system, i.e., Extension Agencies, Regional Extension Offices and National Extension Office. The following are the full operational requirements, on an annual basis for vehicles of different types at each level.

TOTAL VEHICLE REQUIREMENTS

(of which new purchases)

<u>Year</u>	<u>Type of Vehicle*</u>	<u>Agency</u>	<u>Region</u>	<u>National</u>
1980	Jeeps	87 (14)	42 (8)	12 (6)
	Pickups	15 (15)	-	-
	Motorcycles (trail bikes)	15 (15)	-	-
1981	Jeeps	81 (28)	43 (8)	12 (3)
	Pickups	35 (20)	-	-
	Motorcycles	35 (23)	-	-
1982	Jeeps	78 (27)	42 (12)	12 (3)
	Pickups	49 (21)	-	-
	Motorcycles	49 (21)	-	-
1983	Jeeps	78 (30)	42 (14)	12
	Pickups	49 (10)	-	-
	Motorcycles	49 (10)	-	-

* Depending on terrain, access and distance factors, mules or horses may be used instead of motorcycles in some instances.

The number of vehicles required each year during the Program period was compared with the number of vehicles on hand, taking into consideration a 20% annual fleet replacement factor (including motorcycles), and the differences indicated the number of units to be purchased for a given year. Over the Project period the increase in number of units (73%) does not keep pace with the increase in personnel (over 100%) and the man to car ratio rises from 1.5:1 to 1.7:1. However, the effective mobility is expected to increase with the acquisition of new units to replace older vehicles which experience considerable down time.

The types of vehicles required, i.e., jeeps, pick-up trucks and motorcycles, reflect the varying needs faced in the field by extension personnel. Single passenger, off-the-road, low-power (fuel efficient) motorcycles are being introduced for use primarily by para-technicians (auxiliaries) whose radius of action will be more localized than that for the Agents

under whom they will work. Agents, in addition to covering fairly wide geographical areas, often need to transport personnel, demonstration and educational equipment, supplies and inputs, usually over poor roads. This can most effectively be accomplished by using four-wheel drive jeep-type vehicles but in many instances pickup trucks are considerably more useful. An effort has been made to balance the types of vehicles to be assigned to agencies being upgraded through this Program. There is a shift towards increasing the number of pickup trucks and motorcycles of which there are currently practically none.

An alternative mix with an even larger proportion of motorcycles versus more expensive four-wheel drive vehicles was considered. Due principally to safety, weather and cargo factors, the MNR and the USAID concluded that the mix finally arrived at was optimum.

b. Use of Volunteer Leaders

A fundamental objective of the GOH and this Program is to expand the delivery of public services to small farmers. To achieve this objective at a cost Honduras can afford, under the Program Volunteer Leaders will be integrated into the Extension Service as one means to increase contact and services with the target group. For obvious efficiency reasons, emphasis will be placed on working with groups, albeit more loosely defined than previously, i.e., campesino cooperatives, agrarian reform settlements or other small farmers more loosely grouped by reason of location. To strengthen the tie between the agent and the groups, some 900 community-based volunteer leaders will be identified, be given special orientation and training and will work in close cooperation with the extensionists.

Each Extension Agent will be responsible for identifying key farmers with interest and motivation to serve as leaders from within the groups with which he works. The volunteer leaders will initially serve as a point of contact between the agent and the other farmers in the community, assisting the agent in planning and organizing meetings, demonstrations and other educational activities. The agent will work with the leaders in establishing demonstration plots, often but not always on the leader's land. After initial orientation, most of the training that the leaders will receive will be done informally through on-the-job contact with the agent. The agent will also encourage the leaders to participate in farmer training courses to be given in the locality or region. Once the leader has acquired a demonstrable ability in certain areas, e.g., seed bed preparation, insect control, weed control, fertilizing, water management, soil conservation, the agent may ask the leader to give demonstrations and to serve as an information source for the community.

The only "payment" provided to the leaders will be in the form of limited amounts of agricultural inputs, primarily for demonstration purposes, a greater amount of individual technical assistance, the opportunity to preferentially attend farmers training courses, and the opportunity to occasionally travel with the extensionist to observe farming activities in other neighboring

areas and the prestige of being regarded as a source of information among their peers.

The MNR has begun using a small number of unpaid volunteer leaders on an experimental basis over the past two years in the Choluteca, Olancho and La Esperanza areas. A number of valuable lessons have been learned regarding their selection, orientation and role in the extension program. It has been found, for instance, that the volunteer leaders are more effective if they have been selected by their group or community rather than by the extension agents. Within the Extension Service there is a growing recognition of the contribution volunteer leaders can make to the extension effort and, consequently, concrete plans to greatly increase the numbers of volunteer leaders have been formalized. The extension team in Choluteca has expanded the use of volunteer leaders to three more agencies and incorporated approximately one hundred more leaders into the program. Similarly, efforts are under way to increase the number of volunteer leaders in both La Esperanza and Olancho.

c. Use of Paid Auxiliaries

To further strengthen the extension activities at the agency level, the PEA will hire 96 auxiliaries or field assistants. These para-professionals will be recruited from among those persons who have considerable practical field experience and/or the equivalent of a junior high-school diploma (three years beyond primary school) from an institution where agricultural training is included in the curriculum. Their role will be one of attending to certain routine matters which presently consume large amounts of the extension agents' time, e.g., vaccinations, collecting certain types of farm or farm community data, distributing seeds or other inputs. This will allow the agents to spend a greater proportion of their time in providing educational and technical assistance services to their farmer clientele.

The auxiliaries will generally be assigned to prescribed geographical areas within the jurisdiction of an agency and have access to motorcycles or horses for their transportation requirements. They will be supervised and be given on-the-job training by the extension agents.

d. Improved Coverage

By improving the logistical support available to agents and by working with farmer groups using volunteer leaders to assist, it is projected that the number of farmers which can be directly and regularly assisted through the Extension Program will rise from roughly 126 farmers per agent in 1979 to a minimum of 175 per agent, and probably to 200 farmers per agent, in 1983.^{1/}

^{1/} These estimates are substantiated by the conclusions on coverage presented in a recent study sponsored jointly by the IBRD, A.I.D., and IADS entitled Agricultural Research and Farmer Advisory Services in Central America and Panama, January 1979, on pages 47-51.

C.2. Cooperatives to Provide Integrated Agricultural Services to Agrarian Reform Groups and Small Independent Farmers

a. Background

Over the past few years the agrarian reform process in particular has led to the creation of nearly one thousand small quasi-cooperatives or cooperative groups in the main agricultural areas of the country. Once bestowed with lands, the principal needs of the groups have been for technical assistance, timely and reasonably priced inputs, mechanization, credit and marketing, and management services. Neither the responsible GOH agencies nor the individual groups, within or outside of the reform sector, have been able to provide, in an integrated fashion, the types and amounts of resources required to transform the bulk of the farmer groups into viable farm business enterprises.

This component of the Agricultural Sector II Program represents a pilot effort aimed at organizing individual groups of reform and non-reform sector farmers into sub-regional service cooperatives. These cooperatives will possess a scale of operations, resource endowment, and potential for enterprise development far more promising than that of the individual small cooperative group. Through well organized and managed business-oriented cooperatives public agencies too can more effectively program and channel scarce resources to the small farmer target group.

b. Services

Planned sub-regional cooperative services include professional management and administration, farm and enterprise planning, requesting and managing credit, agronomic technical advice, marketing and storage, farm mechanization and input supply. While the precise nature and type of services rendered by any given sub-regional cooperative will depend on a prior detailed feasibility study, the activities indicated above reflect the kinds of needs identified in the Agricultural Sector Assessment^{1/} and which are examined in more detail the Activity Report entitled "Sub-Regional Service Cooperatives for Small Farmers". More specifically, the observations concerning the human and other resource requirements and feasibility (e.g., cost factors, yields, product prices, marketing margins) and social and institutional readiness were based on close consultation with Government cooperative officials; interviews with agricultural cooperative leaders; interviews with MNR, INA, and BNF regional officials; and on-site reconnaissance visits to areas of high potential for sub-regional cooperative development. In fact, three sub-regional cooperatives which are being initiated under the auspices of the Honduran National Campesino Association (ANACH) served to provide much of the specific data, problem identification and insights into operations and management requirements of this type of enterprise. Positive and negative experiences obtained previously in Honduras by

^{1/} Agricultural Sector Assessment for Honduras, August 1978, and the corresponding Annexes A and B.

USAID and the GOH in developing small farmer cooperatives (e.g., FECOAGROH, Agricultural Cooperatives Project) have been examined and taken into account.

Similarly, the current experiences of relatively successful ventures of this type in Honduras (the Federation of Coffee Cooperatives and the Cotton Cooperative) and in Guatemala (Federation of Regional Agricultural Cooperatives - FECOAR) have been used to arrive at what is considered a sound model for the pilot program being proposed.

c. Increased Productivity

The technology and related inputs for increasing crop yields are increasingly available in Honduras. While agricultural research work in the past was not usually geared to the needs and financial and managerial capacities of the small farmers, it has now taken on a strong small producer farm-centered focus. The A.I.D. funded Agricultural Research Grant Project is supporting this emphasis as are other A.I.D. programs such as the Small Farmer Technologies Project. Intensive campaigns, such as the Corn and Bean Improvement Project funded by the IDB, have also served in recent years to develop technological packages for small grain producers. A mechanism such as the service cooperatives proposed above, which can serve to deliver technology and attendant information transfer and other support services to the farmers in a timely and responsive manner, can be expected to result in the yields and recipient income benefits anticipated in this project.

The risk of adverse weather conditions affecting crop production cannot be dismissed or controlled but to some extent it can be minimized by initially selecting areas for the development of the sub-regional cooperatives which are less likely to experience heavy drought or excessive flooding. Crop selection and diversification, water management and infrastructure development can also lessen the effects of weather and help improve farm incomes. For these reasons, the criteria for locating the sub-regional cooperatives will include access to, or probability of obtaining, Government assistance in infrastructure or similar risk-reducing services. For this experimental activity period, preference will be given to areas where such rural infrastructure as irrigation or all-weather roads exist or where the rural infrastructure packages, such as those to be financed under the Program will be implemented.

C.3. Regionalization and Strengthening of the Field Operations of the National Development Bank

a. Impact and Targets

As a result of strengthened BNF regional and field operations as well as expanded and improved complementary services (e.g., Extension Service, Sub-Regional Cooperatives), the following basic improvements in the BNF's small farmer lending program appear feasible both within the two regions of concentration and the five agencies servicing on-going development effort; of special interest to the GOH:

1. Increase the number of small farmers receiving agricultural credit by 50%. That is, the number of small farmers receiving credit will increase from approximately 21,000 in 1978 to approximately 32,000 by 1983. This is an attainable increase, particularly in the regions of concentration, in view of the expansion in the number of field staff (from 32 to 48 in the regions of concentration), supervision and back-stopping from the Regional Offices and the improved logistical support.

2. Render improved and more flexible services to small farmer clients or client groups, particularly to those which have a proven record of credit-worthiness, e.g. finance farm production plans instead of just annual crop plans, minimize and speed up the paper work in loan processing, and provide more farmer credit education.

3. Decrease the loan default rate for small farmers from near 35% currently to less than 20% through more investment planning assistance, more credit education, timelier credit delivery, more regular technical assistance and loan supervision, and through more convenient loan collection facilities, e.g., small branch offices, mobile units, and regional cooperative structures.

b. Credit Availability

A fundamental consideration is, of course, the availability of loan funds for maintaining current lending levels and for expanding to meet the demand created through this Activity. The BNF is currently negotiating a \$10 million loan from the IDB for small farmer credit which is likely to be over the last three to four years of this Program. The loan is contingent, we understand, on the passage of the new legislation for the BNF. Also the GOH has by covenant an obligation to maintain in the BNF the level of loan funds provided through loans 025, 030, and 032 (total \$21,500,000 including GOH counterpart). Further study of credit demand and availability will be undertaken during the latter part of Sector II implementation. Whatever additional actions appear to be necessary will be given consideration at that time. Credit funds availability even with increasing demand, should not be any constraint through 1983.

c. Vehicles

The numbers and types of vehicles required at the Regional Office and strengthened agency levels are based on an assessment of the anticipated travel requirements, road and trail conditions, and condition of the current vehicle fleet. The type, number and assignment of all of the additional vehicles which will be required to implement the activities called for at the Regional Office and strengthened agency levels is described below.

Initially, eight vehicles will be distributed among three Regional Offices located in Tegucigalpa, San Pedro Sula, and La Ceiba. Thirteen professional

personnel of the Bank will use the eight vehicles. During the second phase of the Activity, the Central Office (Tegucigalpa) will be divided into three separate Regional Offices (in Tegucigalpa, Choluteca, and Danlf) and an additional seven vehicles will be required. In sum, fifteen jeeps will need to be purchased for the Regional Offices. Another sixteen jeeps will be distributed among the eight agencies which will be strengthened (e.g. receive more personnel, vehicles, and operational support) in the two regions of concentration. In addition, five agencies outside the regions of concentration warrant logistical support due to the important role they play in servicing six large scale GOH sponsored special projects for small farmers in collaboration with the National Agrarian Institute. Forty-four jeeps will be required over the 1980-83 period to expand and improve the quality of the services that the BNF will give to the special projects. These agencies need additional logistical support, not only to provide intensive service to the special projects, but also to maintain the coverage of the other farmers within their jurisdiction. In total the BNF will need to obtain seventy-five vehicles to effectively carry out its program.

Considering the road conditions, travel distances, load requirements, and fuel economies, a light-weight four-wheel-drive jeep-type vehicle has been selected as the most suitable choice of transport.

C.4. Zonal Infrastructure Packages

a. Use of Labor

The construction techniques to be employed in the road, land improvement and marketing facilities works will be labor intensive to the extent that this is technically and financially feasible. The engineering and feasibility studies will determine the most appropriate level of labor and be subject to approval by the CARs. The limited experience in Honduras with labor intensive public works (rural trails, roadway repair and maintenance) indicates that under many conditions this approach is financially viable, particularly when the local employment generating effect is considered. Labor supply can be a constraint in some areas during peak seasons within the agricultural cycle but proper scheduling can take this into account without seriously jeopardizing project execution.

