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Honduras

An Inquiry into Rural Population, Small Farmers and Agrarian Reform

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CURRENCY EQUIVALENTS

US\$1.00 = 2.00 Lempiras (L)
L 1.00 = US\$0.50

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January 1 to December 31

GLOSSARY OF ABBREVIATIONS

ACADEH	Campesino Association for Diversified Agricultural Development
ANACH	National Association of Honduran Peasants
ATAC	American Technical Assistance Corporation
BANADESA, BANAFOM	National Agricultural Development Bank
BANASUPRO	National Development Bank Food Marketing Agency
BNF	National Development Bank
CABEI	Central American Bank for Economic Integration
CACM	Central American Common Market
CELADE	Latin American Demographic Center
COHBANA	Honduran Banana Corporation
COHDEFOR	National Forestry Corporation
CONADI	National Investment Corporation
CORFINO	Olancho Industrial Forestry Corporation
CONSUPLANE, CSPE	National Planning Council
DIMA	Municipal Water Division of San Pedro Sula
EACI	Isletas Cooperative of Banana Growers
ENEE	National Electric Power Company
ENP	National Port Authority
FAO	U.N. Food and Agricultural Organization
FECORAH	Federation of Agrarian Reform Cooperatives
FENACH	National Federation of Honduran Campesinos
FIAFSA	Agua Fria Industrial Forestry Corporation
FINAVI	National Housing Financiera
FNP	National Railway Company
FONDEI	National Industrial Development Fund
HONDUTEL	Honduran Telecommunications Corporation
IDB	Inter-American Development Bank
IHCAFE	Honduran Coffee Institute
IHDER	Honduran Rural Development Institute
IHMA	Honduran Agricultural Marketing Institute
IHSS	Social Security Institute
IJPM	National Retirement Fund for Teachers
INA	National Agrarian Institute
INFOP	Vocational Training Institute
INVA	National Housing Institute
INVEST	Investment and Economic Studies
JNBS	National Social Welfare Board
JUPEMP	National Retirement Fund for Public Employees
LNB	National Lottery
MNR	Ministry of Natural Resources
PANI	National Child Welfare Institute
PROCCARA	Training Department of INA
PRODERO	Western Rural Development Project
SANAA	National Water and Sewerage Service
UNAH	National University
UNC	National Union of Peasants
USAID	U.S. Agency for International Development

SYNOPSIS

The report analyzes the performance of the Honduran agrarian reform program to assess its achievements, the impact on the campesinos and the problems confronted in carrying out the program. It also analyzes expected population growth and the resulting pressures on natural resources, rural migration and employment, and number of landless peasants. The report arrives at proposals for policy action to improve the situation of small farmers and agrarian reform beneficiaries.

AN INQUIRY INTO RURAL POPULATION, SMALLFARMER AND AGRARIAN REFORM

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IBRD 15677 - Power System Transportation Network
IBRD 16294 - Agrarian Reform Settlements
IBRD 16295 - Lower Aguan Valley
IBRD 14337R - Rainfall
IBRD 14338R - Land Use Potential
IBRD 14339 - Forests
IBRD 14362R - Relief
IBRD 15651 - Watersheds

This report is based on the findings of an economic mission to Honduras in January 1980, comprised of Juan Giral (Chief) and Eric Shaerer (Consultant). A draft report was discussed with the authorities in October 1982.

COUNTRY DATA - HONDURAS

<u>AREA</u>	<u>POPULATION</u>	<u>DENSITY</u>
112,100 km ²	3.7 million (mid-1980)	32 per km
	Rate of Growth: 3.1 ^{1/} (from 1961 to 1979)	124 per km of arable land
<u>POPULATION CHARACTERISTICS (1975-80)</u>		<u>HEALTH (1979)</u>
Crude Birth Rate (per 1,000)	47.0	Population per physician
Crude Death Rate (per 1,000)	12.0	Population per hospital bed
Infant Mortality (per 1,000 live births)	118.0	
<u>ACCESS TO PIPED WATER (1978)</u>		<u>DISTRIBUTION OF LAND OWNERSHIP (1974) ^{2/}</u>
% of population - Total	52.0	% owned by top 12% of owners
		% owned by smallest 10% of owners
<u>NUTRITION (1969-71)</u>		<u>ACCESS TO ELECTRICITY (1979)</u>
Calorie intake as % of requirements	94.0	% of population - urban
Per capita protein intake	56.0	- rural
		<u>EDUCATION (1979)</u>
		Adult literacy rate %
		Primary school enrollment %
		(adjusted)

GNP PER CAPITA IN 1980^{3/}: US\$560

<u>GROSS NATIONAL PRODUCT IN 1981</u>		<u>ANNUAL RATE OF GROWTH (% , constant prices)</u>				
	<u>US\$ Mln.</u>	<u>%</u>	<u>1965-73</u>	<u>1973-79</u>	<u>1980</u>	<u>1981</u>
GNP at Market Prices	2,714	100.0	4.1	4.4	2.2	1.6
Gross Domestic Investment	604	22.3	5.3	11.0	1.1	-13.2
Gross National Saving	301	11.1	4.7	-3.0	-15.0	-2.2
Current Account Balance ^{4/}	-303	11.2	.	.	.	.
Exports of Goods, NFS	885	32.6	5.3	4.1	4.4	-10.5
Imports of Goods, NFS	1,062	39.1	4.8	9.9	8.1	-12.2

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1979

	<u>Value Added</u>		<u>Labor Force^{5/}</u>		<u>V.A. Per Worker</u>	
	<u>US\$ Mln.</u>	<u>%</u>	<u>Mln.</u>	<u>%</u>	<u>US\$</u>	<u>%</u>
Agriculture	599	27.7	.625	59.9	958	46.2
Industry	488	22.5	.175	16.8	2,789	134.4
Services	813	37.5	.244	23.3	3,331	160.5
Unallocated ^{6/}	266	12.3	.	.	.	.
Total/Average	2,166	100.0	1.044	100.0	2,075	100.0

GOVERNMENT FINANCE

	<u>General Government</u>			<u>Central Government</u>		
	<u>(US\$ Mln.)</u>	<u>% of GDP</u>		<u>(US\$ Mln.)</u>	<u>% of GDP</u>	
	<u>1979</u>	<u>1979</u>	<u>1977-79</u>	<u>1979</u>	<u>1979</u>	<u>1977-79</u>
Current Receipts	388	17.9	18.7	316	14.6	15.1
Current Expenditure	330	15.3	15.9	288	13.3	13.9
Current Surplus	58	2.6	2.8	28	1.3	1.2
Capital Expenditures	135	6.2	7.0	126	5.8	6.0
External Assistance (net)	66	3.0	3.5	67	3.1	3.5

(p) = Preliminary

^{1/} Population growth rate is lower than the rate of natural increase, because of net emigration.^{2/} The 1974 Census does not reflect land redistribution efforts. In 1980, land redistributed accounted for about 10 percent of total farm land.^{3/} GNP per capita estimate at market prices, calculated by same conversion method as World Bank Atlas.^{4/} Includes transfers.^{5/} Total labor force: unemployed are allocated to sector of their normal occupation.^{6/} Indirect taxes.

.. Not available

. Not applicable

COUNTRY DATA - HONDURAS

<u>MONEY, CREDIT AND PRICES</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
	(Million US\$ outstanding end period)						
Money and Quasi Money	299	380	467	570	635	682	748
Bank Credit to Public Sector	41	40	55	77	99	155	205
Bank Credit to Private Sector	349	419	518	600	678	739	794
	(Percentages or Index Numbers)						
Money and Quasi Money as % of GDP	27.0	29.5	30.2	31.3	29.3	27.4	27.9
General Price Index (196 = 100)	147.4	154.7	167.9	177.5	193.1	229.4	251.0
Annual percentage changes in:							
General Price Index	8.1	5.0	8.5	5.7	8.8	18.8	9.4
Bank Credit to Public Sector	-4.7	-2.5	37.5	40.0	28.6	56.6	32.3
Bank Credit to Private Sector	19.9	20.0	23.6	15.8	13.0	9.0	7.4
<u>BALANCE OF PAYMENTS</u>							
	<u>1975</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>MERCHANDISE EXPORTS (1981)</u>		
		(Millions US\$)				US\$ Mln.	%
Exports of Goods, NFS	343.5	821.9	928.7	885.3	Bananas	213.3	27.2
Imports of Goods, NFS	452.4	917.6	1126.4	1062.3	Coffee	172.8	22.0
Resource Gap, (deficit = -)	-108.9	-95.7	-197.7	-177.0	Beef	46.5	5.9
					Lumber	43.1	5.5
Interest Payments (MLT)	-10.1	-45.9	-59.1	-77.4	All other commodities	308.1	39.4
Workers' Remittances	..	..	..	..	Total	783.8	100.0
Other Factor Payments (net)	-18.2	-60.0	-88.9	-75.9			
Net Transfers	17.7	18.5	21.5	27.5			
Balance on Current Account	-119.6	-183.1	-324.2	-302.8			
					<u>EXTERNAL DEBT, DECEMBER 31, 1981</u>		
Direct Foreign Investment	10.4	10.0	5.8	-3.6			
Net MLT Borrowing	92.8	162.0	222.5	216.4			US\$ Mln.
Disbursement	(99.2)	(224.6)	(261.8)	(254.0)	Public Debt, incl. guaranteed		1223.7
Amortization	(6.4)	(62.6)	(39.3)	(37.6)	Non-Guaranteed Private Debt		..
Subtotal	103.2	172.0	228.3	212.8	Total outstanding & Disbursed		..
Capital Grants	..	..	..	..
Other Capital (net)	-29.1	1.7	-3.0	-0.4			
Other items n.e.i.	28.6	-7.4	45.1	18.0	<u>DEBT SERVICE RATIO FOR 1981^{1/}</u>		
Increase in Reserves (+)	-16.9	-16.8	-53.8	-72.4			%
Gross Reserves (end year)	108.3	230.0	172.8	133.3	Public Debt, incl. guaranteed		12.7
Net Reserves (end year)	28.2	116.9	63.1	-79.3	Non-Guaranteed Private Debt		..
					Total outstanding & Disbursed		..
<u>RATE OF EXCHANGE</u>							
					<u>IBRD/IDA LENDING, Nov. 30, 1982 (Million US\$):</u>		
Through - 1971						<u>IBRD</u>	<u>IDA</u>
US\$ 1.00 = L 2.00					Outstanding & Disbursed	213.9	79.2
L 1.00 = US\$ 0.50					Undisbursed	179.7	3.8
Since - 1971					Outstanding incl. Undisbursed	393.6	83.0
US\$ 1.00 = L 2.00							
L 1.00 = US\$ 0.50							

^{1/} Ratio of Debt Service to Exports of Goods and Non-Factor Services.

^{2/} Includes a prepayment of about US\$24 million. Excluding this prepayment, the debt service ratio is 10.2%.

.. Not available
 . Not applicable

July 14, 1981
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SUMMARY AND CONCLUSIONS

i. This study analyzes the Honduran agrarian reform program examining its achievements, problems confronted and impact on the campesinos. This is an important issue because expected population growth and resulting pressures on natural resources, rural labor growth, and consequently peasant families will lead to further pressures for land redistribution in the years ahead. The Honduran population is expected to reach 7 million by the year 2000 as a result of a 60 percent decline in mortality rates and a one-third decline in the total fertility rate. Rural fertility is very high (about 8.7 children ^{1/}), and poor western and southern rural areas with high fertility rates are a significant source of internal migration, both to more dynamic agricultural areas and to small towns in neighboring departments. Afterwards, they move to main population centers. Population pressures originating in rural areas will continue to dominate Honduras' population dynamics. This means mounting pressures on natural resources, particularly farmland, and thus on the carrying capacity of different qualities of land. This will also mean additional pressures for more land redistribution.