It is probable that the land improvement works in general will involve more mechanization due to the timing constraints inherent in the cropping cycle; i.e, in many areas crops will be in the fields from May through January leaving only a three-to four-month period when intensive work can be executed.

b. Demand Analysis

The demand for infrastructure works of the kind envisioned in this Activity is estimated for the 21 valleys of highest development potential

in the Plan Maestro Vial. ^{1/} Construction of roughly 1,500 kms. of penetration and access roads, involving an investment of over \$16 million, is projected in that study. Also, the investment required for infrastructure packages which include access roads, public and private irrigation, land clearing and leveling and marketing facilities, is estimated in the Plan Nacional Vial at \$419.8 million for the development of 21 priority valleys by the year 2000.

The work to be carried out under the Sector II Program will satisfy only a small part of the needs for infrastructure development, i.e., 16 projects averaging \$365,500 each for a total of slightly over \$5.8 million. However, assistance under this Program will help to strengthen the institutional capabilities of the GOH in planning, coordinating, and execution of microzone infrastructure packages, especially at the regional levels where they will be initially selected and planned. This experience and increased institutional capacity will provide a sound basis from which to undertake an expanded integrated infrastructure package program as well as help to attract and effectively utilize resources from other sources.

c. Zone Selection and Prioritization

Some general parameters are suggested for selecting zones for possible infrastructure package investments. These guidelines and the rationale behind them are outlined below:

1. Minimum of 200 Small Farm Families. The overhead costs of planning and executing this type of project and supplying the required services during the operational stage should be spread over a reasonable number of beneficiaries. 200 farm families approximates the population of the typical village with good agricultural land.
2. Minimum of 500 Hectares Including 200 Level Hectares Apt for Intensive Agriculture (Where a Crop Production Activity is Contemplated). This constitutes an average of two and a half hectares per family which is fairly typical for small farmers in Honduras. A hectare of irrigated crops plus an additional hectare or so for basic consumption crops is as much as a single farm family can cultivate with some outside help during peak periods. The annual net income potential per hectare will be considerably higher than that of a subsistence operation, e.g., roughly \$1,000 per hectare for irrigated and mechanized farm land versus a net return as low as \$116 for a subsistence operation where family labor is taken into account.
3. Maximum Distance of Road Work of 25 Kms. There is a need to place a limit on the length of an individual road in order to obtain an adequate spread for available financial resources. Also the road building and maintenance capability would, in most cases, be severely

^{1/} A Summary of the Plan Maestro Vial of Honduras is contained in Annex G of the Agricultural Sector Assesment for Honduras.

strained for greater distances. The access road must link the community served to a trunk road in order to realize an improved access to markets and/or services. It should be noted that 25 kilometers as a maximum is no constraint in terms of exclusion of small farmer communities. The vast majority lie within this distance from some road.

4. Willingness of the Community(ies) to Work Together and to Accept Improved Production Practices - Available resources will not permit servicing small farmers individually. Some formal association is necessary to reduce the per beneficiary costs and to ensure labor for construction and maintenance.

The mechanism for prioritizing zones for infrastructure package development is based on three weighted criteria, i.e., economic impact, distribution of benefits and socio-political considerations. These are described in more detail below:

<u>Criteria</u>	<u>Factors</u>	<u>Weight</u>
1. Economic Impact	(1) Increase in the value of agricultural production in the 5th year for each \$5,000 of investment.	40
	(2) Number of cultivable hectares for each \$5,000 of investment.	<u>5</u>
	TOTAL	45
	2. Distribution of Benefits	(3) Number of small farmer families benefited for each \$5,000 of investment.
	(4) Use of labor intensive technologies.	15
	(5) Average per capita income is less than \$135	<u>15</u>
	TOTAL	45
3. Socio-Political Considerations	(6) Improved access to educational, health and social services or an improved delivery of these services.	5
	(7) Improved access to administrative and marketing centers	<u>5</u>
	TOTAL	10

This is considered by the Mission to be a reasonable and workable system. When it is coupled with a requirement for A.I.D. concurrence on all infrastructure packages approved by the CPA and other stipulations allowing investments only in infrastructure which accrues to communities, rather than to individual property holders, there is a strong guarantee that the primary beneficiaries will be the target group of concern to A.I.D. and the GOH.

d. Costs

The per unit cost for the principal investments are estimated as follows:

Road Construction, \$12,500/km. - This figure reflects the costs of building an all-weather gravel roadway according to GOH low volume road standards through more difficult terrain and soil conditions in Honduras. This cost could go as low as \$4,000/km. under ideal conditions.

Land Improvement, \$1,500/hectare - This would cover land clearing, leveling, and irrigation system installation under normal circumstances.

Considering the limitations on resources a ceiling of \$375,000 will be established for each project with the provision, however, that projects of greater cost may be proposed if they can be justified as a result of exceptional benefits meriting special consideration.

A typical project profile could, then, be illustrated as follows:

-300 families		
-Road construction	10 kms.	\$ 125,000
-Land improvement	150 has.	225,000
-Marketing collection and input storage depot	200 m ²	25,000
		<hr/>
		\$ 375,000
-Cost/Family		\$ 1,250

The Mission Engineering Office has examined the foregoing activities and considers them to be appropriate and feasible. Similarly, the general costs of the activities are considered to be representative, reasonably firm and accurate. As specific feasibility studies and plans are submitted for USAID approval during project implementation these will be reviewed in detail by the Mission Engineering staff.

e. Maintenance

The maintenance of roadways or other infrastructure will primarily be an on-going responsibility of the community organization set up to build the infrastructure. (In many cases these will be existing village or municipal organizations such as community improvement "patronatos", cooperatives or asentamientos.) At least part of the tools and light equipment used in the original construction will be turned over to the responsible group for maintenance activities. The GOH Public Works agency will collaborate with a limited amount of scarce materials or equipment time for major maintenance activities upon advance request for and programming of such support.

C.5. Small Farmer Consumption Improvement

a. Impact

The feasibility of reaching the target number of farm families within both the agrarian reform and traditional farmer groups with home nutrition improvement packages on an "intensive" basis (4,000 families) and "extensive" basis (20,000 families) is high using the Agricultural Extension Service as a promotion and technical assistance vehicle. By the end of the Program period the PEA will directly and regularly reach a minimum of 26,000 agrarian reform farm families and 37,000 additional small farmer families. The use of 900 volunteer leaders at the community or agrarian reform group level will also help to amplify the reach and provide the follow-up required in the consumption improvement activity.

b. Supply of Seedlings and seeds

The nursery and management/technical capacity required to produce at least half of the 200-300,000 seedlings needed by this Program is available at MNR and INA nurseries. Supplementary production can be obtained from other parties, i.e., COHDEFOR, Panamerican Agricultural School and/or any one of several commercial nurseries existing in the country.

Good quality vegetable seeds will, on the other hand, have to be imported. Considerable research has been done and continues to be conducted by the GOH and private companies on vegetable varieties and cultural practices in the major vegetable growing areas. This information coupled with the experience obtained directly by small producers provides a fairly good basis for selecting the most promising and adaptable varieties for most of the major climatic and soils zones in the country.

H.4. Administrative Feasibility

The administrative feasibility of this Program rests upon a combination of implementation systems and organizational units which use those systems. For the purposes of this paper, Administrative Feasibility will be discussed in two parts: 1) Common administrative or implementation systems, entities and problems which deal with or concern all or almost all organizations involved in the Program and 2) Executing agencies charged with implementation of specific activities within the Program.

A. Program Implementation Systems and Entities

1. GOH Coordinating Unit

Program implementation depends in large measure upon the ability of the GOH to carry out operational level programming and budgeting, and flowing from that, the procurement of the goods and services necessary for the execution of the Program. With these ends in mind, in late 1978, the CPA Technical Secretariat drew up a proposal to transform the office of the Coordinator for A.I.D. Loan 522-T-025 (Agricultural Sector Program I) into a broader coordinating unit which would be concerned, in due course, with all A.I.D. and possibly - at a later date - all internationally financed programs in the Agricultural Sector. A.I.D. and the GOH subsequently designed a system which consists of an expanded Coordination Unit within the Ministry of Natural Resources, a periodic programming and budgeting process and a set of standard procurement policy guidelines for use under the First Agricultural Sector Program.

The following are the principal administrative responsibilities (financial functions are discussed elsewhere) of the Coordination Unit:

1. Work with the various GOH participating agencies in specifying activities, goals and periodic (three or four month) budgets within the framework of the Project Agreement.
2. Review and approve all procurement actions proposed by the participating agencies, such as the contracting of professional or technical services, construction, or the procurement of materials and equipment.
3. Carry out annual evaluations of the Program jointly with the participating agencies and recommend possible changes in emphasis or goals.

The authority of the Coordination Unit with respect to the autonomous agencies participating in the program rests on the fact that all

Program funds will be disbursed by the Ministry of Finance only pursuant to the approval of the Minister of Natural Resources upon recommendation by the Coordination Unit.

The Coordination Unit has been structured into three basic departments: (1) the Planning, Follow-up, and Control Department, which will be responsible for matters leading to the review and approval of the periodic budgets of the participating agencies and for the review and approval of the technical aspects of requests for the procurement of goods and services; (2) the Administration Department, which will be responsible for the review and approval of the financial aspects of budgets and requested procurement actions, for examining documentation supporting requests for payment, and for the maintenance of financial controls over program operations; and, (3) the Legal Advisor who will be responsible for the review and approval of the legal aspects of procurement, and for such other legal matters that pertain to the Program.

Development of the Coordination Unit and the programming/budgeting/procurement process will take place in three stages. The first stage involves management of the First Agricultural Sector Program only. The Coordination Unit is now implementing the programming and budgeting process, and such procurement actions as remain to be carried out under the First Sector Program are moving in accordance with the new guidelines. Under the second stage of the system, it is the intention of the GOH and A.I.D. to move the administration of all other active A.I.D. - funded projects in the agriculture sector under the administrative control of the Coordination Unit sometime in mid 1979. Finally, in the third stage, the Second Agricultural Sector Program will also come under the management of the Coordination Unit. (The reader is referred to the Activity Report entitled, "Administrative Procedures and the Coordination Unit" for additional discussion of the Coordination Unit, its structure and duties and the budgeting and procurement policies to be implemented by it).

The GOH has now developed and A.I.D. is reviewing the first periodic plan and budget for Agriculture Sector I. Both parties view this as a first-time, learning experience albeit based upon careful analysis beforehand, which will enable Honduran and A.I.D. program managers to identify such procedural weaknesses as might exist and to remedy them accordingly. This exercise, combined with a similar one which will be carried out under the second stage of the new system, will serve to refine and improve the procedures discussed herein to such a point that, by the initiation of the Second Sector Program, the Coordination Unit will be operating in concert with the various executing agencies while using a more manageable and productive implementation plan, program budget and procurement mechanism that allow timely implementation of the Program Plan.

As is described in the Activity Report entitled, "Administrative Procedures and the Coordination Unit", the Coordination Unit will work with the various executing agencies to develop the periodic implementation and financial (budget) plans for A.I.D. approval, at which time confirmation of the Program operating budget will be made. (See Implementation Arrangements: Financial Plan for further discussion of the budgetary aspects of this procedure).

The periodic programming and planning process bestows a number of benefits on the program: It allows the GOH and A.I.D. to monitor more closely and respond to what is happening to the longer range plans on a timely basis; the monitoring and response capabilities in turn provide flexibility which will enable program management to add, alter or drop components of the program as needed, pursuant to the project authorization and agreement.

2. Procurement of Goods and Services

In general, procurement of goods and services up to an amount of \$50,000 per item will be carried out along the lines of the procedures provided to the GOH by Implementation Letter. These procedures provide guidelines for GOH procurement without prior approval in the areas of participant training, salary supplements for professional staff, small value (less than \$2,500) procurement made directly by an executing agency and personal services contracts. All contracts other than those for personal services, all procurement in excess of \$50,000 per item, and all procurement to be effected through the Proveduría General (see further discussion of this Unit below) will require prior review and approval by A.I.D.

An additional procurement method not mentioned above pertains to construction work. Construction work to be performed under this Program includes land improvements, road construction, irrigation works, construction or improvement of marketing facilities, administrative offices and CURLA facilities such as offices, laboratories and classrooms. The administrative aspects and agencies related to each of these types of construction are discussed in the context of individual executing agencies under Section B. below.

3. GOH Proveduría General (General Procurement Office)

A separate Unit of the Proveduría General called the Department of International Bidding is in charge of the procurement of materials and equipment purchased with funds from all international assistance agencies, where the user of the commodities is a line agency of the GOH; e.g., a Ministry. At the present time, the Department of International Bidding is handling commodity procurement under three loans from the Inter-American Development Bank, four loans from the World Bank, and three loans and four grants from A.I.D. (not including the

First Agriculture Sector Program, where commodity procurement has been completed). This Department will also be responsible for procuring commodities funded under the Agriculture Sector II Program.

Assistance to be provided for the Department of International Bidding prior to and during the initiation of operations under the Second Sector Program will include a long-term technician to assist in the development of operational procedures and in the preparation of a suitable handbook relating to those procedures, review and improvement of the Proveeduría's technical materials library and practical day-to-day training of personnel in all phases of procurement and contracting. A second, short-term technician will provide training in specifications writing and general IFB preparation and the technical analysis of bids relating to the kinds of equipment to be imported under the Second Sector Program. Two long-term contract personnel will be retained with Program funds to strengthen the Department's regular staff capabilities. The salary levels of the Department's current employees will also be reviewed. The funding for this technical assistance and support is included in the budget of the Coordination Unit.

It is expected that with the commencement of full scale commodity procurement under the Second Sector Program, the operations of the Department of International Bidding will be upgraded sufficiently to permit that Agency to function on a more effective basis. Commodities needed for procurement will be identified in the periodic budgets by the participating agencies, subject to the review and approval of the Coordination Unit and the Mission. As noted above, all commodities for the Program, other than small value procurement, will be procured through the Department of International Bidding.

The cut-off figure below which the Coordination Unit, through the Department of International Bidding, will be able to act without further Mission intervention will depend upon progress made by the Department in improving its operations.