Agrarian Reform Achievements

ii. Land reform legislation was first introduced in Honduras in 1962. The Agrarian Reform Institute (INA) was put in charge of the agrarian reform. The first significant legislation, however, was not enacted until December 1972 in response to rural unrest. As a result, the Government was overthrown and an aggressive land reform program was launched. The 1972 legislation was expanded and strengthened in January 1975 when a comprehensive Agrarian Reform Law was issued aiming at improved land utilization through the transfer of unused or poorly used land from large landowners to landless rural families. During 1973-76, significant land distribution took place, but it slowed down thereafter.

iii. About 210,000 hectares had been transferred by 1980; about 80 percent was cultivable (8 percent of the total farmland). This is a remarkable achievement. Public land represents about 59 percent of the land redistributed, banana companies' land ceded to the Government about 28 percent, private land purchased or expropriated 15 percent, and other sources the remainder. Although land had been distributed to over 48,000 families, only about 36,000 remained on the land at the end of 1980. Some families abandoned the settlements because they did not receive enough productive land and support services; others because they could not adapt to hard living conditions.

iv. The significance of the agrarian reform for agricultural production and its future potential is indicated by its present estimated 10 percent share of value-added in agricultural production and its employment of about 8 percent of the rural labor force. For some crops, such as African palm, bananas and rice, the share of production is already significant and expected to grow as the Lower Aguan settlements make further advances. Production of basic grains--corn, rice and beans--in the reform settlements

^{1/} Number of children an average woman would have if her childbearing behavior corresponded to that of the general female population.

is also significant although subject to wide variations because of weather conditions and flooding. Performance of different groups of campesinos varies. Those under the Federation of Agrarian Reform Cooperatives (FECORAH), sponsored by INA, show the highest share of permanent and semi-permanent crops--bananas, sugarcane, and African palm--while those under separate campesino organizations ^{2/} concentrate heavily in basic grains, mostly for self-sufficiency.

v. There is now a growing awareness that all reform groups must participate in the higher earnings afforded by cash crops, if they are to be viable in the longer run. INA's current production policy is to encourage contracts for cash crops with reputable firms which may provide technical support, inputs, and markets. Marketing organizations, however, are still weak. In addition, although cattle husbandry is now considered suitable for agrarian reform campesinos, implementation of these programs is slow because of credit shortages and lack of mortgage guarantees.

Agrarian Reform Challenges

vi. Although initial uncertainties have been significantly reduced, there is still considerable mistrust about the Agrarian Reform Law, particularly with respect to the application of Article 38, which exempts from expropriation land under cultivation in 1975 with bananas, plantains, sugarcane, African palm, coffee, pineapple, citrus fruits, and tobacco. New plantings of these or new export crops, however, are not covered by this guarantee. This raises considerable fears of land invasions among non-reform farmers.

vii. Although the Government has provided INA with substantial resources to carry out its mandate, its performance has significant weaknesses. First, although current operating expenditures (largely for personnel) mostly have met their budget targets, actual investment expenditures have been much below budgeted levels. Second, INA's staffing has been rather generous--nearly 2,000 employees, or 17.5 settlers per employee--but serious deficiencies have been identified in the services provided by this staff, particularly, by the promoters. Third, about one-fourth of the beneficiaries have abandoned the settlements; a survey in the Lower Aguan project indicated that this situation could have been avoided through more careful selection and more thoughtful social and economic planning of resettlement conditions. Fourth, land titling has proceeded at a slow pace. Fifth, field assistance, technical assistance and training have suffered from excessive internal reorganizations and from weaker than anticipated support from international experts. Promoters, in particular, have high turnover rates, are not sufficiently trained or qualified, and do not have a clear perception of their task. Training courses appear to be mostly orientation or motivation talks, and campesino indifference to the courses is growing. Groups close to main roads are saturated with courses while, other, more remote, groups received no courses; no evaluation or follow-up is made of the courses.

^{2/} National Association of Honduran Campesinos (ANACH) and National Union of Campesinos (UNC).

viii. By 1980, titles were still pending for about 85 percent of the groups and 70 percent of the land. INA's cadastral office has very limited personnel; it has not worked systematically with the national cadaster nor utilized its aerial photographs for the delineation of property plots. The cumbersome and time-consuming process followed to determine legal ownership and the fact that the banks still do not accept agrarian bonds for payment of outstanding debts of the former owners, as provided by law, have prevented INA from taking legal title to most of the expropriated properties. A quick resolution of these problems will be necessary if the fruits of the agrarian reform are to be harvested.

ix. Abandonment of the settlements is frequently singled out together with "uncultivated" reform land to show that the agrarian reform has been a failure. Both phenomena are related. Abandonment has been heaviest in the south and southeast but because the average cultivable land allocated per family was only two hectares in either a droughty or a hilly area. Abandonment among the Lower Aguan cooperatives is explained by inadequate training and motivation for self-management of the beneficiaries, lack of support services and social infrastructure, failure to adapt to harder living conditions as well as by faulty methods for selection, preparation and settlement of the new agrarian reform recruits. Resolution of these problems will take more time; what is needed, of course, is a better process and stronger institutions.

The Unattended Groups of Campesinos

x. Limited financial capacity and lack of trained human resources have prevented the Government from providing the needed service levels to all agrarian reform settlements. These constraints, together with major policy changes, led to a change in the emphasis of the program in 1978. The Government is concentrating its efforts in the potentially most productive areas (intensive rural development projects with 38 percent of the families) and consolidating other settlements with high production potential (9 percent of the families), which receive only credit and technical assistance. The remainder (about 53 percent of the families) receive only marginal support.

xi. While the Government is concentrating its agrarian reform efforts on a few farmers, an increasingly large group of farmers and peasants receive little official attention; these groups could well use it. A large proportion of the small farmers, an undetermined number of landless peasants, and most of the agrarian reform beneficiaries outside intensive development projects remain in poverty. Two-thirds of Honduran farmers are small farmers with less than 5 hectares; they cultivate about one-tenth of the country's farmland but own only 40 to 65 percent of the land they cultivate. Small farms concentrate on annual crops, basically corn. The most important permanent crop for the small farmer is coffee, which represents on the average 10 percent of the cultivated land in farms below 2 hectares. Small farms significantly underutilize their available manpower; structural and seasonal unemployment are common. Small farmers usually supplement their meager incomes by selling their surplus labor to larger farms.

xii. In addition, there is an undetermined number of peasants without any land. Although 1974 estimates ranged up to 120,000 families and increasing by about 4,000 families per year, this overestimated the magnitude of the problem because it included rural workers engaged in non-agricultural occupations, and workers in banana, sugar, and other cash crop plantations with better incomes than agrarian reform beneficiaries. Furthermore, the agrarian reform experience indicates that not all landless peasants, if provided with land, would remain in the settlements. Therefore, the actual number of landless peasants to be settled will depend not only on the non-reform related employment opportunities, and situation of the poor but also on the Government's desire and capacity to settle and provide support services to agrarian reform families. Land is not a constraint; it appears that there is enough prime arable land with adequate resource base now being made accessible by new roads which could be used for settling over 100,000 farming families in new reform projects.

Suggestions for Improving Rural Conditions

xiii. Honduras' potential for solving many of its present rural problems is significant, but a large gap exists between this potential and the degree to which it has been tapped. Although only one-fourth of the country is arable, about one million hectares suitable for crops are being used as grazing land or lie idle ^{3/}. This land is located mostly in the Aguan and Olancho-Guayape valleys, and the Northern coastal plains, and is either in the public domain or privately owned in large parcels that could be acquired under present agrarian reform legislation. New sources of agricultural, export-oriented growth, which will take advantage of the large public investments now underway, could be developed. Dynamic private sector participation would also be essential to the development of commercial cash crops. Agrarian reform campesinos could also participate by strengthening INA's current policy, which encourages contracts for cash crops with reputable private firms that provide technical assistance and inputs.

xiv. Nevertheless, an attack on rural poverty will have to address the problems of all poor campesinos, including the small farmer, although the level of support undoubtedly will vary with the nature of the group. To improve living conditions of small, poor independent farmers, it is necessary to improve production and marketing systems. Since these farmers may have a low priority for benefits under the agrarian reform program, the solution will have to be found through broad specific programs to support the smallholder. The ultimate aim of both the campesino organizations and the Government ought to be to eliminate the largely artificial differences between agrarian reform and traditional small farmers and focus their entire effort on how to service them best.

^{3/} IBRD, A Review of Selected Sub-Sectors of the Agricultural Economy, 1981.

xv. A broad program to improve the situation of the small farmer should aim at providing an integrated service package comprising at least some of the following: short- and medium-term credit, technical assistance, modern inputs, machinery service, and better marketing facilities. In addition, more infrastructure on farm access roads and storage and drying facilities are needed. The constraints to this approach are both administrative and financial. Government agricultural agencies expanded considerably in the last few years, reflecting Honduras' commitment to improve rural conditions, but are inadequately staffed to provide all these services. In addition, the country may not have enough specialized, qualified technicians to expand them, even if the serious Central Government financial constraints that presently preclude their expansion were removed. Clearly, efforts are needed to improve organization and administration in the agricultural public sector to make it work more effectively. Under these circumstances, support to the small farmer will have to be implemented on a more limited scale, preferably by concentrating resources in the development of specific project areas, as is being done with the PRODERO and Guayape projects. A marketing component is considered essential in most new projects. A nationwide approach will not work in the short run because serious technical, administrative, and financial difficulties would hamper a more intense Government effort. Progress towards nationwide coverage would depend on the experience with regional projects now underway, the availability of qualified technicians, and improvements in the constrained fiscal situation of the Government. ^{4/}

xvi. Agrarian reform beneficiaries can be separated in three groups according to the level of support they receive from INA, intensive development settlements, consolidation settlements, and the rest. Those beneficiaries in intensive development projects already receive most of INA's resources, but there is substantial room for qualitative improvements in their use. Crucial needs of intensive development projects are better training in organization and management, accounting and controls, planning and use of services and resources. Campe-sinos in consolidation and other agrarian reform settlements have problems which are similar to those of the small farmer. Measures to improve their situation accordingly should aim at providing an integrated service package, farm access roads, and storage and drying facilities. The Government is supporting now consolidation settlements with second-tier regional cooperatives to provide improved access to technical assistance and credit and to improve management. Administrative, personnel, and financial constraints, however, will continue limiting the support to the agrarian reform beneficiaries.

xvii. In this connection, an important issue concerning agrarian reform settlements is the appropriate land quality and man/land ratio in each settlement and region. Inappropriate land parcels, by size or quality, will not be viable. Spontaneous adjustments have already taken place, but this needs to be accelerated and rationalized by INA with the support of campe-sino associations and expert technical advice to validate the income-producing potential of a given land. On this basis, a decision can be reached for each group as to whether (i) the settlement should be abandoned for a new land allotment elsewhere; (ii) the number of members

^{4/} See IBRD 3312-H0, Current Economic Memorandum on Honduras, July 1981.

should be reduced; or (iii) additional members are required. In this process, it will be very useful to take account of the experience of the migration program for the Lower Aguan in order to avoid repeating the same mistakes.

xviii. Much of the future success of the reform effort will depend on the stability and technical capacity of the personnel responsible for its implementation, particularly at the field agent level. In the past, INA's field assistance and training has been deficient. Many promoters have not been effective in strengthening management and accounting practices of the reform groups because they lack training and have no clear idea of their tasks. INA's training is not only poor; there is no follow up system. A careful selection of well-trained personnel; an intensive, much better focused, and effective training program; and a minimum assignment period to one area of field personnel should improve field level performance. Furthermore, planning and implementation of projects, as well as selection of campesinos for a particular settlement should avoid a repetition of past practices on beneficiary selection. Many deserted in the past because of inadequate training and motivation for self-management, lack of support services and social infrastructure, failure to adapt to the new environment, as well as because of faulty methods for recruitment, selection, preparation and settlement.

xix. Some commercial farmers are reluctant to plant new crops, particularly on land under cultivation with "protected crops", since it could make them eligible for expropriation. To remove this uncertainty, it will be necessary to expand the protection against invasions and occupations to all efficiently cultivated land regardless of the particular crop. Land redistribution could be undertaken within the expropriation criteria established in the law, which establish maximum limits to private farms depending on soil quality, region of the country, intensity of cultivation, etc. ^{5/}

xx. One of the most important needs of the agrarian reform settlements is better marketing. There are good markets in the medium run for a large number of export products, through mixed public/private initiative (African palm, melon, cotton, vegetables, citrus fruit); however, substantial efforts are needed to produce unblemished fruits. For other products, some with a considerable market potential (sesame, cashews), more marketing efforts will be required. In the case of basic grains, however, the domestic market is not functioning well; support prices set by the Government marketing agency (IHMA) are significantly below wholesale prices, and this agency is not an important market force even though it owns a fairly widespread network of country storage facilities. In this respect, more analysis is needed about Honduras' potential for increasing basic grains production at internationally competitive prices. The information available indicates that import prices are significantly below Honduran wholesale prices for maize and rice, and that bean wholesale prices are at a level almost equal to the import price. It may well be that the grain marketing operations in Honduras are far more inefficient than the producers of these grains.

^{5/} Agrarian Reform Law, Chapter II, Articles 23 to 36, 1975.

HONDURAS: AN INQUIRY INTO RURAL POPULATION,
SMALL FARMER AND AGRARIAN REFORM

I. INTRODUCTION

1. Honduras is a poor country; per capita income was about US\$560 in 1980, ^{1/} the second lowest in the Western Hemisphere. It is also a land of small farmers. About 55 percent of the labor force is rural, 30 percent of GDP originates in agriculture, and four-fifths of total exports are raw and processed agricultural products. The rural population is predominantly poor with about 55 percent below absolute poverty levels. Three-quarters of the rural population are without safewater, and about ninety percent without electricity or any form of sanitary waste disposal.

2. Given the large rural population, the predominance of agriculture, and the level of rural poverty, this study focuses on rural population pressures, rural development, and agrarian reform, seeking a development strategy to improve the lot of the Honduran peasant. In particular, the study concentrates on the small farmers (less than 5 hectares) and the agrarian reform program.

II. POPULATION PRESSURES

A. Rural Population

3. The 1981 country's population is about 3.8 million and is growing rapidly at 3.4 percent a year. While both fertility and death rates are declining, the population growth rate has not yet begun to decline. Honduras' fertility rates are high by Latin American standards. Even though rural population growth at 2.3 percent a year is much below the national average--because of migration to urban centers and higher rural death rates--the main population growth factors are rural. Crude birth and fertility rates are very high in rural areas (see table below). Little variation in fertility and birth rates between regions and socio-economic status is noticeable, except in the vicinity of San Pedro Sula and Tegucigalpa. Mortality rates, on the other hand, are very responsive to socio-economic status.

^{1/} World Bank Atlas methodology.

Table 1: FERTILITY, BIRTH AND DEATH RATES

	Total	Urban	Rural	Regions			
				Urban Centers	Northeast	West	South
Crude Birth Rate (per '000 population)	49.2	38.3	54.2	n.a.	n.a.	n.a.	n.a.
Total Fertility Rate <u>a/</u>	7.5	5.3	8.7	4.7	8.4	8.4	8.2
Death Rates (per '000 population)	14.2	9.0	16.6	8.2	15.2	19.7	12.4

a/ Number of children an average woman would have if her childbearing behavior corresponded to that of the general female population.

Source: Direccion General de Estadistica y Censos, Encuesta Nacional Demografica de Honduras, CELADE, Serie A, No. 129 (1975).

4. These trends mean that population pressures originating in rural areas will continue to dominate the country's population dynamics. Government efforts to alter rural demographic patterns through family planning and health services, if stepped up, might attenuate this pressure. Otherwise, high fertility rates and a high dependency burden will continue to lower gains in per capita income and savings, and force the Government to allocate an increasingly higher proportion of its resources for basic services to its population. Therefore, reducing rural fertility rates should be an important target of public policy since it can ultimately make an enormous difference in improving living conditions and incomes of the Hondurans.

B. Migration and Spatial Distribution of Population

a. Internal Migration and Agricultural Regions

5. Honduras is divided roughly into three areas: a flat, coastal plain extending from Guatemala to the Mosquitia; a rugged, mountainous mid-section with small valleys and higher than 20 percent gradients flanked by lower terrain to the East and West, in the Patuca-Guayape, Comayagua-Ulua, and Chamelecon watersheds; and the southern, Pacific coastal plain. Most of the crop land is in the Atlantic and Pacific plains. Areas with slopes below 20 percent include the Sula and Aguan valleys, the Nacaome-Choluteca valleys, the Guayape, Patuca and Sico valleys, and the Comayagua valley.

6. Based on natural and ecological characteristics, the country has been further divided into eight agricultural regions, ^{2/} which are: West, South Central, and South, bordering El Salvador, and partly Guatemala and Nicaragua; Northwest, North, and East in the northern coastal plains; and North Central and South East in the mid-section of the country bordering Nicaragua to the East. Population density is low in the East and South Central regions medium, in the North, North-Central and West regions, and high on the South, Central and Northwest regions. However, population density per arable land is a more significant indicator given the limited arable land in some regions. Using valley land, ^{3/} population density changes dramatically with the West, Central, and North Central regions being the most densely populated (see Table 1.8, Statistical Appendix).

7. Superimposed upon these agricultural zones, there are seventeen administrative departments. ^{4/} Between 1940 and 1974, only five departments in the northern littoral and central section of the country (Atlantida, Cortes, Colon, Francisco Morazan, and Yoro) show a much higher population growth rate than the national average, partly associated with the major population centers; two (Comayagua and Santa Barbara) in the Central and Western areas show rates close to the national average; and the rest in the South and West are below. ^{5/} The population behavior in the North-eastern area is an exception because until the late 1950's it was in dispute with Nicaragua; after Honduras sovereignty was clearly established, this area showed a remarkable population growth rate. Similarly, population trends in the Department of Colon were reversed in 1961-74 from the original downward trend owing to the agrarian reform projects in the lower Aguan Valley. In brief, population shifts between regions and departments reflect mostly the availability of arable land and the attraction of the cities of Tegucigalpa and San Pedro Sula.

8. An analysis of the residency statistics between 1969 and 1974 ^{6/} confirms that few departments (Atlantida, Cortes, Colon, and Francisco Morazan) experienced net in-migration and are the same previously identified as rapid growth departments. Thus, both on the basis of natural increases and shifts of residency, internal migration shows very similar patterns.

9. An outstanding conclusion of the analysis is the low growth of the departments in the Western and Southern highlands, in border areas with El

^{2/} Caceres, Manuel A., Regionalizacion Agricola de Honduras, Instituto Interamericano de Ciencias Agricolas.

^{3/} Soils with less than 20 percent gradient.

^{4/} The country's eighteenth department is the Bay Isles.

^{5/} Based on the 1961 and 1974 Census.

^{6/} Based on a 10 percent sample of the 1974 census.

Salvador, and partly also with Guatemala and Nicaragua. ^{7/} The topography and soil conditions are unfavorable, and population pressures (in spite of its lower population growth rate) result in the prevalence of minifundia (30 to 50 percent of the farms have less than 2 hectares; 60 to 70 percent below 5 hectares). Agricultural technology is traditional and rudimentary. The farmers in these areas are mostly corn producers with yields below the national average; soils are not adequate for intensive use in annual crops. However, population density has reached a level that is forcing an intensification of production through terracing and other agricultural techniques. Some coffee, fruits, and vegetables are also produced in the region. Furthermore, transportation is limited by the rough terrain and government services also are inadequate. In brief, these departments are poor and a significant source of out-migration.

10. Rural population movements explain to a large degree the population migration between departments. They could be direct or in steps (people moving from rural to small urban centers in the same or neighboring departments or to more promising agricultural areas before moving to the main areas of migrant's attraction). This is evidenced by the extremely low growth rates of rural population in some of the population-losing departments, which also show significant urban population growth. On the other hand, most of the population-pulling departments show high urban and rural population growth rates with the exception of Francisco Morazan, where Tegucigalpa is located (see Table 1.7, Statistical Appendix).

11. The importance of in-migration from neighboring countries in the demographic trends of Honduras is shown by the migration matrix by departments. About one-third of the 1974 migrant population identified in the in-migration departments was born outside Honduras.

b. Characteristics of the Migrants

12. The migrants are young and mostly of working-age (two-thirds are below 24 years of age) seeking better employment opportunities either in rural areas with more favorable conditions or in the most prosperous towns (about two-thirds). They have a higher participation rate in the labor force and a higher proportion of salaried workers. Four-fifths of the migrants moving to other rural areas (mostly in the Northern coast) are in agricultural jobs while migrants moving to the towns become domestics, artisans, small merchants and laborers. Female migrants are in high proportion domestics and residing in the most urbanized zones. The masculinity index of the migrants is lower in highly urbanized areas (San Pedro and Tegucigalpa) than that of the native population while the reverse is true in coastal departments (Colon, Atlantida) with dynamic agricultural activities.

13. The rural working migrants have a higher educational level than the rural working population; urban migrants are about the same (see table below). Female migrants have also a higher education level than male migrants.

^{7/} La Paz, Intibuca, Lempira, Ocotepeque, Copan, and Valle.

Table 2: EDUCATION OF THE WORKING MIGRANT POPULATION
(in percentages)

Years of Education	Working Migrants			Total Work Force		
	Total	Urban	Rural	Total	Urban	Rural
0-3	58.0	40.7	77.5	69.5	42.8	82.8
4-6	27.1	35.4	17.8	21.9	35.1	15.3
Over 7	13.4	22.1	3.5	8.1	21.4	1.6
Unknown	1.5	1.8	1.2	0.5	0.7	0.3

Source: CONSUPLANE, Plan Nacional de Desarrollo, 1979-83, Desarrollo y Aprovechamiento de los Recursos Humanos.

c. Rural-Urban Migration

14. During 1961-81, the urban population of Honduras grew at a rate of about 5.6 percent, more than double the rural population growth rate, in spite of much lower fertility rates in urban areas. As a result, the urban population increased from less than one-fourth in 1961 to about 37 percent of the country's population in 1981. Honduras, however, continues to be one of the least urbanized countries in Latin America.

15. Honduras is expected to continue its rapid urbanization trend of the last few years as large numbers of people will be moving from rural areas to towns in the coming decades. Between 1975 and 1985, its thirteen main population centers are expected to increase their share of total population from 24 percent to 31 percent, with most of the increase concentrated in Tegucigalpa and San Pedro Sula.

16. Reflecting the rural characteristics of Honduras, the country had only 13 cities with more than 10,000 people and only two above 100,000 (Tegucigalpa and San Pedro) in the 1974 Census. Population growth and thus the attraction for migrants have been unequal in these urban centers. Rapid growth took place in six cities along the North-South highway that links Tegucigalpa, San Pedro and the nearby coastal areas. However, growth in towns, such as Tela, La Ceiba, and Santa Barbara--centers near the bulk of banana and coffee production areas--has not been as dynamic in spite of a tripling of banana production between 1960 and 1980. Furthermore, urban life and employment does not explain the attraction of the frontier Departments of Colon and Gracias a Dios; low population, significant natural resources, and Government programs for the Aguan Valley are attracting people to settle in these Departments.

d. Growth Poles

17. Honduran population and regional development prospects indicate that, apart from the present population poles in the North-South corridor (centered on Tegucigalpa and San Pedro Sula) and the Atlantic littoral (around Tela and La Ceiba), new poles are likely to develop in the Aguan Valley, the Olancho-Corocito-Puerto Castilla area, and the Southern Olancho region, as a result of large public investments underway in highways and productive facilities to support the agrarian reform program, the rational exploitation of forest resources, and the incorporation of new productive zones. This is a healthy development that would permit a more even distribution of urban population and delay some of the most serious repercussions of rapid urban growth concentrated in Tegucigalpa and San Pedro Sula.