4. Total Program Personnel Requirements

During the implementation period of the Program additional personnel will be required to strengthen the institutional capabilities of the GOH to deliver an improved stream of benefits to the target group. These additional personnel requirements are presented in the attached Table No. 1. The additional personnel requirements are presented by year for the major implementation units. They are also broken down between technical personnel (467 additional) and support personnel (172 additional). The largest requirements for technical personnel are in three activities: CURLA (150 for 32% of total); Extension (172 for 37% of total); and Planning (48 for 10% of total).

These three activities account for 79% of the total increment. The Information Activity and the National Bank Regionalization require 47 technicians (10%) and 31 technicians (7%) respectively. The remaining activities account for 19 technicians (4%).

Due to the low level of skills required by the 172 support personnel and the present high levels of unemployment in the country, no problems are anticipated in obtaining these services. On the other hand, the requirements for additional technicians will require close monitoring to balance supply and demand. The analysis of supply and demand of technicians in Agricultural Assessment ^{1/} points out that during the 1978-1983 period a total supply of approximately 1,450 technicians will exist, of which about 1,150 will be available for hire for all sub-sectors including forestry (private and public). (See Technical Feasibility Section for a more thorough analysis of availability of technicians). Consequently, in total there are expected to be sufficient technicians available; however, there may be periods of time in which special skills may be in short supply, especially in the early phases of the Program. Should these short-run shortages develop, the GOH is prepared to hire U.S. or third country nationals for the interim period.

B. Individual Executing Agencies

Existing Executing Agencies or entities are discussed in the order in which Program activity outputs appear in the Project Description. The administrative and/or technical feasibility of all proposed new entities is discussed in the annexes treating each of the activity-outputs comprising the Program.

1. Participant Training

Basically a continuation of the successful scholarship/participant training program initiated under the First Agricultural Sector Program, this Activity will be administered by two entities, one to be formed under the Second Sector Program, and the other to continue its administration of participant training begun under the First Sector Program.

a. EDUCREDITO

Participant training, which has been one of the more successful elements in the First Sector Program, has been administered by EDUCREDITO, a private, non-profit organization formed in 1968 by the Honduras cooperative movement for the purpose of carrying out a student loan program financed from Government and private contributions. A.I.D.

^{1/} Agricultural Assessment for Honduras, August 1979, p. 60.

made a \$2 million loan to the GOH for EDUCREDITO in 1972 which was successfully completed in 1976.

A key feature of the Program is that the scholarships are awarded as loans to the participants, not as grants. This means that the participant is held personally responsible for the loan and, in addition, must obtain a guarantor for an amount equal to 20 percent of the amount of his loan. Upon successful completion of the prescribed course of study, 10 percent of the participant's debt is forgiven. Upon completion of a tour of duty with the sponsoring agency equal to twice the period of time that was required for his training, an additional 75 percent of the debt is cancelled. This leaves the participant with the obligation to repay 15 percent of the cost of his training (which represents EDUCREDITO's administrative costs) over an extended period of time.

If the participant does not comply with the obligation to complete his training successfully, or to serve the specific length of time with his sponsoring agency, he becomes liable for the entire amount of the debt. In large part because of this feature of the program, the attrition rate has been insignificant. For example, a review made in 1977 disclosed that of 234 participants who had completed or were still participating in the Program at that time, only two had dropped out.

EDUCREDITO will continue to program and administer participant training funds under the First Sector Loan as it initiates operations under the Second Sector Program. As the Second Program begins, EDUCREDITO will assume duties over and above those which it performed in the First Sector Program. These additional duties will require EDUCREDITO to strengthen or improve its orientation and monitoring capabilities. In addition, EDUCREDITO will begin developing contacts with institutions of a similar nature in order to assimilate experiences gained by the other institutions in the course of their work, particularly in the areas of participant orientation and monitorship of participant programs.

It is expected that EDUCREDITO will be able to perform these services for no additional cost to the program, since the current 15 percent administrative charge covers somewhat more than the current actual costs. (Funds available and not used for administrative purposes are programmed for additional in-country training).

The periodic budgets to be prepared by the Coordination Unit will consider the requests for training funds submitted by the scholarship committee on the basis of the proposals of the agencies participating in the program. With the agreement to the budget by the Coordination Unit and by the Mission, EDUCREDITO will be free to implement the program, using contract procedures established and proven in the main, under the First Sector Program.

Past Mission audit experience with expenditures made by EDUCREDITO under the First Sector participant training program has been quite favorable, and no problems are foreseen with this entity.

b. Scholarship Committee and Its Technical Secretariat

An expanded, more authoritative scholarship coordinating committee closely based on the original committee which operated under the First Sector Program, and composed of the principal training officers of the sector agencies will be formed for the activity along with a technical secretariat staff of two professionals to carry out the committee's responsibilities with respect to administration of participant training and in-service training. For a detailed analysis of the committee, the technical secretariat, their functions and capabilities, see the Activity Reports entitled, "Scholarship Program" and "In-Service Training".

2. In-Service Training

This Activity represents an effort to improve the in-service training program at both the institutional level and on a sector wide basis through the same Coordinating Committee which was discussed in the Scholarship Program Activity.

In-Service Coordinating Committee and Technical Secretariat

The Committee and its Technical Secretariat will work with the five institutions involved in this Activity to establish uniform policies which allow the institutions to administer coordinated, standardized courses based on a rational set of training priorities.

While these two bodies are the same entities which operate under the Activity of the Scholarship Program, of necessity, the operating committee for this Activity will consist of five members rather than 11, to represent the agencies involved in this Activity. Technical assistance to the Secretariat will consist of approximately 63 man-months of aid to assist the Secretariat in developing methodologies for identifying training needs and designing appropriate courses along with the control, supervision and evaluation procedures necessary for the successful administration of those courses.

3. CURLA

Program assistance to CURLA consists of construction work for the library, classrooms, laboratories, cafeteria, auditorium and administrative offices in addition to the installation of a 150 hectare irrigation system and initiation of new study programs.

With respect to construction work, the National Autonomous University of Honduras (UNAH), of which CURLA is an administrative unit, possesses a Financial Management Unit quite experienced in purchasing and contracting matters. Members of the Management Unit have been apprised of the workload requirements of this Activity and have the capability to manage all financial and contractual aspects of the construction work. In addition, the University maintains its own Engineering and Physical Plant Department which will monitor the engineering and supervisory aspects of construction work. No problems are foreseen in the administration of this work.

Training of staff members will be carried out through the Scholarship Program funded as a separate activity of the Second Sector Program, possibly under the auspices of the Latin American Scholarship Program of American Universities, LASPAU, which has offered to assist EDUCREDITO specifically in the administration of scholarships for CURLA staff personnel.

Related to the question of staff training is the question of qualified candidates for scholarships. The working group for this Activity concluded that sufficient, qualified personnel are available; e.g., advanced students of high achievement currently carrying out their social service as teaching and research instructors, or members of the Association of Professional Graduates of CURLA.

In regard to initiation of new study programs, the UNAH approved a comprehensive plan for the restructuring and overall development of CURLA. In addition to plans for the physical plant mentioned above, the plan sets forth a complete set of new study programs and curricula to be used by CURLA in the coming years and is discussed in some detail in the Activity Report entitled, "Development of CURLA". UNAH is presently planning a detailed study of projected student attendance based on current secondary school graduation which will allow it to determine how much effort should be allocated to initiating programs for new students and also which programs should receive emphasis in the coming years.

4. Strengthening of the Agricultural Planning Sub-System

The constraints confronting the main sector planning and programming entities and responses proposed thereto are intrinsically administrative in nature and as such are discussed at some length in both the detailed project description of this Activity and the activity report entitled, "Strengthening of the Planning Sub-System of the Public Agricultural Sector". For this reason, the administrative aspects of this activity will not be discussed in this section.

5. Development of an Information System

This activity is one of the more complicated activities in the Program. Detailed descriptions of the system to be developed and the organizations involved may be found in the Project Description Section of this paper and in the Activity Report entitled, "Development of an Information System".

Given the need for 47 additional technical personnel throughout the system, the question of manpower sources arises. In fact, the majority of the personnel required will be hired over the life of the Program. Given the salaries offered (since the positions will be exceptional to the Civil Service scale and will pay more) and the projected supply of technicians over the next four years, hiring of additional technicians should present no problem. Moreover, a good number of the planners required for the initial stages of this activity are already on hand in the various sector planning units. For example, the Agricultural Section of the Directorate General of Statistics and Census (DGEC) currently has a staff of 31 people, including nine professionals. The Agricultural Section is slated to undergo a major organization (described elsewhere in this paper) under this program which will create three new departments and charge the DGEC with being the chief data collecting agency for the Sector. Approximately 15 additional people will be required to enhance the DGEC's data gathering capabilities, along with one year of technical assistance, primarily from PIADIC. It is expected that all or almost all of the people presently working in the Agricultural Section will continue to serve in the new DGEC units envisioned in this Activity. With respect to types of personnel currently serving, projected personnel requirements, and types of technical assistance required for this Unit and the others discussed below, see the Activity Report cited above.

The Agricultural Documentation and Information Center (CEDIA) of the MNR currently carries a staff of 28, including four professionals, and is charged with responsibilities for organization of the Regional Documentation Centers and continued management of agricultural documentary information. The office has no need for additional staff personnel, but will require 170 person days of technical assistance from PIADIC in developing the regional documentation centers.

The MNR's Department of Agricultural Statistics which currently has 23 people, including six professionals, will be charged with administration and analysis of numerical data. The Department will manage the Central Numerical Data Bank for Agricultural Information. This Department sees a need for one additional professional person to assist in the establishment and management of the Agricultural Data Bank, and will use approximately 340 person days of technical assistance, primarily from PIADIC, over the life Program to assist it in

certain areas, including establishment of the Data Bank and linkage with user agencies.

Since it is to be located in the Directorate General of Agricultural Operations (DGOA), the Consolidation and Dissemination Department will use personnel already assigned to the DGOA's Extension Service. The Department will use approximately 90 days of technical assistance, primarily from PIADIC sources, to assist it in its information distribution work.

6. Marketing Research and Analysis System

This Activity calls for the establishment and support of a research and analysis department within the Honduran Agricultural Marketing Institute (IHMA) consisting of 17 people, seven of whom are professional personnel. Long-term training is to be provided to the majority of the professional staff, and technical assistance both long-term (an economist specializing in agricultural marketing - four years) and short-term (six months per year in such fields as price policy, commodity supply and demand analysis, etc.) will be funded under this activity.

Manpower needs for this Activity are of a low order in terms of quantity and the salaries offered should be sufficiently high to attract qualified personnel. The periods of long-term training will be staggered in such a way as to maintain the maximum possible number of people in the office at any given time.

For further details of the types of people and training required for this Activity, see the Activity Report entitled, "Marketing Research and Analysis System".

7. Improved Extension Service

As with the Activity for the strengthening of the field operations of the National Development Bank, the main implementing agent for this Activity is also the target institution and beneficiary of the implementation plan - in this case, the Natural Agricultural Extension Program, or simply, the Extension Service.

A department within the Directorate General of Agricultural Operations under the Ministry of Natural Resources, the Extension Service is responsible for the transfer of farming techniques and other technologies necessary to improve the production, productivity and net income of small and medium farmers.

A rapid expansion in numbers of Extension Service Personnel, particularly at the field level, with a concomitant improvement in quality of services provided, is envisioned under this Activity. The Service is to be organized along the lines drawn up in the attached

CUADRO No. 2: NUEVA ESTRUCTURA DEL PEA

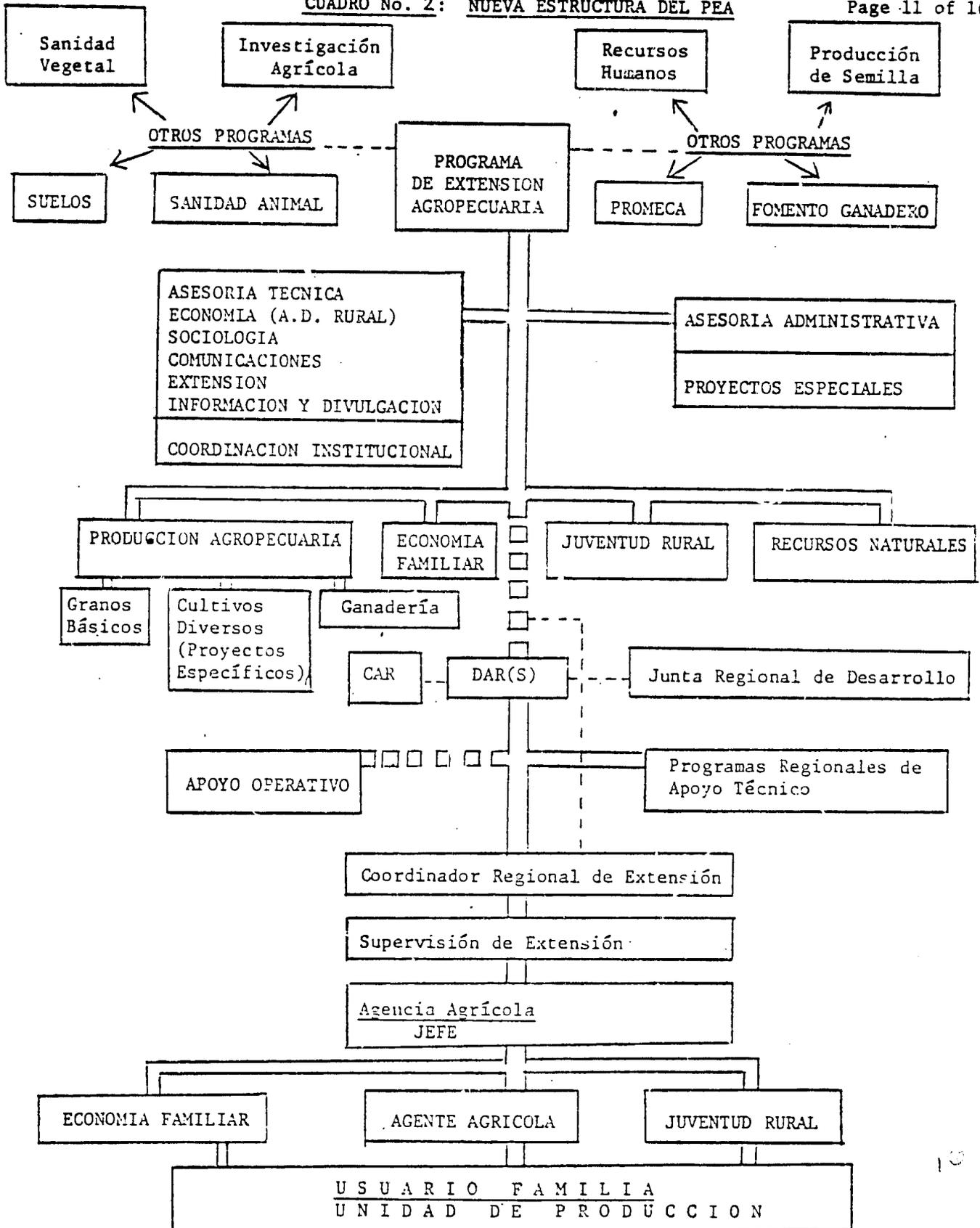


Table No. 2.

The Service currently has approximately 225 people working at the national, regional and local levels in various capacities, primarily as field agents (approximately 175 of the total work force).

For the proposed activity, the Extension Service will expand its central office or unit, which has primary responsibility for implementation of improvement measures including administration of extension orientation courses and coordination of in-service training with the Human Resources Program of the MNR, from a current total of 16 to 44 people (see Activity Report entitled, "Improvement of the Extension Service", for further details regarding types of personnel and costs involved in the expanded central unit and at the operational levels).

At the regional level, personnel charged with responsibility for directing and supporting the operating plan will increase from 31 to 77 while field agents will increase from 175 to 318. By the end of 1983, the total effort in this Activity will involve a full-time, permanent group of 439 technicians, specialists, extension agents and support staff working throughout the country.

In this Activity, as in a number of others in this Program, the question of sources and retention of personnel arises since a net increase of 217 people is called for. In fact, about 104 additional technicians qualified for field agent work are already working on specific crop projects such as citrus, corn and beans, apart and aside from regular extension work. The Extension Service intends to transfer about 65 of these people into direct extension service and plans to recruit the remaining required personnel over the life of the Program.

Turnover of personnel has presented the Extension Service with serious problems in the past. Behind the flight of extension agents lies such problems as low pay, little training, lack of incentive pay for hardship assignments, and so forth. This Activity will address these problems directly since budget resources have been specifically set aside to deal with each of the above-mentioned problems. Further discussion of these problems together with proposed responses can be found in the Activity Report cited earlier in this Section.

8. Cooperatives to Provide Services to Agrarian Reform Groups and Individual Small Farmers

This Activity involves the creation of eight pilot sub-regional cooperatives, four from the Agrarian Reform sub-sector and four from the non-reform sub-sector, with a total membership of about 4,800 farmers. DIFOCOOP, the institution charged with implementation of this Activity, will establish a unit specifically designed to create and supervise the pilot service cooperatives.

Deputy

JUN 29 1979

ACTION MEMORANDUM FOR THE ACTING ADMINISTRATOR

THRU: ES

Acting AA/PPC, Mr. Charles Paolillo *Charles Paolillo*

FROM: Acting AA/LAC, Edward W. Coy

Problem: To approve a \$25 million loan/grant for the Honduras Agriculture Sector II Program, No. 522-0150, and to authorize \$10 million of loan funds and \$1 million of grant funds in FY 1979.

Discussion: The purpose of the \$25 million (\$21 million loan and \$4 million grant) Program is to establish efficient and cost-effective institutional structures and delivery systems to serve the needs of small farmers. It will do this through thirteen subprojects or activities which will strengthen three major systems within the sector: (1) Human Resources Development (\$11.2 million) which will include participant training, in-service training, and development of the Agricultural University Center (CURLA); (2) Institutional Development (\$5.8 million) which will include development of agricultural planning, information, and marketing analysis systems and administrative reform; and (3) Delivery of Services and Related Inputs (\$8.0 million) which include extension improvement, creation of subregional cooperative service centers, farmer training, credit administration, zonal infrastructure packages, and small farmer consumption improvement.

The total cost of the Sector Program is \$98.9 million, of which \$49.0 million can be considered incremental or program expansion costs. The A.I.D. loan/grant of \$25 million will finance participant training (\$6,169,000), construction and infrastructure (\$3,654,000), technical assistance (\$3,528,000), machinery and equipment (\$3,089,000), personnel and service contracts (\$2,960,000), vehicles (\$2,728,000), other costs (\$2,206,000), and project coordination (\$666,000). The GOH's \$24 million counterpart contribution for incremental program costs will finance personnel and other operating costs, as well as some capital and construction costs.

Because of budgetary limitations, the attached authorization is for only \$10 million of loan funds and \$1 million of grant funds in FY 79. The Mission wishes to capitalize on momentum generated during Program development and is, therefore, prepared to go ahead now with partial funding. Standard incremental funding agreements will be executed and the Bureau will give high priority to obtaining the remaining funding at the earliest possible date.

The DAEC review meeting was held on June 19, 1979, at which time the Project Paper was approved subject to the following modifications:

1. A Condition Precedent to Initial Disbursement was added requesting that the GOH submit an implementation plan for the overall Agriculture Sector II Program (\$49 million) which shows the timeframe for achieving major Program objectives and the relationship among Program components.
2. Five person months of technical assistance were included in the planning activity to assist in developing environmental criteria for the Zonal Infrastructure Package activity and in training planning teams in the use of these criteria.
3. The size of the subregional cooperative service center pilot activity was clarified, both in terms of the number of centers (8) and the estimated cost of each.
4. The financial flexibility criteria were modified to (a) clarify the extent to which funds could be transferred within individual activities and (b) put an upper limit on the amount of money which could be transferred to any activity -- i.e., with regard to the latter, in no case will the budget of an activity to which funds are transferred increase by more than 50%. Language was also added to clarify that the flexibility criteria will apply to both A.I.D. and GOH funds.
5. A description of the procedures to be followed in carrying out a mid-term review of the Program was added to the paper. The GOH Program Administration Unit will submit a mid-term evaluation and recommended programming of undisbursed funds to the Mission by April 1, 1982. During the next three months, the Mission will review these submissions, come to a formal agreement with the GOH on the use of remaining funds, and submit the evaluation and recommended use of funds to AID/W for concurrence. Disbursements after July 1, 1982 will not be made until the A.I.D. review process has been completed.

The authorization includes a request for a waiver to allow for the purchase of up to \$75,000 worth of off-the-road motorcycles (less than 130cc) from A.I.D. Geographic Code 935 countries. Because the motorcycles will be used in off-the-road conditions and in places with limited access to fuel supplies, they must have engine sizes less than 130 cc. This type of motorcycles is not manufactured in the United States or Honduras; therefore, third country procurement is required. Code 941 sources were considered. However, since adequate maintenance facilities and supplies of spare parts do not exist for such motorcycles, procurement from Code 941 countries was rejected. Therefore, the Mission is requesting a waiver to allow the purchase of small off-the-road motorcycles from Code 935 countries.

The Authorization also permits the use of grant funds to purchase goods and services which have their source and origin in Member Countries of the Central American Common Market, including the cooperating country, or in the United States. Local cost grant financing is anticipated for three activities: CURLA, Service Cooperatives, and Small Farmer Consumption

Improvement. It is required in order to (a) provide the GOH with the necessary encouragement to finance a major share (72%) of the costs of the CURLA Activity and (b) permit experimentation with two highly innovative delivery systems, both of which are critical to the achievement of Program objectives.

An IEE recommending a negative determination was approved by the AA/LAC on June 25, 1979. The project appears on Page 747 of the 1979 CP at a level of \$16,000,000 loan and \$1,750,000 grant. If the FY 79 level remains below this level, no Advice of Program Change will be required.

Recommendation: That you sign the attached Project Authorization and Request for Allotment of Funds (PAF) for the Honduras Agriculture Sector II Program.

LAC/DR:CPeasley:cld

Clearances:
GC:MBall MB/MLC Date 5/29

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

**ASSISTANT
ADMINISTRATOR**

Loan No. 522-T-034
AID/LAC/P-020

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

PART II

Name of Country: Honduras
Name of Project: Agriculture Sector II Program
Number of Project: 522-0150

Pursuant to Part I, Chapter 1, Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a Loan in the amount of not to exceed Ten Million United States Dollars (\$10,000,000) and a Grant in the amount of not to exceed One Million United States Dollars (\$1,000,000) to the Republic of Honduras the "Cooperating Country" for a total of not to exceed Eleven Million United States Dollars (\$11,000,000) the ("Authorized Amount") to help in financing certain foreign exchange and local currency costs of goods and services required for the project as described in the following paragraph.

The project consists of human resource training and institutional development and improvement to build the expertise and organizational structure in the Cooperating Country to adequately analyze, plan, and implement agricultural projects impacting on the rural poor (hereinafter referred to as the "Project"). Of the Authorized Amount, Ten Million Dollars ("Loan") will be lent to the Cooperating Country to assist in furnishing certain foreign exchange and local currency costs of goods and services required for the Project. The entire amount of the AID financing herein authorized for the Project will be obligated when the Project Agreement is executed.

I approve the total level of AID appropriated funding planned for the Project of not to exceed Twenty-One Million Dollars (\$21,000,000) (Loan) and Four Million Dollars (\$4,000,000) (Grant) including the funding authorized above, during the period FY 1979 - 1983.

I approve further increments during that period of Eleven Million Dollars (\$11,000,000) (Loan) and Three Million Dollars (\$3,000,000) (Grant) subject to the availability of funds in accordance with AID allotment procedures.

I hereby authorize the initiation of negotiation and execution of the Project Agreement by the officer to whom such authority has been delegated in accordance with AID regulations and Delegations of Authority subject to the following essential terms and covenants and major conditions; together with such other terms and conditions as AID may deem appropriate.

a. Interest Rate and Terms of Payment

The Cooperating Country shall repay the Loan to AID in United States Dollars within forty (40) years from the date of first disbursement of the Loan, including a grace period of not to exceed ten (10) years. The Cooperating Country shall pay to AID in United States Dollars interest from the date of first disbursement of the Loan at the rate of (a) two percent (2%) per annum during the first ten (10) years, and (b) three percent (3%) per annum thereafter, on the outstanding disbursed balance of the Loan and on any due and unpaid interest accrued thereon.

b. Source and Origin of Goods and Services (Loan)

Except for Ocean Shipping, goods and services financed by AID under the Loan shall have their source and origin in countries included in AID Geographic Code 941 or the Central American Common Market except as AID may otherwise agree in writing. Ocean Shipping financed under the Loan shall be procured in the United States or the Central American Common Market.

c. Source and Origin of Goods and Services (Grant)

Except for Ocean Shipping, goods and services, financed by AID under the Grant shall have their source and origin in the United States or the Central American Common Market except as AID may otherwise agree in writing. Ocean Shipping financed under the Grant shall be procured in the United States or the Central American Common Market.

d. Condition Precedent to Initial Disbursement

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement, Borrower/Grantee shall furnish, in form and substance satisfactory to AID, an implementation plan for the overall Agriculture

Sector II Program (\$49 million) which shows the timeframe for achieving major Program objectives and the relationship among Program components.

e. Condition Precedent to Disbursement for Transportation Equipment

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the purchase of vehicles, motorcycles or trucks, Borrower/Grantee shall furnish, in form and substance satisfactory to AID, a plan detailing the procedures for allocating and maintaining all transportation equipment to be procured under the Program.

f. Conditions Precedent to Disbursement for Participant Training and In-Service Training Activities

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance Participant Training and In-Service Training Activities, Borrower/Grantee shall furnish in form and substance satisfactory to AID:

- (1) Evidence that the Committee for Scholarships and In-Service Training and its Technical Secretariat have been officially established, and
- (2) A staffing plan and budget for the first year of operation of said Technical Secretariat.

g. Conditions Precedent to Disbursement for the Atlantic Coast Regional University Center (CURLA) Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the CURLA activity (other than for technical assistance and training), Borrower/Grantee shall furnish in form and substance satisfactory to AID, a time-phased plan for:

- (1) The construction or remodeling of CURLA's physical plant pursuant to this Program Activity, and
- (2) The procurement of equipment to be used in connection with this Activity.

h. Conditions Precedent to Disbursement for the Information System Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the Information System Activity (other than for technical assistance and training), Borrower/Grantee shall furnish in form and substance satisfactory to AID:

- (1) Evidence that the Department of Agricultural and Rural Surveys has been officially established within the General Directorate of Statistics and Census, and
- (2) A staffing plan and budget for the first year of operation of the Department of Agricultural and Rural Statistics.

i. Conditions Precedent to Disbursement for the Marketing Analysis System Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the Marketing Analysis System Activity (other than for technical assistance and training), Borrower/Grantee shall furnish in form and substance satisfactory to AID:

- (1) Evidence that the Marketing Research and Analysis Department has been officially established within the Honduran Agricultural Marketing Institute, and
- (2) A staffing plan and budget for the first year of operation of the Marketing Research and Analysis Department.

j. Conditions Precedent to Disbursement for the Service Cooperatives Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the Service Cooperatives Activity (other than for technical assistance and training), Borrower/Grantee shall furnish in form and substance satisfactory to AID:

- (1) Evidence that a unit has been officially established within the Directorate for Cooperative Development to administer this Activity on a full-time basis, and
- (2) A staffing plan and budget for the first year of operation of this administrative unit.

Upon satisfactory compliance with the conditions (1) and (2) above, prior to the funding of each service cooperative under this Activity, the Borrower/Grantee shall furnish in form and substance satisfactory to AID an economic/financial feasibility study of such individual service cooperative to be financed.

k. Conditions Precedent to Disbursement for the National Development Bank Regionalization Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the National Development Bank Regionalization Activity (other than for technical assistance and training), Borrower/Grantee shall furnish in form and substance satisfactory to AID, evidence that a new law setting up a Bank for agricultural lending has been promulgated for the National Development Bank.