C. Rural Working Force

18. The 1981 rural working force (690 thousand) is basically male; official 1974 Census data seem to show that women participation in the working force and activity rates ^{8/} are low at all working ages. The bulk of female economic activities are related to family garden plots and animal care; these chores need frequent but short periods of daily attention. ^{9/} On the other hand, child labor (ages 10-14) makes an important contribution since it represents about one-tenth of the rural working force.

19. As expected, the rural labor market is dominated by agricultural occupations. In the 1974 Census, about four-fifths of the employed rural labor force was in agriculture; 7 percent in rural industries and artisanry, and 2 percent in commerce. Only one-fourth of the rural labor force were paid farm laborers while over two-thirds were self-employed or family workers without remuneration (see Table 1.6, Statistical Appendix).

20. Underemployment rather than open unemployment characterizes the Honduran countryside. Open unemployment is low but underutilization of rural labor is common. The underemployed and inadequately employed represent a large proportion of the rural labor force. Family workers without monetary remuneration are about one-fifth of the rural labor force, and self-employed labor in farms below 20 hectares is significantly in excess of the needed man-days per cultivated hectare. CONSUPLANE estimates the subemployed

^{8/} Ratio of economically active population to total population in the same age group.

^{9/} In addition, rural women spend a substantial amount of time preparing food, gathering firewood, carrying water for household needs, and in laundry activities. Three hours may be spent grinding corn for tortillas; two to four for laundry activities depending on the distance to the stream. Lunch will be delivered to her mate at the milpa (small land plot planted with corn) often distant. For details see USAID, Agriculture Sector Assessment for Honduras, Annex M, The Role of Women in the Agricultural Sector in Honduras.

equivalent of excess labor (including non-remunerated laborers) at about 32 percent of the economically active population. Although this figure may be on the high side because of the definitions involved, there is no question that a substantial labor surplus exists in rural areas. This surplus labor is explained by poverty, low agricultural production and its seasonality, the land tenure structure, and the technology mix.

D. Rural Population and Labor Force Projections

21. The Planning Office and the Latin American Demographic Center (CELADE) have prepared population projections under four different assumptions about fertility rates. The first projection assumes a constant fertility rate of 7.38 children for an average woman in her childbearing years (the 1970-75 level) until the year 2000; the other three projections assume fertility declines of 17 percent, 32 percent, and 44 percent. The preferred population for the year 2000 is 7 million based on a one-third decline in fertility rates and implies a reduction in the crude birth rate from 48.6 per thousand to 38.0 per thousand in 1995-2000. Crude death rates are also halved from 13.8 to 6.3 per thousand population; this means a steady improvement in life-expectancy from 57 years in 1975-80 to 68 years in 1995-2000.

22. These population trends will result in a rapid increase of urban population, with about one million concentrated in Tegucigalpa and over three-quarters of a million in San Pedro Sula by the year 2000. This urbanization trend reflects, on one hand, lower mortality rates and, on the other hand, the high rural fertility rates combined with the resulting increase in population density (over 230 people per square kilometer of arable land by the year 2000) and related impact on internal migration. Large numbers of people would migrate from the poor Southern and Western highlands to the main growth poles in the Tegucigalpa-San Pedro Sula axis, the Atlantic littoral, the Aguan Valley, and the Olancho area. The speed and direction of this internal migration will likely depend on the creation of jobs and other opportunities in the towns and in promising new agricultural areas, the advances of the land reform program, and the access of the rural population to social services, including family planning.

23. A longer-term view of this development process reveals some related issues. Rapid rural population growth means mounting pressures on natural resources, such as forests and arable land; increasing numbers of landless peasants and pressures for more land redistribution; and a rapidly growing labor force because lower fertility rates will have little impact in decreasing the labor supply in the late 1980s and early 1990s. It is evident that agriculture must grow rapidly to absorb productively the new entrants to the rural labor force, and to slow down a likely acceleration of rural-urban migration.

24. Even if progress is made in the rural areas, rationalizing urban development has a high priority. Honduras is already experiencing the shortcomings of the present unregulated physical development of its towns and low service levels. Rapid population growth means increasing pressures for these services, while the financial capacity of the municipalities and water agencies is weak, limiting their ability to meet these needs.

25. Expected population growth makes evident the need for a longer-term development strategy for Honduras geared towards accelerating economic growth as well as improving social conditions. While the medium-term prospects are fairly well established (barring unpredictable natural disasters), beyond 1985 the prospects are less certain. New sources of growth, which will take advantage of the larger public investments now underway and scheduled for completion towards 1985, need to be developed. These new sources of growth most likely would be agricultural, export-oriented activities. Dynamic private sector participation would be essential to the success of these activities.

E. The Costs of Rural Population Growth

26. The costs of high rural fertility rates are many. A rapidly growing population increases the pressure on fixed land resources, particularly farmland per capita. Food requirements of a growing population exert a direct pressure on farmland and the carrying capacity of different qualities of land. As noted earlier, some areas have a low carrying capacity and have already a heavy population load. A doubling of the Honduran population between the years 1980 and 2000 would mean, at least, a doubling of food needs ^{10/} and would put a heavy pressure to increase land use intensity on existing farmland as well as lead to the expansion of farming on marginal or previously unutilized land, which may significantly affect the large forest resources of the country. Otherwise, the country will have to increasingly rely on food imports to feed its population. This has happened in the last few years when production of corn and beans, the staple food of the poor, stagnated. Corn production grew 0.6 percent a year, and bean production declined one percent a year during 1970-79.

27. Ongoing studies based on physical and ecological factors and, to a lesser extent, on agronomic data, indicate that about 43 percent of the crop land is now being used for annual and perennial crops. This suggests that a great deal remains to be done to achieve a pattern of land use broadly in accord with its long-term capability for crops, pasture, and forests, which will result in satisfactory rates of growth of agricultural output. ^{11/}

28. The Government is aware of this potential problem, particularly in view of the large imports of corn in 1980, and has launched a plan of action to increase production of basic grains. However, political changes in 1980 have weakened the implementation capacity of the Ministry of Agriculture and other agricultural public agencies.

29. High rural fertility will have an adverse impact on the savings capacity of the economy and thus on future per capita income. First, high fertility means larger families and higher consumption per family, depressing

^{10/} Without taking into account the need to provide an adequate nutritional diet.

^{11/} IBRD, A Review of Selected Sub-Sectors of the Agricultural Economy, 1981.

savings and ultimately investment, preventing rural families, in particular, from increasing their productivity and incomes. Second, public savings will be also adversely affected because the Government would need to allocate an even greater proportion of its limited resources to public education and health, and perhaps, even housing and feeding programs for the poor migrants to the cities. On the other hand, slowing down rural population growth would mean that a lower proportion of public expenditures would be needed to supply each person with an average quotient of basic services, and that increased coverage of these services for a larger proportion of the rural population would be easier to provide for.

30. Although important advances have been made in education during the last ten years, UNESCO estimates that the present allocation of one-fourth of the current budget to education may need to increase to 33 and 38 percent in 1985 and 1990, respectively, in order to accommodate the fast growing population. Recent primary education coverage is less adequate in rural areas. Similarly, health services in rural areas have expanded rapidly but still need vast improvements, which would impose serious strains in the budget.

F. Summary Conclusions

31. The poor Western and Southern highlands, bordering with El Salvador and partly with Guatemala and Nicaragua, are a significant source of internal migration. Migrants move from these areas, first, to more promising agricultural areas or to small urban centers in neighboring departments before proceeding to the main population centers. The migrants are usually of working age. Male migrants tend to go to areas with dynamic agricultural activities while female migrants usually become domestics in the most urbanized areas.

32. As a result of rural-urban migration, the urban population growth rate is about double the rural rate and the country's urban population increased from one-fourth in 1961 to close to 40 percent in 1981. This is still a low proportion by Latin American standards. However, the rapid urbanization trend is expected to continue in the coming decades.

33. Honduras' traditional growth poles are centered in the North-South corridor (including Tegucigalpa and San Pedro Sula) and the Atlantic Littoral. However, the Olancho-Bonito Oriental-Puerto Castilla area and the Southern Olancho region are expected to become important, new growth poles as a result of large infrastructure and productive investments. This will permit a more even distribution of urban population and will delay in some degree serious urbanization problems in Tegucigalpa and San Pedro Sula, which are expected to have a million people early in the XXI century.

34. A longer term view of population growth reveals that Honduras will face mounting pressures on natural resources (forest, arable land); pressures for more land redistribution; and a rapidly growing labor force. This makes evident the need for a long-term development strategy.

35. Population pressures originating in rural areas will continue to be dominant in explaining the population dynamics. This suggests the need to step up efforts to reduce fertility rates. Rural fertility declines would permit the country to increase more rapidly per capita income and satisfy demands for minimal basic coverage in education, health, and other social services because the costs of providing these services are dramatically reduced by lower fertility rates.

III. THE SMALL FARMER

36. Rural poverty is evident from a variety of indicators. Most rural housing is sub-standard. Plate cane and dried mud (bahareque) and mud (adobe) walls and roofs of palm leaves or straw are widespread. Four-fifths of rural homes have dirt floors. Few have potable water service (21 percent) and waste disposal (10 percent). Water is carried to the household from wells or streams; clothes are washed at streams. Gastrointestinal and other waterborne diseases are common. Infant mortality is high and malnutrition is serious, particularly among landless peasants. Illiteracy is high. One of the major obstacles to effective training of the agrarian reform settlers was the high degree of illiteracy found among them, averaging 60 percent but rising to 80 percent in some areas.

37. Rural poor households spend large amounts of time performing simple household tasks and toiling the soil to provide for basic needs, such as water and fuelwood. Men work in the fields; women provide mostly for household needs, and take care of some animals and the family fruit and vegetable garden. Bad weather can have disastrous consequences for farm production, which, in subsistence farms, is dominated by corn. In these farms, it is essential to cover minimum household needs. Hard work and difficult living conditions are not uncommon.

38. The rural poor consist mostly of landless peasants, small farmers (below 5 hectares), and agrarian reform beneficiaries with inadequate land and support. This report concentrates on the small farmers and the agrarian reform program because the solution to the problems of an undetermined number of landless peasants depends on the progress of the agrarian reform. The next sections deal with the small farmers, how they work and earn their living, what crops they grow, and what support they receive. For this purpose, an inquiry will be made of small farms (less than 5 hectares) comparing them with farms in the 5-20 hectare groups. ^{12/}

A. Land Intensity, Crop Mix, and Incomes

39. Small farmers with holdings below 5 hectares represent 64 percent of the total number of farms in Honduras but only about 9 percent of the

^{12/} ATAC Expanded Survey and John C. Kelley, Socio-economic Profile of Small Farms provided background materials for the preparation of this section.

farmland. Small farmers own a low proportion of the land they cultivate with the proportion increasing with farm size (see table below). The poorest areas (Western and Southern highlands) show the lowest proportion of land exploited under tenancy farms other than ownership, sharecropping, or renting; the Western region has the highest proportion of rented land (over one-third) and the lowest of owned land (55 percent). The proportion is highest in the Eastern, North, and South Central areas, which have more uncultivated land and thus are more suitable for slash and burn agriculture.

Table 3: LAND TENURE BY FARM SIZE
(percentages)

Farm Size	Private Property	Rented (share-cropping)	Rented (cash)	Other
Less than 1 hectare	25	14	33	28
1-2 hectares	40	8	30	22
2-3 hectares	50	5	15	30
3-5 hectares	65	3	10	22
5-20 hectares	85	1	5	9
20-35 hectares	98	-	-	2

Source: Ministry of Natural Resources, CONSUPLANE, and USAID, Compilacion de los Estudios Basicos del Diagnostico del Sector Agricola, 1978.

40. Small farms use more intensively their land than larger farms and tend to concentrate in the production of annual crops, mostly basic grains. However, there are significant variations by regions; small farms in the North and Littoral regions, for example, are more involved in the production of export crops while those in the Western and Southern highlands have a higher share of basic grains. Small farms' intensity of cultivation is about two to three times the national average and about 1.4 to 1.7 times above the national average share of annual crops. The proportion of fallow land in small farms is negligible and farms below one hectare have virtually no fallow land. However, averages are perhaps deceiving because detailed community studies indicate that poor farmers in the Western areas follow traditional practices of slashing and burning, followed by cultivation for

2-3 years and then they leave the plot uncultivated for some time (barbecho)--to restore soil nutrients before using it again. Land in the area is transferred by inheritance or sale. ^{13/}

41. Crop seasonality is unavoidable and explains significant monthly variations in agricultural labor requirements. Labor availability, farm size, and the use of a labor-intensive technology mix are closely related. Small farms use labor-intensive technologies; available labor, however, exceeds their needs. Larger farms use more mechanized techniques and hire labor from nearby areas. In 1974, farms below 20 hectares (90 percent of the total number of farms under individual owners) had 55 percent of the rural agricultural labor force but only one-fourth of the arable land.

42. Subsistence agriculture is widespread among small farmers who market a low share of their production, particularly in the Western and Central areas; about two-thirds of their crops are for household consumption. Production in small farms is highly concentrated in basic grains. A sample of small farms ^{14/} shows that basic grains crops account for over two-thirds of agricultural production in the 0-2, 2-3, and 3-5 hectares groups. This share is slightly reduced for farms in the 5-10 and 10-20 hectares groups. Corn always is predominant among basic grains crops in small farms--about half of their agricultural production. Similar results are recorded in the 1974 Census with basic grains representing about three-quarters of agricultural production in the 2-3 hectare farms.

43. On a national level, the share of permanent crops in agricultural production although low (5-10 percent) for farms below 5 hectares, steadily increases as farm size increases. The most important of the permanent crops for the small farms is coffee, which shows a dramatic increase as farm size increases. Coffee's share of agricultural production ranges from 10 percent for farms with less than 2 hectares to 23 percent for low to medium-sized farms with 10-20 hectares. In the Northwest (Santa Barbara and Copan with 36 percent of Honduras' coffee production and about 11,000 growers), coffee farms range from 0.4 hectares to 140 hectares but the average farm has 14 hectares. About 50 percent of the coffee growers in the area have less than 5 hectares. Average yields are low at 8.3 quintals per manzana. ^{15/} Coffee is a higher income crop and it is to the advantage of the small farmer to step up its production; however, the level of subsistence farming associated with low incomes and savings prevent the farmers from undertaking the longer run investments required by a permanent crop, such as coffee. In the

^{13/} Waterbury, Ronald, Los Campesinos de Quebrada Honda, Compilacion de los Estudios Basicos del Diagnostico del Sector Agricola, Ministerio de Recursos Naturales, CONSUPLANE and USAID, June 1978.

^{14/} ATAC Survey.

^{15/} IHCAFE, Estadisticas Descriptivas de la Zona Cafetalera Nor-Occidental (Santa Barbara y Copan), October 1980.

Northwest, about 44 percent of the coffee producers use fertilizers and 7 percent pesticides but 70 percent planted new coffee trees in the last three years. Lack of credit contributes to this situation; about 55 percent of the coffee growers receive credit. Marketing is another problem area; about two-thirds of the coffee is sold to intermediaries at the farm or nearest town and about one-fourth by cooperatives.

44. Small farmers utilize a higher proportion of their land, so that land productivity--measured by the value of output per hectare--is highest among them. However, the situation is sharply different with respect to the acreage under cultivation.

45. About one quarter to one-third of the net income of farmers below 20 hectares, comes from imputed labor in the farm, one-fourth to two-thirds from net farm surplus ^{16/}--the larger the farm the higher its relative share of total income--and the rest from outside income, which is more important the smaller the farm. Table 4 shows the relative importance of these income sources for farms below 20 hectares.

Table 4: FARM INCOME BY SOURCES
(in US dollars and percentages)

Farm Size (in hectares)	Total Net Income	Family Labor		Farm Surplus		Outside Income	
		Amount	%	Amount	%	Amount	%
0-2	448	110	25	105	23	233	52
2-3	600	163	27	189	32	248	41
3-5	642	210	33	198	31	234	37
5-10	1,081	277	26	521	48	283	26
10-20	1,192	294	25	687	58	211	18

Source: USAID, INVEST, ATAC Expanded Survey of the Rural Poor in Honduras.

Net incomes of farmers with less than 5 hectares are 60 to 70 percent derived from crops; cattle and forestry products account for the remainder. As expected, net income increases with farm size; a sharp increase occurring once the farm is over 5 hectares (see table below).

46. The small farmer's situation varies between regions. Farmers with less than two hectares in the North and Atlantic littoral regions have a much higher share of outside income (55 percent and 72 percent, respectively) than in the West Central region where a much lower share of their gross incomes (18 percent) is generated outside the farm. There are also large differences

^{16/} Net farm surplus after deducting actual and imputed labor costs.

in net farm incomes by regions. This reflects the relative importance of cash crops by regions and by farm size. Farmers with less than 2 hectares have meager incomes from cultivating their land; the Atlantic littoral region is the only exception. Furthermore, only about two-fifths of production is marketed as an average for farms below 35 hectares. Furthermore, farmers with less than 2 hectares market less than one-sixth of their production on the average.

Table 5: RELATIVE LEVELS OF INCOME, 1976
(indices) 1/

Region	Less than 2 Hectares	2-3 Hectares	3-5 Hectares
Atlantic Littoral <u>2/</u>	100	100	100
North	45	68	79
West Central	32	67	71
Northeast	32	69	61
South	32	102	104
West	22	77	88
East Central	20	67	72

1/ Atlantic littoral income equals 100.

2/ Farmers in the Atlantic littoral region in the 2-3, 3-5 hectares group earn only about 49 percent and 55 percent of the income of the farmers with less than 2 hectares because of non-farm incomes.

Source: ATAC Survey (revised)/INVEST.

B. Labor Force in Small Farms

47. A large proportion of the Honduran population lives and works in rural areas, in small farms. These farms have significant surplus labor. The number of family members is about 6 to 7 for all farms below 35 hectares. Small farms support a much larger number of people and working men per hectare than medium and large farms.

48. About two-thirds of the rural labor supply living in farms with 20 hectares or less is from farms below 5 hectares; of this, about two-thirds are from farms below 2 hectares and one-fourth from farms with 2 to 3 hectares. On-farm work on farms below 5 hectares provides productive

employment for only one-fourth of their available manpower. ^{17/} The working of the labor market in rural areas is closely related to this. Surplus labor from small farms is hired by larger farms; the larger the farm, the higher the likelihood of it hiring laborers. In spite of this and the fact that production methods in small farms are labor intensive, underemployment-- measured by the number of unutilized man-days per year--^{18/} is prevalent in the small farms.

49. Underutilization of rural labor is large. About 60 percent of the available man-days in small and medium farms are not utilized. The rate of underutilization is about 63 percent in small farms (0-5 hectares) and diminishes to about 55 percent in farms in the 10-20 hectare group. Seasonality of agricultural production is partially behind the employment problem and its importance increases with farm size. For the small farm, basic grains are the main source of on-the-farm employment and because of its seasonality is the main reason for seasonal unemployment; however, underutilization of labor is more of a structural problem at the level of the small farms with too much labor and not enough land, thus the small farmer is forced to work as hired labor in larger farms.

50. Seasonality of employment and labor oversupply are still problems in the small medium-sized farms (5-20 hectares); these farmers also seek employment in larger farms. However, they have a much lower level of underutilization per farmer (see Table 6).

^{17/} However, this type of standard statistical estimate has to be qualified. Farm labor spends significant amounts of time building fences, providing lumber and firewood; trading animals, produce and grains, running errands, and travelling back and forth to the family plot. This is not properly accounted for in this statistical indicator.

^{18/} The standard used in this study is about 230 man-days per year (see Table 6). Surplus labor, however, may be less than estimated. Unless significant changes take place in the way small farmers live and work in order to ease or free them from some of the difficulties they encounter in performing even simple tasks, a large amount of time will continue to be used for household and production-related tasks.

Table 6: LABOR UTILIZATION PER FARM SIZE
(in man-days per farmer per year)

Farm Size (hectares)	Work in Farm	Work outside Farm	Total	% Outside Farm	% of Available Man-days <u>1/</u>
0-2	73	85	158	54	69
2-3	109	66	175	38	76
3-5	140	46	186	25	81
5-10	185	32	217	15	94
10-20	196	27	223	12	97
20-35	222	5	227	2	99

1/ Assuming that available man-days are about 230 per year. This is a lower number than the usual norm of 260 man-days per year which assumes a five-day week over the whole year considered typical for a more urbanized labor force. Estimates of excess labor will depend significantly on the standard applied, which must be reasonable for the special characteristics of agricultural production.

Source: ATAC Survey (Revised), INVEST.

C. Education

51. Farmers in farms with less than one hectare have an illiteracy rate of 55 percent while those in the 20-35 hectare group have only a 34 percent rate. Nevertheless, these rates are high and indicate the illiteracy problem in rural Honduras. Furthermore, only about 6 percent of the campesinos surveyed have 6 years of primary education with some improvement--to 9 years--for those in farms in the 20-35 hectare category. The low rural educational level has been identified as a serious obstacle to the performance of the agrarian reform sector.

D. The Small Farm Access to Credit, Technical Assistance, and Other Inputs

52. Over two-thirds of the small farmers have no access to institutional credit. The situation is even more serious for farmers with less than 2 hectares of land. In a survey, banks and credit unions provided about two-fifths of the credit received by small farmers; the rest came from relatives and friends, merchants, and moneylenders. The Government Agricultural Development Bank was the principal source of institutional credit for small farmers. Furthermore, according to a 1978 AID/MNR/CSPE report, only 6.6 percent of the farms with less than one hectare received technical assistance as opposed to 22 percent for the 20-35 hectare group. Small farms use little fertilizer and improved seeds compared to medium and large farms; fungicides,

herbicides, and insecticides are sparingly used. In the Western and North-Eastern areas, access to agricultural inputs is even lower because of poor communications. ^{19/} Private distributors tend to concentrate in areas of higher campesino concentration.

E. Landless Peasants

53. Apart from the excess labor in rural areas, an undetermined number of peasants have no land. Estimates ranged up to 120,000 families in 1974. However, this figure overestimates significantly the magnitude of the problem. Some landless peasants move to the little populated North-east areas clearing new land but even more important is the fact that not all landless rural families are peasants seeking a plot to cultivate. About 17 percent of rural workers (about 50,000 families) are engaged in non-agricultural occupations while about 30-40,000 workers are working in banana and sugar plantations as well as in small sawmills. This reduces significantly the present number of actual landless families that the agrarian reform program has to reach. This is the main program to take care of this problem and will be analyzed in following sections.

F. Rural Manufacturing

54. A survey of rural manufacturing and handicrafts carried out by CDI and USAID shows that the most important activities are: garment industries (tailors and seamstresses), bakeries, carpentry, pottery and brick-making. About 7 percent of rural employment is provided by manufacturing activities. However, minimal employment is generated on a per firm basis; the average number of workers ranges from 1.0 for textiles to 2.6 for brick-making. Family members represent over two-thirds of the employed labor force in these enterprises.

55. Male labor is predominant in metal, construction, and repairs, while female labor is prevalent in textiles and ceramics. However, three-fifths of the enterprises are female-owned. Capital and thus machines per worker are low. The capital invested per worker is low (carpentry US\$147 in fixed capital per worker, blacksmithing US\$90, and brick-making US\$58). The number of machines per worker is thus low and most of them are simple, such as sewing machines and ovens.

56. Rural industry sells its products directly (56 percent) or to retailers (36 percent); only a minority (5 percent) works to fulfill a contract. Capital for these enterprises comes primarily from savings, three-quarters of all rural enterprises surveyed were capitalized with their owners savings.

^{19/} USAID, Agriculture Sector Assessment for Honduras, 1978.

G. Summary and Conclusions

57. Small farmers work about two-thirds of the total number of farms in Honduras but only 9 percent of the farmland. They have low incomes and only own 40 to 65 percent of the land they cultivate. In order to supplement their low farm income, small farmers work outside their farms.