1. Condition Precedent to Disbursement for the Zonal Infrastructure Packages Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the Zonal Infrastructure Packages Activity, Borrower/Grantee shall furnish in form and substance satisfactory to AID:

- (1) A description of the economic, distributional, socio-political, and environmental criteria used in selecting each infrastructure package and its beneficiaries, and
- (2) A plan setting forth the administrative, procedural and financial arrangements for implementing zonal agricultural development plans and related infrastructure packages.

m. Conditions Precedent for the Small Farmer Consumption Improvement Activity

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant Agreement to finance the Small Farmer Consumption Improvement Activity (other than for technical assistance), Borrower/Grantee shall furnish in form and substance satisfactory to AID:

- (1) Evidence that an administrative unit has been established within the Ministry of Natural Resources to coordinate the implementation of the Activity, and

- (2) A detailed time-phased implementation plan covering actions to be effected during the first two years of the Activity's execution period.

n. Conditions Precedent to Disbursement after July 1, 1982

Prior to any disbursement or the issuance of any commitment document under the Loan/Grant after July 1, 1982, Borrower/Grantee shall furnish in form and substance satisfactory to AID:

- (1) An evaluation, conducted by the Program Administration and Coordination Unit of the Ministry of Natural Resources, of activities effected during the previous two years pursuant to the Program, and
- (2) The Borrower/Grantee and AID shall have jointly programmed in writing the manner in which the Loan/Grant funds will be used during the subsequent Loan/Grant disbursement period under the Program.

o. Special Covenants

The Borrower/Grantee shall covenant as follows:

- (1) To establish additional economic incentives for Extension Service personnel stationed in rural areas of Honduras;
- (2) That the effect of the Program upon the natural environment will be taken into consideration in accordance with criteria satisfactory to AID prior to and during the implementation of the Program, in order to minimize any potentially harmful effects upon the natural environment;
- (3) To provide production and investment credits to the Sub-Regional Service Cooperatives established pursuant to the Program based on appropriate studies and reasonable repayment prospects;
- (4) To continue the Small Farmer Consumption Improvement Activity for an additional four year period beyond the completion of the Activity's Implementation under the Program at approximately the same level of effort achieved during the implementation period of this Program Activity, except as AID may otherwise agree in writing.

P. The following waiver of AID regulations is hereby approved: The purchase of off-the-road motorcycles (displacement less than 130 c.c.) from AID Geographic Code 935 Countries in an amount not to exceed U.S. \$75,000.

[Signature]
Acting Deputy Administrator

1/21/79
Date

Clearances:

	AA/LAC, A. Valdez	<u>[Signature]</u>	date	<u>[Signature]</u>
<u>Ed</u>	A/AA/PPC, C. Paolillo	<u>CP</u>	date	<u>6/29/79</u>
	GC, M. Ball	<u>[Signature]</u>	date	<u>[Signature]</u>
	LAC/CEN&P, W. Luken	<u>[Signature]</u>	date	<u>6/26/79</u>
	LAC/DR, C. Leonard	<u>[Signature]</u>	date	<u>[Signature]</u>
	LAC/DR, M. Brown	<u>[Signature]</u>	date	<u>6/21/79</u>
	SER/COM, W. Schmetisser	<u>[Signature]</u>	date	<u>6/28/79</u>

GC/LAC:JLKessler:ec:6/27/79:x29182

The benefits derived from this effort will obviously flow to the sub-regional cooperatives in addition to the regular clients of DIFOCOOP.

9. Regionalization and Strengthening of the Field Operations of the National Development Bank (BNF)

This Activity seeks to decentralize and at the same time, strengthen the operations of the Bank by creating five regional offices and increasing personnel and/or placing additional vehicles in 13 agencies (branch banks).

Two fairly simple administrative questions present themselves here: Physical location of the regional offices and sources of manpower. With respect to location of the regional offices, the BNF intends to place them in agency offices located in towns or cities strategically located to the Bank's operations in a given region.

With regard to manpower requirements, the Bank has five employees acting as regional supervisors, albeit in the Tegucigalpa Central office, at this time. Regional directors and other supervisors can be drawn from agency management ranks while agricultural economists and credit supervisors will come from the various agricultural training institutions or the public or private sectors over the life of the Program.

10. Zonal Infrastructure Packages

a. Planning and Design Work

The regional planning offices of CONSUPLANE are charged specifically with the basic area selection, description and prioritization work. At the moment, two regional offices are in operation with the rest to become operational between now and the end of 1980. Those currently operating or scheduled to open in the near future have or will have expanded staffs of regional planners on board that are experienced in zonal planning. In those cases where a regional office is not established in time to allow interinstitutional planning teams working in support of the CARs (the team would consist of the regional planning officers of MNR, INA, BNF, CPA, CONSUPLANE) to present their zonal evaluations to the CPA (i.e., June, 1980), the interinstitutional team would formulate preliminary evaluation plans for CPA review.

The CARs exist and are operating in all seven administrative regions in the Agricultural Sector. Along with them, in varying stages of development, are regional planning offices from various sector agencies which in effect operate as interinstitutional planning teams or technical secretariats to the CARs. The CPA already has seven regional representatives while the MNR, INA and the BNF already have or are planning to add regional planners in almost all regions in the near

A factor of singular importance to the success of the sub-regional cooperatives themselves is the quality and capability of the management staff and in particular, the Coop Manager. Persons with the multiplicity of talents which a manager should possess, i.e., organizational and planning skills, some knowledge or familiarity with farm management, business acumen, marketing talent, personnel management, human relations and communication facility are in scarce supply in Honduras. Initial queries as to the availability of such talent revealed that it could be found but mainly in the private sector. Competitive salaries and the opportunity to assume leadership responsibilities should attract enough talent with mid-level management experience to fill the required positions. In fact, at this point in time, several queries by interested and qualified parties have been made. Still, there may be a need to use some of the technical assistance provided under this Activity to advise and backstop Coop Managers, at least during the initial start-up period.

DIFOCOOP will create a special organizational unit within the institution to direct the feasibility studies, selection, planning, promotion, education, implementation and evaluation for the Activity as a whole. This unit will be staffed by four full-time employees and specially contracted individuals who, as a group, will have agricultural cooperative planning, organization, management and marketing of agricultural economics experience. The unit will have sufficient hierarchical stature to be able to effectively interact and plan jointly with the other principal Divisions of DIFOCOOP (i.e., education, promotion, planning, control and inspection) for the on-going support for the cooperatives.

This unit will also plan, guide and monitor the work of two field teams which will have full-time responsibility for the initial studies, promotion and education activities required to get the Cooperatives organized and started, particularly at the level of the participating farm communities or individual reform sector groups. Each field team will be mobile and consist of a seasoned team leader, coop promoter and educator and administration/control specialist.

In total, the effort will require a permanent group of ten technicians/specialists and three clerk/typists working over a four year period. DIFOCOOP has most of the personnel required and can recruit one or two more if necessary.

In conjunction with this effort, it is worth noting that as this paper is being written, DIFOCOOP is negotiating a contract funded under the First Sector Loan for a consulting firm to perform a comprehensive study of DIFOCOOP's operating and administrative systems and procedures and the services which it delivers to cooperatives. Based on the results of that study, the consultants are to design a more responsive organizational system and structure for assistance to cooperatives and an implementation plan to carry out the restructuring of DIFOCOOP.

SUMMARY OF PERSONNEL NEEDED ACCORDING TO JOB CATEGORIES
OF SYSTEMS AND ACTIVITIES

	<u>1 9 7 8</u>	<u>1 9 7 9</u>	<u>1 9 8 0</u>	<u>1 9 8 1</u>	<u>1 9 8 2</u>	<u>1 9 8 3</u>	<u>1 9 8 4</u>
I. TECHNICAL PERSONNEL							
A. Human Resources System							
1. Participant Training	-	-	-	-	-	-	-
2. In-service Training	6	19	24	26	26	21	-
3. CURLA	41	68	100	119	165	218	-
Sub-Total of Human Resources System	47	87	124	145	191	239	-
B. Institutional Development System							
1. Planning	98	133	170	181	186	181	-
2. Information System	43	47	92	93	93	94	-
3. Marketing Analysis System	1	1	7	7	7	7	-
Sub-Total of the Institutional Development System	142	181	269	281	286	282	-
C. System for Delivery of Services							
1. Extension Service	244	267	279	339	387	439	-
2. Service Cooperatives	-	5	14	14	14	14	-
3. National Development Bank Regionalization	175	190	209	215	215	221	-
4. Zonal Infrastructure Packages	-	-	-	-	-	-	-
5. Small Farmer Consumption Improvement	-	-	2	2	2	2	-
Sub-Total of the System for Delivery of Services	419	462	504	570	618	676	-
TOTAL FOR TECHNICAL PERSONNEL	<u>608</u>	<u>730</u>	<u>879</u>	<u>996</u>	<u>1095</u>	<u>1197</u>	-
II. SUPPORTING PERSONNEL							
A. Human Resources System							
1. Participant Training	-	-	-	-	-	-	-
2. In-service Training	2	15	22	27	30	21	-
3. CURLA	107	135	146	150	157	165	-
Sub-Total of Human Resources System	109	150	168	177	187	186	-
B. Institutional Development System							
1. Planning	73	71	83	87	88	88	-
2. Information System	12	13	40	40	40	40	-
3. Marketing Analysis System	1	1	7	7	8	9	-
Sub-Total of the Institutional Development System	86	85	130	134	136	138	-
C. System for Delivery of Services							
1. Extension Service	51	63	84	114	134	134	-
2. Service Cooperatives	-	1	4	4	4	4	-
3. National Development Bank Regionalization	97	97	102	102	102	104	-
4. Zonal Infrastructure Packages	-	-	-	-	-	-	-
5. Small Farmer Consumption Improvement	-	-	2	2	2	2	-
Sub-Total of the System for Delivery of Services	148	161	192	222	242	244	-
TOTAL FOR SUPPORTING PERSONNEL	<u>343</u>	<u>396</u>	<u>490</u>	<u>583</u>	<u>565</u>	<u>568</u>	-

future. For further discussion of the regional planning capabilities of the various agencies, see the Activity Report for the Agricultural Sector Planning Sub-System.

b. Individual Project Execution

An implementation team will be established for each infrastructure package to assure interagency coordination during construction and subsequent use of specific packages in accordance with integrated area production programs designed by the CARs and which entail use of services (e.g., extension) and credit.

Two of the principal agencies which will have responsibility for actual construction work on the project are the MNR and the General Directorate of Roads (DGC) both of which have had extensive experience in administration of construction work in general and AID projects in particular - the MNR in construction of vehicle maintenance workshops and the DGC in asentamiento access roads - under the First Agricultural Sector Program. Administration of construction projects contemplated under this Project should present no problem to either agency.

11. Small Farmer Consumption Improvement

The Extension Service of the MNR is the agency responsible for implementation of this Activity. (See Section No. 7 under Administrative Feasibility for a discussion of the administrative aspects of the Extension Service). Technical assistance will be provided in the form of two full-time technicians hired for the duration of the project: one to work as the national coordinator for the Activity and the other to work at the regional/field level to coordinate field work under this Activity with regional extension supervisors and agents. The short-term assistance of an expert with ample field experience in horticulture is planned for the initial phase of this Activity. The budget includes funds sufficient for four more months of technical assistance in this area if the need arises. No problems are anticipated with regard to placing orders with nurseries, organizing promotional work and other aspects of the Activity.

The handling of money (receiving payments by beneficiaries and the spending of the proceeds) is to be entrusted to the Municipalities, which are akin to Counties in the United States. They provide an excellent network as far as coverage is concerned. Details of how the funds are to be controlled, reports provided and similar aspects of the role of the Municipalities have yet to be developed. The use of sales proceeds in the fashion proposed should redound to the benefit of the target group. Final details with respect to administration of the funds will be elaborated in an implementation plan required as a Condition Precedent to this Activity.

TABLE No. 2

**TOTAL ANNUAL COST SUMMARY BY SYSTEM
CURRENCY AND TYPE OF EXPENDITURE
(US \$000)**

SYSTEM / TYPE OF EXPENDITURE	1978	1979	1980	1981	1982	1983	1984	TOTAL 1980 - 1984
I. HUMAN RESOURCES SYSTEM								
A. LOCAL CURRENCY								
1. Current Expenditures	1,039	1,448	2,800	3,317	3,659	4,025	461	14,262
2. Investment	163	197	3,179	1,515	747	55	-	3,496
TOTAL LOCAL CURRENCY	1,182	1,645	5,979	4,832	4,406	4,080	461	19,758
B. FOREIGN EXCHANGE								
1. Current Expenditures	36	39	1,419	1,978	1,702	1,220	461	6,780
2. Investment	32	49	967	328	481	231	-	2,307
TOTAL FOREIGN CURRENCY	68	88	2,386	2,306	2,183	1,451	461	9,087
TOTAL HUMAN RESOURCES SYSTEM	1,250	1,733	8,365	7,138	6,589	5,531	922	28,845
II. INSTITUTIONAL DEVELOPMENT SYSTEM								
A. LOCAL CURRENCY								
1. Current Expenditures	1,880	2,881	3,950	4,613	5,083	5,449	-	19,095
2. Investment	11	67	280	59	7	4	-	410
TOTAL LOCAL CURRENCY	1,891	2,948	4,230	4,672	5,130	5,493	-	19,505
B. FOREIGN EXCHANGE								
1. Current Expenditures	180	675	766	925	464	355	-	2,310
2. Investment	39	4	213	185	130	-	-	528
TOTAL FOREIGN CURRENCY	219	679	979	1,110	594	355	-	3,038
TOTAL INSTITUTIONAL DEVELOPMENT SYSTEM	2,110	3,627	5,189	5,782	5,724	5,848	-	22,543
III. SYSTEM FOR DELIVERY OF SERVICES AND RELATED INPUTS								
A. LOCAL CURRENCY								
1. Current Expenditures	4,585	5,225	6,541	8,091	9,485	10,826	203	35,146
2. Investment	-	131	489	1,266	2,043	3,093	-	7,191
TOTAL LOCAL CURRENCY	4,585	5,356	7,030	9,357	11,528	13,919	203	42,337
B. FOREIGN EXCHANGE								
1. Current Expenditures	275	126	197	309	273	111	-	890
2. Investment	215	-	876	902	724	409	-	2,911
TOTAL FOREIGN CURRENCY	490	126	1,073	1,211	997	520	-	3,801
TOTAL SYSTEM FOR DELIVERY OF SERVICES AND RELATED INPUTS	5,075	5,482	8,103	10,568	12,525	14,439	203	46,138
IV. COORDINATING UNIT								
A. LOCAL CURRENCY								
1. Current Expenditures	55	106	211	222	244	219	240	1,137
2. Investment	-	-	84	75	37	-	-	196
TOTAL LOCAL CURRENCY	55	106	295	298	281	219	240	1,333
B. FOREIGN EXCHANGE								
1. Current Expenditures	-	-	-	-	-	-	-	-
2. Investment	-	-	-	-	-	-	-	-
TOTAL COORDINATING UNIT	55	106	295	298	281	219	240	1,333
GRAND TOTAL	8,490	10,848	21,932	24,286	24,119	24,187	1,365	98,819