58. Underutilization of rural labor in small farms is large; their landholdings are not adequate to productively employ all the labor force they generate. In addition, seasonality of production, mostly from basic grains, compounds the employment problem. Surplus labor characterizes the rural labor market. Larger farms hire labor from small farms, particularly at harvest time.

59. Basic grains account for over two-thirds of agricultural production in the 0-5 hectare. Corn is predominant among small farms--about half of their agricultural production. Permanent crops do not represent, on the average, a large share of small farms' production. However, the most important permanent crop is coffee, which ranges from 10 percent of agricultural production in farms with less than 2 hectares, to 20 percent in farms with 10-20 hectares.

60. The rural poor also comprises an undetermined number of landless peasants families (most likely a smaller number than available estimates indicate), which seek employment as laborers in the larger farms or migrate to the cities looking for work.

61. Rural manufacturing, commerce, and other non-agricultural activities employs over one-sixth of the rural labor force; rural manufacturing creates employment for about 7 percent of the rural labor force. Capital per worker is low. Main activities are garment industries, bakeries, carpentry, pottery, and brick-making.

IV. THE AGRARIAN REFORM

62. As noted earlier, rural migration to better agricultural areas or to the cities provides an opportunity for excess labor in the small farms and for landless peasants to improve their lives. The other alternative is to enter into the Government-supported agrarian reform program. In spite of many shortcomings, the agrarian reform program has settled a large number of campesino families and is providing significant support to the agricultural development of areas previously underutilized, such as the Aguan Valley. Furthermore, this together with other developments taking place in nearby areas (Puerto Castilla, Bonito Oriental, Olancho) are creating a significant new growth pole that will attract large numbers of people in coming decades.

63. The following sections will examine briefly the history of the agrarian reform, its role in settling campesino families and in increasing production, and the efficiency and shortcomings of the agrarian reform institutions.

A. Brief History

64. A significant step towards labor organization in Honduras took place in May-June, 1954 with the strike against the banana companies; neither the companies nor the Government attempted to suppress the strike. The unions that originated from this strike were the core of both future labor and campesino movements. With the decline in banana production, the banana companies laid off 19,000 workers out of 35,000 in the six years after the strike. This led to the creation of the campesino movement. However, it was not until the early 1960s that the former banana workers established the National Federation of Honduran Campesinos (FENACH). After the 1963 military coup, violent repression led to the demise of this organization. The National Association of Honduran Campesinos (ANACH) was established in 1962 with the backing of the US labor movement and the Honduran Government, and is still active. Later on, other campesino organizations joined ANACH in the fight for land: the National Union of Campesinos (UNC) organized in 1972 out of the socio-Christian oriented Peasants Leagues, and the Federation of Agrarian Reform Cooperatives (FECORAH), composed exclusively of reform settlers and sponsored by the Agrarian Reform Institute (INA).

65. The first agrarian reform law (D.L. No. 2 of 1962) was a response to reformist trends of the Alliance for Progress, but also to the pressures from the "campesino" organizations. This law contemplated the redistribution of publicly owned lands to individual settlers, not to collectives and created the Agrarian Reform Institute (INA). It also introduced the concept of the social function of land property and the Government right to tax or expropriate idle land.

66. The results of D.L. No. 2 were very limited. About 500 families were settled on 6,000 hectares of land in the Departments of Choluteca and Cortes, and INA mediated in the transfer of land from the Tela Railroad Co. (subsidiary of United Fruit) to the Guanchias cooperative. INA was also in charge of earlier groups established in land ceded by the banana companies in the 1950s. The 1969 war with El Salvador slowed down land reform activities. One of the causes of the conflict was the growing competition for land between Salvadorian squatters and Honduran campesinos attracted by INA's settlement programs.

67. The first significant land reform legislation was Decree Law No. 8 of December 1972. An aggressive program was launched in order to create more stable political conditions and avoid a repetition of the 1972 events when the Government was overthrown. This had been preceded by considerable rural unrest and land invasions by organized campesino groups. About 24,000 families were settled on over 70,000 hectares under D.L. No. 8.

68. The temporary Land Reform Law of 1972 was followed by a comprehensive Agrarian Reform Law issued in January 1975 (D.L. 170) aimed at improving land utilization through the transfer of unused or poorly used land from large landowners to landless rural families. The basic objective was to modernize the traditional campesino sector through the establishment of collective settlements composed of formerly landless and land-poor campesinos while, at the same time, strengthening the modern entrepreneurial sector in agriculture.

69. The 1975 legislation established the social function of land according to farm size and land capabilities; specified the expropriation and compensation mechanisms; and gave priority to associative enterprises (empresas asociativas) and cooperatives. The law exempted from expropriation fully utilized farms of less than 50 hectares, as well as land planted with bananas, plantains, sugarcane, African palm, coffee, pineapple, citrus, and tobacco. Banana or agro-industrial companies whose land exceeded the maximum limit (ranging from 100 hectares in public irrigation districts to 2,000 hectares in the eastern areas) had three years to conform with the law. Properties not efficiently cultivated as well as those worked by renters, sub-renters, sharecroppers, colonos or other arrangements were subject to expropriation even if they were below the maximum limit. The provisions of the 1975 legislation still remain in force.

B. The Agrarian Reform Institute

70. By law, INA is principally responsible for official institutional support of the agrarian reform. INA deals with land acquisition and distribution, organization and management, training and technical support of the settler groups, and with guarantees for farm credit issued by the official agricultural bank (BANADESA).

71. INA is organized into management, which includes the regional offices, land acquisition and administration, and three technical departments for promotion and training (PROCCARA), concentration projects, and consolidation programs. The creation of these departments reflects a program decision incorporated in INA's operational plan for 1977, which recognized that INA's resources were being stretched too thin to make a tangible impact on all campesinos. As a result, the bulk of the agency's resources have been allocated since 1978 to the potentially most productive areas (intensive rural development projects). Certain other settlements (consolidation) with a relatively high productive potential--comprising about 9 percent of the settlers--have received only "complete" credit and technical assistance services. The rest of the reform settlements--about one-half of the total number of families--have been provided at best with marginal organizational support and "supervised" credit.

72. The 1978 budget allocated three-fourths of INA's resources to nine intensive rural development projects which comprised about one-third of the land reform population; of this, 90 percent was allocated to the IDB-supported Lower Aguan project. In fact, the 100 percent increase in the authorized budget between 1977 and 1978 reflected almost entirely external financing for the Lower Aguan.

73. Intensive rural development projects represented in 1977 about two-fifths of the families in settlements, about half of the productive area, and one-third of the area in basic grains. Table 7 shows the breakdown of population and land area among the three classes of reform settlements in 1977.

Table 7: REFORM SETTLEMENTS, 1977

	Intensive Rural Development	Consolidation	Rest of Settlements
	----- (Percent) -----		
Families settled <u>1/</u>	38	9	53
Total area	55	12	23
Productive area	47	19	34
Area in basic grains	34	20	46
	----- (Hectares) -----		
Total area per family <u>2/</u>	4.9	5.0	2.9

1/ Original number.

2/ Number as of 1976.

Source: INA

C. The Importance of the Agrarian Reform

74. The agrarian reform impact is significant both in the number of families settled and in the level of production. The latter will become more important as production in the Aguan Valley reaches programmed targets towards 1985.

a. Families Settled

75. Over 48,000 families (12 percent of rural families) had benefitted from the agrarian reform program and about 8 percent of total farmland had been distributed through 1980. Table 31, Statistical Appendix, shows the number of families that received land grants from the agrarian reform program by campesino organization. Total landless peasants as well as membership by campesino organizations is larger, but impossible to determine because there is no reliable record of the undetermined number of landless peasants waiting for their turn to receive a parcel of land. Undoubtedly, rapid population

growth will add significant numbers of new, landless peasants to the roster in the next few years.

76. About 36,000 families of the 48,000 benefitted by the program remain on the land. Some families abandoned the settlements because they did not receive enough productive land and support services; others because they could not adapt to hard living conditions in the settlements of the Aguan Valley. Limited absorptive capacity and lack of financial and trained human resources contributed to this situation. Land granted per member of the settlements was unequal between regions. It was highest in the Atlantic Littoral and East Central regions where land is more abundant and lowest in the Western and Northern regions.

77. About one-third of the members that remain in the settlements and half of the arable land of the agrarian reform program are in concentration projects. The five most important of these projects, Lower Aguan, San Bernardo, La Masica, Guaymas, and San Manuel, cover about 90 percent of the cultivable area in intensive development projects. The Lower Aguan project is the most important, with 38 percent of the members and about 60 percent of the land in concentration projects. Lower Aguan has been chosen by the Government for massive resettlement of landless campesinos with substantial foreign financing from IDB.

78. The beneficiaries of the agrarian reform are organized in cooperatives, enterprises of associated campesinos, sub-sections of ANACH, peasants leagues, and traditional groups. Table 8 illustrates the relative importance of each group.

Table 8: ORGANIZATION OF THE REFORMED SECTOR, 1980

	Number of Groups	Members		Land (Hectares)	
		Initial	In 1980	Distributed	Arable
Cooperatives	298	12,275	9,075	82,416	75,695
Enterprise of Associated Campesinos	30	1,935	2,185	6,989	6,374
Sub-section (ANACH)	484	18,475	13,033	58,210	38,567
Peasants' Leagues	341	11,107	7,842	40,903	24,685
Traditional Groups	144	4,444	3,575	21,565	14,460
Total	1,297	48,236	35,710	210,083	159,781

Source: INA

b. Agricultural Production and Marketing in the Reform Sector

79. Rough estimates indicate that agricultural value-added in the reform sector is about 10 percent of the country's agricultural value-added originating in crop production. This is an important development. The reform sector's share of value-added varies by crops, ranging from a very high share for African palm to a negligible proportion for tobacco. Basic grains production is still dominant in the reform sector although significant progress is taking place with the production of African palm, bananas, rice, and other commercial crops.

80. INA's 1980 Operating Plan shows programmed targets for the main crops cultivated in the agrarian reform settlements. Although these programming figures are subject to significant margins of errors, they illustrate the most recent production thrust of the agrarian reform program (see Table 3.7, Statistical Appendix).

81. ANACH and UNC settlements, as well as the independents, have the least diversified crop mix, concentrating heavily on corn, rice, and beans. FECORAH settlements show the highest level of diversification with two-fifths of the area under cultivation planted with permanent and semi-permanent cash crops, mostly bananas, sugarcane, and African palm.

82. As a result, there is growing awareness that all reform groups must participate in the higher earnings afforded by cash crops. INA's current policy is to encourage contracts for cash crops, with reputable private firms that provide technical guidance and inputs in addition to markets. Another traditional misconception is being abandoned; cattle husbandry is now a suitable occupation for agrarian reform campesinos. Earlier opposition based on the economies of scale of cattle ranching, ignored several facts: (i) the bulk of the cattle in Central America and the Caribbean are in the hands of small and medium-sized producers; (ii) most small cattlemen practice a dual-purpose milk-meat husbandry; (iii) most campesinos of these regions know how to handle the traditional dual-purpose cattle; (iv) the great majority of Honduran reform settlements are run collectively, which means that they are in a position to benefit from some economies of scale, mostly fencing and watering facilities. Implementation is slow, partly because of the acute shortage of credit and partly because banks insist on mortgage guarantees for loans for cattle development (as distinct from fattening), while most reform settlements can only offer a formal INA guarantee in addition to the cattle.

83. Marketing is a serious problem for the reform settlements with the exception of those producing bananas and sugarcane under contract with the banana exporting companies and the sugar mills, or those growing African palm and grapefruit in the Lower Aguan and cantaloupe melons in the South. Grapefruits have already found an adequate market in West Germany if harvested at the right time, i.e., before the Mediterranean crop becomes available. Cantaloupe melons are grown under contract with a United Brands subsidiary (PATSA), which buys the unblemished export sizes for shipment to the United States; the surplus fruit is sold to local intermediaries.