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TABLE No. 1
TOTAL ANNUAL COST SUMMARY BY SYSTEM
AND BY ACTIVITY
(US \$000)

SYSTEM / ACTIVITY	1978	1979	1980	1981	1982	1983	1984	TOTAL 1980 - 1984
I. HUMAN RESOURCES SYSTEM (A)								
A.1 Participant Training	-	-	1,806	2,850	2,526	1,733	719	9,634
A.2 In Service Training	245	435	804	793	817	866	203	3,483
A.3 CURIA	<u>1,005</u>	<u>1,298</u>	<u>5,755</u>	<u>3,695</u>	<u>3,246</u>	<u>3,032</u>	-	<u>15,728</u>
TOTAL HUMAN RESOURCES SYSTEM	1,250	1,733	8,365	7,338	6,589	5,631	922	28,845
II. INSTITUTIONAL DEVELOPMENT SYSTEM (B)								
B.1. Planning	1,836	3,192	3,851	4,187	4,044	4,105	-	16,187
B.2 Information System	267	413	1,096	1,339	1,409	1,451	-	5,295
B.3 Marketing Analysis System	<u>7</u>	<u>22</u>	<u>242</u>	<u>256</u>	<u>271</u>	<u>292</u>	-	<u>1,061</u>
TOTAL INSTITUTIONAL DEVELOPMENT SYSTEM	2,110	3,627	5,189	5,782	5,724	5,848	- 0 -	22,541
III. SYSTEM FOR DELIVERY OF SERVICES AND RELATED INPUTS (C)								
C.1 Extension Service	3,588	3,598	4,572	5,613	6,528	7,823	-	24,530
C.2 Service Cooperatives	-	-	677	1,048	1,246	526	203 ^{a/}	3,700
C.3 National Development Bank Regionalization	1,487	1,884	2,702	2,904	2,828	3,171	-	11,605
C.4 Zonal Infrastructure Packages	-	-	56	1,198	1,810	2,785	-	5,849
C.5 Small Farmer Consumption Improvement	-	-	96	105	113	134	-	448
TOTAL	5,075	5,482	8,103	10,868	12,525	14,439	203	46,138
IV. COORDINATION UNIT (D)	55	106	295	298	281	219	240	1,333
GRAND TOTAL	<u>8,490</u>	<u>10,948</u>	<u>21,952</u>	<u>24,286</u>	<u>25,119</u>	<u>26,137</u>	<u>1,365</u>	<u>98,859</u>

a/ Includes 1985 costs - a total of \$48,500.00

PARTICIPANT TRAINING
IMPLEMENTATION PLAN (CY's)

E V E N T	UNIT	1979				1980				1981				1982				1983				1984			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Creation and staffing of scholar. comm. & tech. sec.	Participating Institutions			x																					
2. Advertisement of scholarships	Technical Secretariat			x																					
3. Pre-selection of first year candidates	Technical Secretariat			x																					
4. Final selection of candidates	Scholarship Committee			x																					
5. English Language Training in Honduras	Contracted Institution			x																					
6. English Lang. Training in U.S.	Participants			x	x																				
7. Training begins for Group I (66)	Participants & EDUCREDITO			x	x																				
8. Selection of candidates for second year	See 4																								
9. English Lang. Training	See 5 and 6																								
10. Training begins for Group II (83)	See 7																								
11. Selection of candidates for third year	See 4																								
12. English Lang. Training	See 5 and 6																								
13. Training begins for Group II (56)	See 7																								
14. Selection of candidates for fourth year	See 4																								
15. English Lang. Training	See 5 and 6																								
16. Training begins for Group IV (30)	See 7																								
17. Evaluations	Tech. Sec. & Consultants																								

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IN-SERVICE TRAINING
IMPLEMENTATION PLAN (CY's)

EVENT	IMPLEMENTING UNIT	1979				1980			
		1	2	3	4	1	2	3	4
1. Creation of In-Service Training Commission	MNR, INA, DIFOCOOP, BNF, CONSUPLANE, INFOP, other as deemed appropriate				X				
2. Staffing of a Technical Secretariat	Commission								X
3. Definition of operational norms of the Technical Secretariat	Commission								X
4. Review, synthesis and alternative courses of action defined	Tech. Secr.								X
5. Organizational support to training units of DIFOCOOP and INA	Tech. Secr.								X
6. Assessment of training needs within sector	Tech. Sec. - INFOP								X
7. Profile of needs completed	Tech. Sec. - INFOP								X
8. Instructor Training	Tech. Sec. - INFOP							X	X
9. First Annual Evaluation of Results	Tech. Sec.-Training Units of institutions								X

PLANNING
AGRICULTURAL PLANNING SUB-SYSTEM
IMPLEMENTATION PLAN (CY's)

7 E N T	IMPLEMENTING UNIT	1979				1980				1981	1982	1983
		1	2	3	4	1	2	3	4			
Prepare terms of reference for consultants to help develop basic subsystem mechanisms	Tech. Secr. (CPA), CONSUPLANE	x										
Contract consultants and assign counterparts	Tech. Secr., CONSUPLANE, Public Agr. Sector (PASA) Institutions	x					x		x		x	
Consultants providing long-and short-term technical assistance	PAS Institutions CONSUPLANE											x
Formal installation of COPLAN	PAS Institutions	x										
Development of subsystems including manuals and basic procedures	PAS Institutions (COPLAN) and consultants											
Policy-level approval of subsystem	CPA											
Annual budgets for activities	PAS Institutions					x					x	
Recruitment of personnel required at start of each year	PAS Institutions (COPLAN)						x					x
Conduct in-service training activities	PAS Institutions (COPLAN)								x		x	
Issue Agreements and Regulations required for functioning of subsystem	CONSUPLANE											
Selection of machinery and equipment	PAS Institutions											
Develop Work Plan for 1980	PAS Institutions											
Carryout work aimed at integrating planning within the subsystem	PAS Institutions (COPLAN)											
Identification and development of production projects and production plans	PAS Institutions (COPLAN)								x		x	
Analysis of budgetary structure and public investment	COPLAN-Min. of Finance											
Development of Annual Operating Plan for the sector	PAS Institutions (COPLAN)								x		x	
Establish linkages with the Agr. Information System (SNIAD)	PAS Institutions; SNIAD											
Monitoring and adjustments to Annual Operating Program	Tech. Secr.-CPA; COPLAN								x		x	
Review and evaluation of subsystem performance and develop plans for 1981, 1982, 1983, 1984	COPLAN								x		x	

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CURIA
IMPLEMENTATION PLAN (CY's)

EVENT	IMPLEMENTATION UNIT	1979				1980				1981				1982				1983				1984							
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
1. Final Construction Designs	UNAH/Consulting firms				x																								
2. Participants	UNAH-CURLA; Scholarship Committee									x	-----	x		x	-----	x		x	-----	x									
a. Group 1																													
b. Group 2																													
c. Group 3																													
3. Construction	UNAH-CURLA; Construction Firms																												
a. Library Expansion						x	-----	x																					
b. Classrooms						x	-----	x		x	-----	x																	
c. Seed Tech. Lab.						x	-----	x																					
d. Faculty offices						x	-----	x																					
e. Soils Lab. Expansion						x	-----	x																					
f. Biology & Chem. Lab. Expansion						x	-----	x																					
g. Art. Insem. Lab.										x	-----	x																	
h. Plant Science Building										x	-----	x																	
i. Forestry Sciences Building										x	-----	x																	
j. Administrative Building										x	-----	x																	
k. Irrigation System										x	-----	x																	
l. Feed Concentrate Mix-Mill														x	-----	x													
m. Meat Products Lab.														x	-----	x													
n. Ag. Eng. Building														x	-----	x													
o. Forestry Mgt. Bldg.														x	-----	x													
p. Auditorium																		x	-----	x									
q. Cafeteria																		x	-----	x									
r. Ag. Econ. Dept. Offices																		x	-----	x									
4. Equipment Purchases	UNAH-CURLA									x	-----	x																	
5. Evaluations	CURLA																												
a. Administrative/Financial														x												x			
b. Institutional														x												x			
c. Mid-Point																													
d. Final																													

TABLE No. **BEST AVAILABLE COPY** LOCAL COST ANNUAL INCREMENTS BY SOURCES OF INCREMENT BY SYSTEM AND BY ACTIVITY (U.S. 000)

SYSTEM/ACTIVITY	1979 - 1980			1980 - 1981			1981 - 1982			1982 - 1983			TOTAL		
	Total Increment	Inflation Increment	Increase Due to Program Expansion	Total Increment	Inflation Increment	Increase Due to Program Expansion	Total Increment	Inflation Increment	Increase Due to Program Expansion	Total Increment	Inflation Increment	Increase Due to Program Expansion	Total Increment	Inflation Increment	Increase Due to Program Expansion
HUMAN RESOURCES SYSTEM (A)															
A.1. Participation Training	332	-	332	1,045	-	1,045	974	-	974	919	-	919	3,470	-	3,470
A.2. In Service Training	239	40	199	209	44	165	185	49	136	395	54	341	1,028	187	841
A.3. CBRLA	3,363	124	2,439	1,767	127	1,640	1,256	150	1,106	1,041	165	876	7,827	576	7,251
TOTAL HUMAN RESOURCES SYSTEM	4,334	164	4,170	3,021	181	2,840	2,415	199	2,216	2,355	219	2,136	12,125	763	11,362
INSTITUTIONAL DEVELOPMENT SYSTEM (B)															
B.1. Planning	880	229	651	860	252	608	969	277	692	879	305	574	3,588	1,063	2,525
B.2. Information System	604	33	571	828	36	792	860	40	820	978	44	934	3,270	153	3,117
B.3. Marketing Analysis System	110	2	108	106	2	103	134	2	131	152	2	149	302	10	292
TOTAL INSTITUTIONAL DEVELOPMENT SYSTEM	1,594	264	1,330	1,794	291	1,503	1,963	320	1,643	2,009	352	1,657	7,160	1,227	5,933
SYSTEM FOR DELIVERY OF SERVICES AND RELATED INPUTS (C)															
C.1. Extension Service	674	347	327	1,281	382	899	1,841	420	1,421	2,780	462	2,318	6,576	1,611	4,965
C.2. Service Cooperatives	363	-	363	625	-	625	768	-	768	638	-	638	2,416	-	2,416
C.3. National Development Bank Regionalization	440	188	292	569	207	362	522	228	294	663	251	412	2,234	874	1,360
C.4. Canal Infrastructure Packages	55	-	55	1,198	-	1,198	1,810	-	1,810	2,785	-	2,785	5,648	-	5,648
C.5. Small Farmer Consumption Improvement	79	-	79	92	-	92	106	-	106	126	-	126	403	-	403
TOTAL SYSTEM FOR DELIVERY OF SERVICES AND RELATED INPUTS	1,673	535	1,138	3,765	589	3,176	5,047	648	4,399	6,992	713	6,279	17,477	2,485	14,992
COORDINATING UNIT (D)															
D	87	11	76	82	12	70	91	13	78	208	30	178	468	46	402
GRAND TOTAL	7,688	874	6,714	8,662	1,073	7,589	9,516	1,180	8,336	11,544	1,214	10,330	37,402	4,461	32,941

NOTE: (1) The figures in the column "Inflation Increment" relate only to the local component of the Activity. A factor of 101 per year was used to bring the 1979 cost to current future prices. Contingency requirements are also included in the adjustments.
 (2) Some of the individual budgets were put together in such a way that the increment for expansion of on-going activities is overstated, since some line items were not adjusted for inflation; e.g., pesticides and travel expenses. In addition, for some of the agencies included in the Planning Activity, no inflation factor at all was applied, thus the overstatement of the increment for Activity expansion is even greater.
 (3) If a cumulative "Inflation Increment" would have been considered higher. Under the system used second year value of inflation is the difference between year one and two, i.e., 11 (Year 0 = 100, Year 1 = 110, Year 2 = 121). Using a cumulative method, the second year value of inflation would have been 21, i.e., the increment in year one (10) plus the increment in year two (11).

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TABLE No. 4

SUMMARY: TOTAL PROGRAM COST BY SOURCE OF FINANCING

(000' dollars)

HUMAN RESOURCES SYSTEM	TOTAL GOH		AID		REFERENCE
			GRANT	LOAN	
I. PARTICIPANT TRAINING <u>1/ 2/</u>					ACTIVITY REPORT
A. Local Costs					
1. Other Professional and Service Contracts	901	901	-	-	Tech. Asst. and EDUCREDITO administration charge 15% Page 16, 23.
2. Living Allowances for Scholarship Recipients	2,319	2,319	-	-	% of salary paid to participants, Pag. 16
3. Other	245	245	-	-	Airplane Tickets for Participants, Pags. 16,
TOTAL LOCAL COSTS	<u>3,465</u>	<u>3,465</u>	-	-	
B. Foreign Exchange Costs					
1. Scholarships	6,169	-	-	6,169	Academic and Short Course Training for all the sector institutions, Pag. 17-22A.
TOTAL FOREIGN EXCHANGE	<u>6,169</u>	-	-	<u>6,169</u>	
GRAND TOTAL SCHOLARSHIPS	<u>9,634</u>	<u>3,465</u>	-	<u>6,169</u>	
II. IN-SERVICE TRAINING <u>1/ 3/</u>					ACTIVITY REPORT
A. Local Costs					
1. Technical and Professional Personnel	869	757	-	112	See Tables I and III, pags., 47-77 for more detailed information.
2. Support Personnel	252	244	-	8	" " "
3. Per diem and Other Travel Expenses	296	288	-	8	" " "
4. Other Professional and Service Contracts	475	386	-	89	" " "
5. Consumable Supplies and Other Recurrent Costs	255	238	-	17	" " "
6. Machinery and Equipment	75	68	-	7	" " "

1/ Budgets for these two activities were modified to transfer the joint Technical Secretariat for Participant Training and In-Service Training from Participant Training to the latter.

2/ Due to the nature of this activity, it has been programmed for five years, to end in 1984.

3/ In this activity, the following institutions are represented: Ministry of Natural Resources, National Agrarian Institute, Professional Development Institute, National Development Bank, and Cooperative Promotion Directorate. The information that explains these figures is in pages 27 through 43 of the Activity Report and in the budget tables-Consolidated and/or Individual Budgets of the Participating Institutions.

INSTITUTIONAL DEVELOPMENT SYSTEM	TOTAL	GOH	AID		REFERENCE
			GRANT	LOAN	
I. PLANNING					
					ACTIVITY REPORT
A. Local Costs	See Budgets for Individual Institution on pp.				
1. Technical and Professional Personnel	9,841	9,441	-	400	" " "
2. Support Personnel	1,065	1,065	-	-	" " "
3. Per diems and Other Travel Expenses	694	694	-	-	" " "
4. Other Professional and Service Contracts	1,166	150	-	1,016	" " "
5. Consumable Supplies and Other Recurrent Costs	1,036	1,036	-	-	" " "
6. Machinery and Equipment	109	109	-	-	" " "
7. Construction	176	176	-	-	Includes \$165 for the construction of the sectoral Planning Office Building, the rest is for BNF.
8. Other ^{1/}	13	13	-	-	
TOTAL LOCAL COSTS	<u>14,100</u>	<u>12,684</u>	-	<u>1,416</u>	
B. Foreign Exchange Costs					
1. Technical Assistance	1,574	-	-	1,574	See Budget section for more information.
2. Special Studies	263	-	-	263	
3. Vehicles	250	-	-	250	About 26 new vehicles will be purchased.
TOTAL FOREIGN EXCHANGE	<u>2,087</u>	-	-	<u>2,087</u>	
GRAND TOTAL PLANNING	<u>16,187</u>	<u>12,684</u>	-	<u>3,503</u>	
II. INFORMATION SYSTEM					
					ACTIVITY REPORT
A. Local Costs	See Budget Tables No. 2 and 3, pp. 26-30 and Tables in Annexes A and B for a more detailed breakdown of these figures.				
1. Technical and Professional Personnel	2,310	2,180	-	130	" " "
2. Support Personnel	466	466	-	-	" " "
3. Occasional Labor	320	220	-	100	" " "
4. Per diems and Other Travel Expenses	844	644	-	200	" " "
5. Other Professional and Service Contracts	80	-	-	80	" " "
6. Consumable Supplies and Other Recurrent Costs	671	671	-	-	" " "
7. Machinery and Equipment	113	68	-	45	" " "
TOTAL LOCAL COSTS	<u>4,304</u>	<u>4,249</u>	-	<u>555</u>	

^{1/} See BNF budget (depreciation).

HUMAN RESOURCES SYSTEM	TOTAL	GOH	AID		REFERENCE
			GRANT	LOAN	
7. Construction	148	148	-	-	Same as above
8. Living Allowances for Scholarship Recipients	543	543	-	-	Includes Living expenses for participants attending in country training. See Table I, page 58. Includes Multi-Institutional courses. See table I, page 58.
TOTAL LOCAL COSTS	<u>2,913</u>	<u>2,672</u>		<u>241</u>	
B. Foreign Exchange Costs					
1. Third Country Nationals Occupying Full-time Positions and paid in Foreign Exchange	97	97	-	-	See Table I, pp. 49, 60,
2. Technical Assistance	377	5	93	279	See Table I, pp. 51.
3. Special Studies	7	7	-	-	See Table C-I, pp. 51
4. Machinery and Equipment	17	17	-	-	" " " " "
5. Vehicles	72	54	-	18	8 vehicles will be purchased.
TOTAL FOREIGN EXCHANGE	<u>570</u>	<u>180</u>	<u>93</u>	<u>297</u>	
GRAND TOTAL IN-SERVICE TRAINING	<u>3,483</u>	<u>2,852</u>	<u>93</u>	<u>538</u>	
III. CURLA					ACTIVITY REPORT
A. Local Costs					
1. Technical and Professional Personnel	4,332	4,332	-	-	See Tables I and III, pp. 59 and 61 for more information.
2. Support Personnel	1,435	1,435	-	-	Same as above.
3. Per diem and Other Travel Expenses	194	194	-	-	" " "
4. Consumable Supplies and Other Recurrent Costs	567	567	-	-	See Table I, p. 59.
5. Machinery and Equipment	570	-	570	-	" " " " "
6. Construction	5,164	3,671	464	1,029	" " " " "
7. Other	1,118	1,118	-	-	" " " " "
TOTAL LOCAL COSTS	<u>13,380</u>	<u>11,317</u>	<u>1,034</u>	<u>1,029</u>	
B. Foreign Exchange Costs					
1. Technical Assistance	45	-	45		See Table I, p. 59B.
2. Special Studies	84	-	84		" " " " "
3. Machinery and Equipment excluding vehicles	2,128	-	-	2,128	" " " " "
4. Vehicles	91	-	-	91	10 vehicles will be purchased.
TOTAL FOREIGN EXCHANGE	<u>2,348</u>	<u>-</u>	<u>129</u>	<u>2,219</u>	
GRAND TOTAL CURLA	<u>15,728</u>	<u>11,317</u>	<u>1,163</u>	<u>3,248</u>	

EXTENSION IMPROVEMENT
IMPLEMENTATION PLAN (CY's)

EVENT	IMPLEMENTING UNIT	1979				1980				1981				1982				1983			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
A. Restructuring of the PEA																					
1. Implementation of new scheme in the two regions of concentration	PEA; DAR's	(1)	(1)																		
2. Implementation of new scheme in other 5 regions			X	X																	
B. Area Studies																					
3. Area studies completed in seven regions	PEA	(2)	(2)	(2)	(1)																
		X	X	X	X																
C. Agencies																					
4. Equipment, logistical support and personnel for 9 Training Agencies	PEA-DARs			(3)		(4)			(2)												
5. Equipment, logistical support and personnel for 31 Strengthened Agencies	PEA-DARs			X	X	X	X	X	X												
						(21)			(10)												
				X	X	X	X	X	X												
D. Commodities																					
6. Vehicles and equipment requested for AEP-1st and 2nd Phases	PEA-Program Coordinating Unit	(1st)							(2nd)												
		X							X												
E. Personnel																					
7. Increase technical staff by 225 (net increase)	PEA			(65)		(60)		(48)		(52)											
8. Select, orient and incorporate 900 volunteer leaders	PEA-Human Resources			X	X	X	X	X	X	X											
				(50)	(50)	(100)	(100)	(300)	(300)												
				X	X	X	X	X	X												
F. Participant and In-Service Training																					
9. Loan-term participants for graduate Specialization abroad: Group 1 (6) Group 2 (4) Group 3 (4) Group 4 (4) Group 5 (4)	Scholarship Committee- EDUCREDITO			X	X	X	X	X	X												
				X	X	X	X	X	X												
10. Short-term training abroad (64 participants)	Scholarship Committee																				
11. Staff training short courses in-Country	PEA-Human Resources			(16)		(16)		(16)		(16)											
				X	X	X	X	X	X												
				(19)	(13)	(12)	(25)	(25)													
G. Technical Assistance																					
12. Selection and contracting of long-term technical advisor	PEA			X	X	X	X	X													
13. Short-term technical assistance (10mm)	PEA			(2mm)		(2mm)		(2mm)		(2mm)		(2mm)		(2mm)							
				X		X		X		X		X		X							
H. Administration/Evaluation																					
14. Payment of incentives	PEA			X	X	X	X	X													
15. Annual Evaluations	PEA, DQA, CPA, AID			X	X	X	X	X													
16. Mid-Course Evaluation	Independent evaluators			X	X	X	X	X													
17. Final Evaluation	PEA, DQA, CPA, AID, Consultant			X	X	X	X	X													
				X	X	X	X	X													

UNCLASSIFIED
ANNEX II.5.
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MARKETING INVESTIGATION AND ANALYSIS SYSTEM
IMPLEMENTATION PLAN (CY's)

EVENT	IMPLEMENTING UNIT (Semesters)	1979		1980		1981		1982		1983		1984	
		'1st'	'2nd'										
1. Creation of the Dept. of Marketing Research & Analysis in IHMA	IHMA												
2. Personnel & Training	IHMA-Schol. Committee												
a. Chief													
b. Agronomist I - training													
c. Agronomist 2 - training													
d. Statistician - training													
e. Economist I - training													
f. Economist 2 - training													
g. Economist 3 - training													
3. Evaluations	IHMA-CPA-Indep. Evaluators												
4. Technical Assistance	IHMA												
a. Long-term Advisor													
b. Short-term Consults													

INSTITUTIONAL DEVELOPMENT SYSTEM	TOTAL	GOH	AID		REFERENCE
			GRANT	LOAN	
B. Foreign Exchange					
1. Technical Assistance	229	-	-	229	See Appendixes A and B, Tables A1, A4, A7, A9, B1, B9, B10, B14, B15.
2. Vehicles	262	-	-	262	26 vehicles will be purchased. See Tables B4, B11, pp. B14 and B25.
TOTAL FOREIGN EXCHANGE	<u>491</u>	-	-	<u>491</u>	
GRAND TOTAL INFORMATION	<u>5,295</u>	<u>4,249</u>	-	<u>1,046</u>	
III. MARKETING ANALYSIS SYSTEM					
A. Local Costs					
1. Technical and Professional Personnel	310	310	-	-	See P. 5 (inputs) and Tables 2, 3, 4, 6, pp. 10, 12, 13, 14 for more detailed information.
2. Support Personnel	146	146	-	-	" " "
3. Per Diems and Other Travel Expenses	18	18	-	-	" " "
4. Other Professional and Service Contracts	83	-	-	83	" " "
5. Consumable Supplies and Other Recurrent Costs	32	32	-	-	" " "
6. Machinery and Equipment	12	12	-	-	" " "
TOTAL LOCAL COSTS	<u>601</u>	<u>518</u>	-	<u>83</u>	
B. Foreign Exchange					
1. Technical Assistance	444	-	-	444	Short and long-term T.A. in Marketing.
2. Vehicles	16	-	-	16	2 vehicles will be purchased.
TOTAL FOREIGN EXCHANGE	<u>460</u>	-	-	<u>460</u>	
GRAND TOTAL MARKETING	<u>1,061</u>	<u>518</u>	-	<u>543</u>	

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DELIVERY SYSTEM	TOTAL	GOH	AID		REFERENCE
			GRANT	LOAN	
I. EXTENSION SERVICE ^{1/}					ACTIVITY REPORT
A. Local Costs					
1. Technical and Professional Personnel	9,120	8,899	-	221	Budget and Personnel, p. 31 and 32, Salary Supplements, pp. 19 & 20.
2. Support Personnel	1,305	1,305	-	-	Budget and Personnel, pp. 31, 32.
3. Occasional Labor	40	40	-	-	Budgets p. 31.
4. Per diems and Other Travel Expenses	2,303	2,008	-	295	Approx. 6 days/mo./person each at L. 40/day.
5. Other Professional and Service Contracts	100	-	-	100	Studies p. 20.
6. Consumable Supplies and Other Recurrent Costs	8,748	8,748	-	-	Budget P. 31a.
7. Machinery and Equipment	211	211	-	-	Includes projectors, port. generators, back-pack sprayers, etc.
8. Construction	862	862	-	-	Construction and repairs at 75 sub-regional agencies.
TOTAL LOCAL COSTS	<u>22,689</u>	<u>22,073</u> ^{3/}	-	<u>616</u>	
B. Foreign Exchange					
1. Technical Assistance	210	-	-	210	p. 19 and 31 b.
2. Machinery and Equipment	63	50	-	13	Budget p. 31 b.
3. Vehicles	1,574	534	-	1,040	153 jeep-type vehicles, 67 pick-ups, 60 motor-cycles.
TOTAL FOREIGN EXCHANGE	<u>1,847</u>	<u>584</u> ^{4/}	-	<u>1,263</u>	
GRAND TOTAL EXTENSION	<u>24,536</u>	<u>22,657</u>	-	<u>1,879</u>	
II. SERVICE COOPERATIVES ^{2/}					ACTIVITY REPORT
A. Local Costs					
1. Technical and Professional Personnel	316	316	-	-	See Budget Tables pages 39, 40 and 41, and illustrative budget in page 23.
2. Support Personnel	49	49	-	-	" " "
3. Occasional Labor	20	20	-	-	" " "
4. Per diems and Other Travel Expenses	109	109	-	-	" " "
5. Other Professional and Service Contracts	71	-	-	71	" " "

^{1/} GOH Budget includes approximately L. 3,044,000 of BID funds and L. 566,000 of IDA funds under Extension.

^{2/} This Activity is programmed for five years, and L. 97,000 are budgeted to cover operational deficits in 1985.

^{3/} Includes \$909,000 being financed under an IDB Loan.

^{4/} Includes \$584,000 of IDB financing.