84. A case in the South (Choluteca) illustrates the difficulties of undertaking new crops in the reform settlements. Peasants planted about 3,500 hectares of sesame in 1980, expecting a price of around L 60 per quintal of seed in the shell as in the previous year. However, at harvest

time, buyers offered about one half the 1979 price (L 30-35), which allegedly did not cover production costs. This happened because US import prices dropped sharply in 1980 and because a new sheller, the only one in the country, was still not fully operational. Pressing needs forced the producers to sell at prices ranging from L 33 to L 40.

85. Campesino organizations ought to find ways of improving their marketing organization and involving the buyers more closely with the producer groups. This will become more important in the near future as new crops develop. For example, about 2,500 hectares of cashew trees planted by INA will begin to bear fruit soon, and a Miami-based firm in partnership with a local firm reportedly are installing a cashew cracking machine in their plant. This provides an opportunity for fruitful collaboration.

86. The poor performance of basic grains, in general and among the reform settlements, is partly related to prices and marketing. The minimum prices set by Honduran Agricultural Marketing Institute (IHMA) for the last crop years have been consistently below the average wholesale market prices for rice and beans. Support prices have also been substantially lower than the CIF import price of beans. The inadequacy of IHMA's floor prices is underlined by reports in several areas that country buyers (coyotes) were regularly offering more than IHMA, especially considering that their humidity and foreign matter standards are less strict than those of IHMA. While many of IHMA's small country elevators were reportedly under- or non-utilized, the solution that has been proposed to the problem appeared to be building more storage facilities. Undoubtedly, a more comprehensive marketing and pricing approach is needed.

D. Types of Settlements

87. Although D. L. 8 of 1972 introduced the concept of collective settlements and D. L. 170 of 1975 provided for both individual and collective settlements, the socio-political origins of most of the settlements, i.e., the kinship and/or friendship bonds and the common struggle for the land and the previous status of the members as organized plantation workers or as day laborers, favored the collective tenure solution. A majority of the reform groups work their land partially or wholly collectively. Joint operation of the land is not only favored by campesinos but also by policy makers because of internal and external economies of scale, including public services, particularly credit.

88. Group solidarity is closely related to whether the members of the groups were smallholders or renters, part-time subsistence farmers with occasional off-farm work experience, or full-time laborers in large enterprises. Part-time subsistence farmers, who make up the bulk of agrarian reform beneficiaries, have the greatest difficulty in organizing themselves successfully because of their lack of commercial agricultural experience. Similarly, former small cultivators have great problems in forming a collective enterprise and tend to let dominant leaders become entrenched. As a result, in the western region, which was found to have many groups composed of members with such background, 70 percent of the groups studied had a desertion rate of more than 50 percent. In contrast, the experience of collective enterprises in the northern valleys (despite their many problems) indicates that the former plantation workers appear to represent the best human material for collective farming groups.

89. Systematic physical and social planning of the settlements is not a characteristic of the Honduran process. Rather, it has responded to very specific socio-political pressures at the local level. With few exceptions, all campesino settlements originated as more or less site-specific applications for land parcels by groups of landless peasants or farm workers. The site-specificity means that, in many cases, the groups themselves identified parcels of land falling within the purview of the reform law and requested that it be allotted to them. Exceptions to this rule are the Lower Aguan project and the land released by the banana companies.

E. Land Acquisition and Titling

90. INA redistributes land by allocating unoccupied public land--national or municipal (ejidal), by recovering public land from occupants that do not meet the conditions specified by the agrarian reform law, and by negotiated purchase or expropriation with compensation of privately owned land. Through 1980, INA acquired, under the latter two methods, a total of 59,500 hectares, of which 55 percent was expropriated and the rest seized for the public domain. These figures do not include land that has been voluntarily turned over by the banana companies since 1975. A tentative reconstruction of data on land acquisition by the government, designed to match the 211,000 hectares included in official INA settlements, would look as follows:

	<u>(in thousand ha)</u>
(a) Privately occupied land recovered for public domain (D.L. 170)	27.4
(b) Private land purchased or expropriated (D.L. 170)	32.1
(c) Additional land in Lower Aguan, minimum (45,500 less 7,000 under (a))	38.5
(d) Banana company grants	<u>59.0</u>
Total known acquisitions	157.0
Assumed unoccupied public land allocated	26.0
Other in Lower Aguan	<u>28.0</u>
Total allocated by INA	211.0

91. Ninety-one percent of the 59,500 hectares acquired by INA are in five of the country's fourteen departments, and 72 percent in the three northern departments of Colon, Olancho and Yoro. An examination of some 700 transactions shows that only 57 covered private properties or claims that exceeded 100 hectares, and of these only six measured over 1,000 hectares. Surprisingly, an exceedingly large number of small parcels were repossessed for the public domain, some of them even measuring even less than one hectare.

92. The financial cost of the 59,500 hectares was comparatively modest. Compensation averaged only 253 lempiras per hectare, and the only actual financial outlay to date was 1.4 million lempiras in cash payments, or an average of less than 24 lempiras per hectare. The amortization of the bonds is unlikely also to represent a financial burden for the central government since 60 percent have a 25-year maturity and pay only 2 percent interest.

93. During 1975-80, issuance of titles has been slow. Titles were issued to 186 settlement groups, covering 61,458 hectares. This still left about 85 percent of the groups and 70 percent of the land, without title. The cumbersome and time-consuming process of determining legal ownership, and the fact that the banks (including the official ones) do not accept the land bonds as payment for outstanding debts of the former owners as provided for by law have prevented INA from taking legal title to all but 15 to 20 expropriated properties so far. It seems that a political decision is required to break this impasse; for example, accepting the bonds as payment for tax liabilities. Furthermore, INA's cadastral office has a limited capacity with only a dozen employees and field brigades were recently increased from four to seven.

94. To further complicate matters, INA has never worked systematically with the national cadaster which has much of the needed information on file. Also INA has not utilized the cadaster's aerial photographs for the delimitation of property plots even though it is legally permissible.

F. Abandonment of the Settlements

95. Two phenomena are usually singled out in Honduras to show that the agrarian reform has been a failure: the high rate of turnover and abandonment of the settlements, and the low rate of economic utilization of the land allocated to the settlements. The two are, of course, related. Moreover, the proportion of allegedly "uncultivated" reform land reflects many physical, institutional and human constraints ranging from unsuitable soil and climate to lack of capital and/or technical know-how.

96. The average cultivable land per member in the intensive development sector is substantially greater than that of other reform groups. In 1979, the ratio was 2.1:1. This and the higher quality of the land are major reasons for a lower attrition rate (16 percent) in the concentration projects compared to other areas (32 percent). The attrition rate shows that, for settlements established during 1972-78, the 1979 population was 75 percent or less of the original number settled each year. For 1976-78 settlements, the attrition rate at about the historical average (25 percent).

97. The heaviest rate of desertion took place in the South, where only 56 percent of the number of original settlers remained at the end of 1978. This is not surprising inasmuch as the average cultivable land assigned per family was little more than two hectares and this is a very droughty area. Similarly, in the hilly areas of the Southeast (department of Paraiso) fewer than half the 1,804 families originally settled remained in 1978.

98. A high rate of abandonment of the settlements indicates a serious prima facie problem with the implementation of the reform. It may also indicate that the situation, from which the reform was rescuing the beneficiaries, may not have been so desperate, at least in the rather numerous cases where the members returned to their place of origin. Although an overall study of the abandonment phenomenon is not available, a survey made recently in the Lower Aguan project shed some light on the reasons that induced members of a colonization project to leave their settlement within one year, and showed where the "deserters" tended to go. The survey indicated that this situation could have been avoided through more careful selection of the settlers and more thoughtful social and economic planning of resettlement conditions. ^{20/}

G. Uncultivated Land in the Settlements

99. The proportion of reform land that is not cultivated, aside from being generally exaggerated, has not been studied on a systematic, nationwide basis. Available data and field observations, however, indicate that the problem is not dramatic. Campesino groups estimate that 160,000 hectares--or 76 percent--of their land are cultivable. ^{21/} Of this, a total of about 140,000 hectares are available to be planted with perennial and annual crops, almost equally divided between concentrated development projects and the remaining settlements. Of this area, at most 60,000 hectares (two-fifths) of land potentially cultivable may be idle either as fallow land or unutilized. This indicates that the problem of uncultivated land is not as severe as the critics point out. Furthermore, the criteria for appraising a given piece of land as cultivable tend to be quite subjective (sometimes "cultivable" is confused with "usable"), and thus a wide range of "uncultivated" proportions can be claimed.

^{20/} For details see Annex 1, para. 19.

^{21/} Of the sample of supervisors and promotors interviewed by PROCCARA researchers in 1979, 41 percent of the former, and 19 percent of the latter stated that, with the exception of the Lower Aguan, the land allocated to the majority of the groups was qualitatively and quantitatively inadequate, and that it tended to be marginal in the consolidation sector.

Table 9: CULTIVABLE LAND IN THE SETTLEMENTS

	Area (in hectares)
<u>Total cultivable land</u>	<u>160,000</u>
Intensive development projects	86,000
Tree crops	16,000
Other	70,000
Remaining settlements	74,000
Cashew	2,000
Other	72,000
<u>Land not in permanent crops</u>	<u>142,000</u>
Cash crops	10,000
Under cultivation with other crops	71,000
of which: with BANADESA credit	(40,000)
Unknown, uncultivated or fallow land <u>a/</u>	61,000

a/ Undoubtedly not all the area in this category is idle land.

Source: Mission estimates based on partial information from several sources.

100. This conclusion is supported by some field research. A sample of 34 reform settlements in the drought-stricken southern region shows that, despite environmental and financial constraints, only 15 percent of the cultivable area was not under cultivation in 1980. The low quality of the land allocated to these groups is underlined by the fact that only 46 percent of the total area is considered cultivable.

H. The Institutional Capacity of the Agrarian Reform Institute

a. INA's Budget and Personnel

101. INA's budget totaled L 45.3 million in 1979 and L 52.4 million in 1980, or about 5 percent of the Central Government budget. However, actual expenditures have been below budgeted levels. INA's 1980 budget was covered by a Central Government transfer of L 130 million and by IDB loans for L 21 million. In 1979, of the budget only L 28.5 million (63 percent) were actually spent, including L 6.4 million from IDB resources. Actual operating expenses were 77 percent of the budgeted level ex post but capital expenditures reached only 43 percent of the budgeted level. Partial results for

1980 show a similar situation, with capital expenditures lagging significantly. Among functional expenditures "management and general administration" showed the highest expenditure ratio, while "concentrated rural development" projects lagged the most. Nearly two-thirds of the authorizations for concentration projects (which absorbed 57 percent of total expenditures) were for the Lower Aguan. Only 10 percent was spent for "consolidation" of all other settlements, and 7 percent for land acquisition.

102. INA's 1981 budget was L 26 million from central government transfers and L 21 million from external funds (IDB). Since actual 1980 expenditures from national budget funds were L 31 million, slightly above the L 30 million budgeted level, the 1981 budget level represented a reduction. Because of this, INA sought actively to transfer certain functions to other agencies, mainly, to the Extension Service of the Ministry of Natural Resources (MNR) and to the Directorate General of Cooperative Promotion (DIFOCOOP). However, these agencies had their own budget limitations so that the transfers were unlikely to be fully implemented in 1981.