ADMINISTRATION OF CREDIT PROGRAMS
IMPLEMENTATION PLAN (CY'S)

EVENT	IMPLEMENTATION UNIT	1972				1980				1981				1982				1983				1984			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Creation main branch office and credit department	BNF					x																			
2. Creation of Central-South East and North-west regional offices	BNF						x																		
3. Creation of Atlantic Coastal regional office	BNF							x																	
4. Purchase of vehicles, furniture and equipment for three regional offices	BNF								x																
5. Purchase of vehicles, furniture and equipment for 8 branches in two priority regions of MNR	BNF						x																		
6. Appointments of Appraisers in order to strengthen the 8 branches	BNF					x			x																
7. Purchase of vehicles, furniture and equipment for other 5 branches	BNF						x																		
8. Adoption of detailed system of operations and reports for regional offices	BNF							x																	
9. Formulation of a regional programming system	BNF								x																
10. Do detailed analysis of manuals for credit procedures in order to modify them and apply to 8 branches in regions of concentration	GOH with participation of MNR, INA, DIFOCOOP								x																
11. Do detailed study of new credit focus in priority branches	BNF					x			x																
12. Begin regional interinstitutional coordination	BNF						x																		
13. Adoption of new credit focus in priority branches	BNF, MNR, INA, DIFOCOOP											x													
14. Adoption of changes in manuals and procedures	BNF											x													
15. Purchase of vehicles for new branch offices	BNF											x													
16. Purchase of furniture and equipment for same	BNF											x													
17. Purchase of vehicles, furniture and equipment for regional offices in 18. and 19. below	BNF																								
18. Creation of Southern regional office	BNF																								
19. Creation of Eastern regional office	BNF																								
20. Adoption of detailed system for operation and reporting for Southern and Eastern regions	BNF																								

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SUB-REGIONAL SERVICE CENTERS
IMPLEMENTATION PLAN (CY's)

E V E N T	IMPLEMENTATION UNIT	1979				1980				1981				1982				1983				1984				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
A. Selection and Organization of Coops.																										
1. Preliminary selection of zones	DIFOCOOP; CARS			x	x																					
2. Data gathering-regions of concentration	DIFOCOOP; MNR; INA			x																						
3. Feasibility studies 1st two Coops.	DIFOCOOP; CARS					x	x																			
4. Approval and organization of two Coops.	DIFOCOOP; CPA							x	x																	
5. First two Coops. functioning	Coops; DIFOCOOP									x																
6. Feasibility studies for 2nd group of Coops (3)	DIFOCOOP; CARS							x		x																x
7. Approval and organization of 2nd group (3)	CEA; DIFOCOOP									x	x															
8. 2nd group Coops. functioning	Coops.; DIFOCOOP											x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
9. Feasibility studies for 3rd group of Coops (3)	DIFOCOOP; CARS											x	x													
10. Approval and organization of 3rd group (3)	CPA; DIFOCOOP													x	x											
11. 3rd group Coops functioning	Coops.; DIFOCOOP															x	x	x	x	x	x	x	x	x	x	x
B. Administrative/Institutional Support																										
12. Formally constituted DIFOCOOP Project Management and Technical Support Unit functioning	DIFOCOOP									x																x
13. Unit contracted staff hired and working	DIFOCOOP									x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
14. Long-term technical advisor (36 pm)	DIFOCOOP									x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
15. Short-term technical assistance (33 pm)	DIFOCOOP																									
16. Commodities ordered	DIFOCOOP; Loan Coord. Unit					x				x	x															
C. Evaluations																										
17. Evaluation 1st group of Coops	DIFOCOOP; CARS; USAID																									
18. Mid-point evaluation	CPA; Indep. Evaluators																									
19. Evaluation 2nd group of Coops.	DIFOCOOP; CARS; USAID																									
20. Evaluation 3rd group Coops	DIFOCOOP; CARS; USAID																									
21. Final Evaluation	CPA; Indep. Evaluators																									

INFORMATION SYSTEM
IMPLEMENTATION PLAN (CY's)

EVENT	IMPLEMENTING UNIT	1979		1980		1981	1982	1983
		1st Sem.	2nd Sem.	1st Sem.	2nd Sem.			
1. Finish the assessment for the marketing information sub-system	MNR/SPD	x						
2. Hold national workshops for the socio-economic and science and technology information sub-systems	SPD/PIADIC	x						
3. Prepare the set of general norms that will regulate the functioning of the National System of Agricultural Information	DGEC, MNR/SPD, CSPE, IHMA, PIADIC		x					
4. Finish the Pilot Phase of the Sample Frame and start operation for Region 6	MNR/SPD DGEC		x					
5. Carry out three courses: PLL, Operating System and SPSS	MNR/SPD		x					
6. Conduct a Practical Statistics and Sampling Course using correspondence courses	MNR/SPD		x	x				
7. Analyst contracted and training local personnel in the development and use of data bank technique	MNR/SPD; DGEC		x	x				
8. Obtain an advisor in Systems Analysis to assist in the development of punching and processing programs for the Survey of the Pilot Sample Frame and in survey methodology and techniques	MNR/SPD DGEC			x				
9. Organize, in cooperation with the Honduran National Autonomous university a module to train personnel in sampling techniques	DGEC, MNR/SPD		x					
10. Carry out the basic stages of the Sampling module with national personnel	DGEC, MNR/SPD		x	x				
11. Operational design for the documental information network and the CEDIA structure	CEDIA, PIADIC		x					
12. Establish inter-institutional coordination and cooperation mechanisms	CEDIA, PIADIC		x					
13. Inventory the agricultural libraries, documentation centers, and agricultural information services and determine the sector needs for libraries and Documentation Centers	CEDIA		x	x				
14. Prepare and implement a personnel training program	CEDIA, PIADIC	x						
15. Negotiate inter-agency agreements for the integration of the numerical and documental information networks	MNR/SPD, DGEC, INA, IHMA, CSPE, MNR/AOD		x					
16. Organize and phase in the Farmer Consolidation and Dissemination Unit of the Extension Service (PEA) including the development, testing, and transfer of pertinent information	PEA	x	x	x				
17. Implement No. 15 above	DGEC, MNR/SPD and AOD			x				
18. Develop the Sample Frame for the Agricultural Regions No. 2,3 and 6	DGEC, MNR/SPD			x				
19. Organize and implement the National System of Agricultural Surveys	DGEC			x				
20. Design and institutionalize the farms for the information flow to and from the data bank	MNR/SPD			x				

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(2) INFORMATION

EVENT	IMPLEMENTING UNIT	1981		1980		1981	1982	1983
		1st Sem.	2nd Sem.	1st Sem.	2nd Sem.			
21. Inventory usable information within the institutions that integrate the network of numerical information and adapt it to the input formats to the data bank	DGEC MNR/SPD			-----				
22. Analyze the Sector needs for Libraries and Documentation Centers	CEDIA			x				
23. Design the centralization process documental information in the sector.	CEDIA/PIADIC			x				
24. Organize the CEDIA documentation and information services.	CEDIA/PADIC			x				
25. Organize and strengthen the documental and information services of the agricultural libraries and information centers	CEDIA/PADIC			x				
26. Set up a mechanism for rationalizing the acquisition of required bibliographic materials according to the specialization of the documental information units of the Sector.	CEDIA/PADIC			x				
27. Develop a methodology to control and publish agricultural research being carried out by sector institutions	CEDIA/PADIC					x		
28. Develop methods and procedures to manage the documental information Data Bank, train personnel integrate and put the system into operation	CEDIA/PADIC					-----		
29. Finish the Sampling Training Module with technical assistance from the U. S. Bureau of Census to propose the strategy and structure for the DGEC Sampling Department	DGEC; MNR/SPD					-----		
30. Organize the DGEC Sampling Department	DGEC						x	
31. Strengthen the general data collection functions of the DGEC and other SNIAM members through the provision of technical assistance and training in questionnaire development, data collection and survey processing	DGEC						x	
32. Train personnel in data storage and retrieval and put the data bank into operation	DPS, DGEC						-----	
33. Develop and implement a methodology for SNIAM evaluation, review and adjustment based on the experience obtained to date	DGEC, DPS, CEDIA, PSA, PIADIC							-----
34. Evaluations 2nd Semester each year						x	x	x x

SMALL FARMER CONSUMPTION IMPROVEMENT
IMPLEMENTATION PLAN (CY's)

E V E N T	IMPLEMENTATION UNIT	1979				1980				1981				1982				1983				1984			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Select/hire project coordinator-Agr. Engineer	MNR/Extension			x	x																				
2. Select/hire project secretary	MNR/Extension			x	x																				
3. Establish office of coordinator	MNR/Extension			x	x																				
4. Identification of cooperating offices and personnel	MNR/INA																								
	Coops./Private Sector			x	x																				
5. Development of detailed operational plan	MNR/INA			x	x																				
	Coops./Private Sector			x	x																				
6. Prepare resolutions, agreements or contracts for the Research Program of the MNR, the Improved Seed Program, INA and/or the private sector for the production of vegetative material for 24,000 packages of plants	MNR/Extension			x				x				x				x				x				x	
7. Prepare orders for the importing of the required seed materials	MNR/Extension							x																	
8. Identify the beneficiaries in the regions (24,000 over 4 years)	MNR/Extension							x	4,500			x	5,400			x	6,300			x	7,800			x	
9. Make arrangements for transport of materials to beneficiaries	MNR/Extension							x				x				x				x				x	
10. Selling of packages	MNR/Extension							x				x				x				x				x	
11. Internal activity evaluation	MNR/Extension							x				x				x				x				x	
12. Project evaluation	MNR/USAID																								

INFRASTRUCTURE PACKAGES
IMPLEMENTATION PLAN (CY's)

EVENT	IMPLEMENTING UNIT	1979		1980		1981		1982		1983	
		1st Sem.	2nd Sem.								
1. Selection and assignment of planning team to CAR's in regions of concentration	CONSUPLANE, DPS		X								
2. MNR and SECOPT budget funds for project studies	MNR, SECOPT		X								
3. Zone selection guidelines developed and given to CAR's	CPA, MNR, SECOPT				X						
4. CONSUPLANE determination of priority sub-regional zones sent to CAR's	CONSUPLANE		X								
5. Planners evaluate zones and make recommendations to CPA; CPA approval	CAR's			X-X							
6. Implementing agencies budget for projects	MNR, SECOPT, others as required				X						
7. Final studies completed and first two projects started	CAR's & other specialized Agencies as required				X	X					
8. Repeat steps 2, 5, 6 and 7 for all projects (16)	(Same Agencies)				X	X	X	X			
9. Evaluations Quarterly for projects under construction Final-End of Program	CAR's, CPA Independent Evaluators				X	X	X	X	(3)	(5)	(8)
						X	X	X	X	X	X

TABLE No. 5

TOTAL ANNUAL COST SUMMARY BY CURRENCY
AND
DETAILED BY TYPE OF EXPENDITURE
(US \$ 000)

	1978	1979	1980	1981	1982	1983	1984	TOTAL PROGRAM 1980 - 1984
I. LOCAL CURRENCY								
A. Technical and Professional Personnel	3,396	4,504	6,583	7,779	9,014	10,248	291	33,914
B. Support Personnel	497	623	924	1,297	1,584	1,828	13	5,646
C. Technical Assistance and Special Studies	195	209	709	713	772	589	93	2,876
D. Construction	154	395	3,645	2,702	2,464	3,109	-	11,920
E. Others ^{1/}	<u>3,471</u>	<u>4,324</u>	<u>5,570</u>	<u>6,893</u>	<u>7,474</u>	<u>7,937</u>	<u>507</u>	<u>28,561</u>
SUB-TOTAL	7,713	10,055	17,430	19,384	21,308	23,711	904	82,737
II. FOREIGN EXCHANGE								
A. Technical Assistance	195	867	926	1,284	606	318	-	3,134
B. Machinery and Equipment	32	-	962	528	537	316	-	2,413
C. Vehicles	254	26	1,085	918	824	508	-	3,335
D. Others ^{2/}	<u>296</u>	<u>-</u>	<u>1,549</u>	<u>2,102</u>	<u>1,844</u>	<u>1,284</u>	<u>461</u>	<u>7,240</u>
SUB-TOTAL	777	893	4,522	4,902	3,811	2,426	904	16,122
GRAND TOTAL	<u>8,490</u>	<u>10,948</u>	<u>21,952</u>	<u>24,286</u>	<u>25,119</u>	<u>26,137</u>	<u>1,365</u>	<u>98,859</u>

^{1/} Includes occasional labor, per-diem and other travel expenses, consumable supplies and other recurrent costs, machinery and equipment, living allowances for scholarship recipients, others not specified.

^{2/} Includes scholarships (\$6.2 million), third country nationals, special studies and others not specified.

TABLE No. 6

TOTAL ANNUAL COST BY CURRENCY AND AGENCY
(US \$000)

CURRENCY / AGENCY	1978	1979	1980	1981	1982	1983	1984	TOTAL 1980 - 1984
I. LOCAL CURRENCY								
A. Ministry of Natural Resources	4,108	4,517	6,327	8,550	10,310	12,818	440	38,445
B. National Agrarian Institute	263	425	652	692	737	701	-	2,782
C. Technical Secretariat of the CSPE	174	325	445	537	616	630	-	2,228
D. Technical Secretariat of the CPA	254	203	403	408	451	465	-	1,727
E. National Development Bank	1,868	3,431	2,998	3,366	3,583	4,014	-	13,961
F. Honduran Agricultural Marketing Inst.	8	22	131	130	160	180	-	601
G. Cooperatives Development Directorate	-	51	465	715	870	557	202	2,809
H. Professional Development Institute	72	96	72	89	80	83	-	324
I. EDUCREDITO	-	-	531	1,044	973	655	262	3,465
J. Statistics and Census Directorate	30	50	606	723	773	913	-	3,015
K. CURLA	936	935	4,800	3,130	2,755	2,695	-	13,380
SUB-TOTAL LOCAL CURRENCY	7,713	10,055	17,430	19,384	21,308	23,711	904	82,737
II. FOREIGN EXCHANGE								
A. Ministry of Natural Resources	515	334	857	960	834	723	-	3,374
B. National Agrarian Institute	-	-	110	140	-	-	-	250
C. Technical Secretariat of the CSPE	-	-	83	120	-	-	-	203
D. Technical Secretariat of the CPA	38	4	318	324	136	24	-	802
E. National Development Bank	113	463	368	262	25	-	-	655
F. Honduran Agricultural Marketing Inst.	-	-	111	127	111	111	-	460
G. Cooperatives Development Directorate	-	-	315	447	511	130	-	1,403
H. Professional Development Institute	-	-	19	20	15	-	-	54
I. EDUCREDITO	-	-	1,274	1,805	1,552	1,078	461	6,170
J. Statistics and Census Directorate	81	43	114	133	136	20	-	403
K. CURLA	30	49	953	564	491	340	-	2,348
SUB-TOTAL FOREIGN EXCHANGE	777	893	4,522	4,902	3,811	2,426	461	16,122
GRAND TOTAL	<u>8,490</u>	<u>10,948</u>	<u>21,952</u>	<u>24,286</u>	<u>25,119</u>	<u>26,137</u>	<u>1,361</u>	<u>98,859</u>