103. The 1981 budget cuts had a negative impact on the efficiency and effectiveness of field personnel. Since the bulk of the 1981 budget financed out of central government transfers is used for current expenditures, mostly staff salaries, the reduction was disproportionately reflected in operating expenditures, such as fuel and maintenance for vehicles and per diem for field travel, to avoid personnel lay-offs. This sharply reduced the mobility of field personnel to assist the reform sector. This merits careful consideration; the trade-off between personnel lay-offs and the efficiency of INA's services to the campesinos has to be decided in favor of the latter, particularly taking into account that in relation to the existing number of land reform settlers, INA's staffing in early 1981 was rather generous--nearly 2,000 employees or only 17.5 settlers per employee. Otherwise, INA's main purpose of servicing the campesinos would not be served.

b. INA's Field Assistance and Training

104. Next to acquisition and redistribution of land, INA's other key functions have been to assist the campesino groups to become established, to obtain essential services and resources for these groups, and to train the members of the settlements in the fundamentals of cooperative organization and management. The success of these activities depends on the field agents (promoters) in daily contact with the settlers. Despite the undeniable success of some in special situations, most analysts agree that the promoters have been far from effective. This is particularly true for "consolidation" settlements and the remaining part of the reform sector where contact is at best marginal. Even in the high priority concentration projects, the promoters' main responsibility for strengthening the groups' management and accounting practices has not been successfully performed although some progress has been made. Successive changes in policies and personnel in the last few years have hampered the process. A 1979 study of 21 northern and

western settlements (with a mean age of 4.8 years) ^{22/} concluded that "INA's promotion ... has not been effective in developing and consolidating the cooperatives and empresas comunitarias because visits to the groups were sporadic, promoters had no clear methods or even idea of their tasks and their preparation is not adequate for helping the groups with their managerial problems." In addition, personnel instability was a major problem. In a sample of 29 campesino groups, the leaders identified a total of 122 promoter who had passed through during 1977-1979.

105. A 1979 INA survey of 31 promoters highlighted a number of critical aspects of the training activity. One-third of the promoters had been in the agency less than 12 months and only 13 percent more than two years. Only one-fifth perceived their primary task as one of training. The majority could not adequately define the meaning of "campesino promotion" and "group entrepreneurial consolidation." Although there were no written guidelines for promoters engaged in training, 95 percent of the promoters interviewed had given "courses" in "organization," "cooperation" and "agrarian reform," which most likely were information talks on motivation, promotion or orientation. Some supervisors and promoters felt growing resistance to such "courses" by the campesinos, who considered them useless and thus failed to attend. INA field personnel also noted indifference to the "courses" among regional campesino organization leaders.

106. INA's training department (PROCCARA) was created with the assistance of UNDP in 1973 when FAO fielded a team of experts and initiated a massive training program for campesino groups and association leaders, as well as for INA promoters, executives and technicians. INA's training programs have had problems, such as lack of interaction and occasional conflicts with the peasant organizations, which are somewhat related to the politicized nature of the first phase of the project. This phase of the project ended in 1976 amid a great deal of political controversy. This was supposedly overcome in the second phase by the creation of a coordinating commission for promotion and training with representatives of the three major peasant organizations. However, the committee is said to be relatively ineffectual.

107. In recent years, INA's training program has suffered from excessive internal reorganizations. International support has also been weaker than expected because of recruitment delays and differences in backgrounds and initiatives of the various experts. A special 1978 study identified the main problems of INA's training as lack of capacity for systematic analysis or organization and management problems of campesino groups; lack of inter-institutional coordination of training activities; lack of a strategy for a coherent organizational framework for campesino groups; and lack of a follow-up system.

^{22/} IHDER, "84 Meses de Reforma Agraria del Gobierno de las Fuerzas Armadas de Honduras", May 1980.

108. The appraisal of INA's training efforts indicates that there is little or no evaluation or specific follow-up. Also groups close to main roads were saturated with courses while other, more remote, groups received none. In addition, some technical courses had no relation to the groups' actual or future production pattern, and training in administration and accounting did not result on any tangible improvements in group management or record keeping.

c. Technical Assistance to the Reform Settlements

109. A case study ^{23/} showed that fewer than two-thirds of the campesino groups had received any technical assistance from 9 different public and non-governmental agencies, not all of which were adequately specialized for this kind of service. In accordance with INA's policies noted earlier, concentration projects were using two-thirds of the available agricultural technicians, while more than 800 "consolidation" groups shared a total of 9 technicians. INA's policies and qualified technical personnel distribution imply that "consolidation" is essentially a holding pattern with little support in terms of technical expertise. Even though 42 percent of other middle level personnel were assigned to consolidation settlements, this personnel is not particularly qualified (i.e., promoters, with non-specific background).

110. The MNR's Extension Service had a total of about 300 professional employees in 1981, of whom 238 were working in the 92 field agencies. Of the latter, 149 were middle-level agricultural technicians, the rest were youth promoters and home economists. About 20 percent of the agricultural field technicians were graduates of the Zamorano agricultural school; their services are reportedly in such high demand that they tend to be placed into higher-level jobs. A number of university graduates are also in charge of specific commodity programs, such as soybeans, horticulture, potatoes, cotton, beekeeping, citrus and henequen. Extension service agents of the MNR have been working with 8 of the regional reform cooperatives since 1978 and plans exist for servicing the remaining 6. In 1981, 20 to 28 MNR's field agents were working exclusively with agrarian reform groups. MNR's extension agents tend to devote about three-fourths of their time to reform settlements although they have difficulties in obtaining cooperation from INA field agents. This raises concerns about the concentration of MNR's extension services in agrarian reform groups to the virtual exclusion of other small producers. In 1979, for example, MNR Extension Service provided assistance in 11 municipalities in the north to only 453 non-reform groups. Independent small farmers are serviced through a Campesino Association for the Diversified Agricultural Development of Honduras (ACADEH), comprising 38,000 producers.

^{23/} IHDER, op. cit.

I. Training Needs of the Reform Settlements

111. Technological training for basic grains is most needed in the settlements. Basic grains technology is particularly deficient, as reflected by low yields and frequent crop failures. Technological needs are taken care efficiently in the case of specialized cash crops, where the buyers (banana company, PATSA for melons, tobacco companies, cotton cooperative, sugar mills, etc.) provide it. Furthermore, for bananas, the experience of the former plantation workers is an important factor. Thus, in these cases only occasional assistance from official (INA and/or MNR) technicians is needed. A similar situation exists when the project is for an entirely new crop and external sources provide for the technical assistance (e.g., African palm in the Lower Aguan, where technical assistance was both required and provided with IDB funds).

112. The most crucial training needs identified in the cooperative settlements are in the field of management: planning and establishing priorities for land and labor use; organizing the work force and assigning tasks and responsibilities; establishing controls and maintaining accounts; designing and implementing credit schemes, including assurance of timely repayments, and allocation and distribution of annual surpluses.

113. The size and highly organized nature of the reform sector in Honduran agriculture make adequate training of the production managers a high priority activity. Most of the training is the responsibility of INA's training department (PROCCARA) and its expatriate advisers, the Institute for Professional Training (INFOP), and the Directorate for Cooperative Promotion (DIFOCOOP).

114. The most important agency is INFOP, which allocates 60 percent of its resources to agricultural training, mostly in the reform sector as required by law. In 1980, INFOP had 8 mobile centers and completed an important regional training center at La Ceiba. INFOP's budgetary allocation from the Honduran Government was L 950,000 in 1981; however, its budget totals about L 14 million, including the proceeds of a one percent payroll tax paid by private business. In addition, INFOP receives various kinds of support from bilateral assistance programs and the International Labor Office.

J. Credit to the Reform Settlements

115. The Agricultural Development Bank ^{24/} provides credit to the agrarian reform settlements. About 40 percent of its new agricultural lending and 46 percent of its crop loans went to the reform sector in 1979, mainly for African palm plantations in the IDB-funded Lower Aguan project, maize, and cotton. The 1979 year-end portfolio of the Government's agricultural development bank represented 13 percent of the banking system's total portfolio; however, only 55 percent of outstanding loans were current. Even

^{24/} In 1980, the Agricultural Development Bank was reorganized and its name was changed from BANAFOM to BANADESA.

though two-thirds of the overdue loans were in crop financing and maize was the largest single crop among the overdue loans, agrarian reform beneficiaries owed only about one-third of overdue loans (not including arrears from Decree No. 8 and IDB Lower Aguan II stage).^{25/} An analysis of the overdue loans in 1977^{26/} showed that, of the overdue reform sector loans, 22 percent was due to total or partial crop loss.

116. Honduran legislation does not seem to provide for any kind of moratorium on bad debts. As a result, new members of settlements who replace others that have abandoned the group have to assume the debts of the predecessor. The original debtor often cannot be located. This creates a difficult condition for the new arrivals to the settlements.

K. Summary and Conclusions

117. Land reform legislation was first enacted in Honduras in 1962 but progress was slow until new legislation was issued in 1972, launching an aggressive program in response to strong campesino pressures. It was significantly strengthened and expanded with the 1975 agrarian reform law, which aimed at greatly improving land utilization as well as increasing incomes and employment opportunities of poor peasants.

118. The important role performed by the agrarian reform is illustrated by the number of agrarian reform beneficiaries and by the share of agricultural value-added. The agrarian reform has settled 48,000 peasant families (12 percent of rural families) on about 210,000 hectares. About 36,000 remain in the settlements and about 12,000 families have abandoned them because they did not receive enough productive land or support services or could not adapt to hard living conditions in some areas, like the lower Aguan. Agricultural value-added in the reform sector is about 10 percent of the country's crop value-added. Proportions vary by crops. Basic grains is the dominant crops in the settlements although significant progress has been made in expanding commercial crops, such as bananas, African palm, sugar cane, rice, and grapefruits.

119. The Agrarian Reform Institute (INA) is mostly responsible for the agrarian reform. INA has received significant resources from Central Government transfers and foreign loans to carry out its mandate. For example, its 1980 budget was about L52 million (US\$26 million). However, investment expenditures have fallen significantly behind budgetary allocations because of delays in implementing projects. In spite of this, operating expenditures have been much closer to budgeted levels.

^{25/} BANAFOM, Evaluacion de las Actividades del BANAFOM, 1979 (Preliminar). March, 1980.

^{26/} BANAFOM, Evaluacion de las Operaciones Crediticias y Financieras, April 1977.

120. Since 1978, INA has concentrated its resources on the potentially most productive areas (concentrated rural development projects with 38 percent of the families), which comprise nine important projects, including the Lower Aguan. Other settlements with high productive potential (consolidation settlements with 9 percent of the families) are supported by the Government with only credit and technical assistance. The remainder (over one-half of the families) qualify to receive marginal support and "supervised" credit. However, most of them are not creditworthy.

121. With the exception of concentration projects, physical and social planning of the settlements has been inadequate. In addition, land invasions create uncertainty among non-reform farmers and affect non-reformed agricultural production.

122. INA's titling has been very slow. About 85 percent of the groups and 70 percent of the distributed land have not been titled, mainly for two reasons: the cumbersome process of determining legal ownership, and the banks unwillingness to accept the land bonds in payment for outstanding debts of the former owners. A political decision is needed so that the bonds can be used for certain purposes, such as paying tax obligations.

123. INA's capacity to perform other functions than acquisition and redistribution of land, i.e. assist the campesino groups to become established and to obtain essential services and resources, and to train them in organization and management, is limited in spite of generous staffing. The promoters are essential to this process but they have been mostly ineffective, even in the high priority concentration projects. Promoters turnover is high and many are not adequately trained to discharge their responsibilities. Serious efforts are needed to remedy this situation and raise the quality of INA's services to the settlements.

124. INA's training programs have suffered from lack of capacity for systematic analysis of organization and management problems of the campesinos, lack of coordination of training activities, and lack of follow-up or evaluation. Furthermore, campesinos groups close to main highways are saturated with courses while more remote groups receive no attention. This is another area of INA's functions that requires a serious evaluation followed by remedial action.

125. The problem of uncultivated land in the settlements is not as severe as the critics of the agrarian reform point out. Since the criteria of cultivable land is subjective, a wide range of uncultivated proportions can be claimed. As far as can be determined, over one-third of the "cultivable" land is not being cultivated or its use cannot be determined from available information and studies. However, partial field research shows much lower ratios (i.e., 15 percent) of uncultivated land indicating that the percentage of unused land most likely is below one-third.

126. Marketing is a serious problem for the reform settlements with the exception of those producing cash crops under special arrangements with marketing intermediaries. The poor performance of basic grains in reform and

non-reform farms is partly related to prices and marketing and partly to flooding and other weather conditions which severely affect production in the reform settlements of the Lower Aguan.

127. IHMA's support prices also have not provided enough incentive to the producer in the case of beans; wholesale prices, however, are closer to the import price (.9 of import price). For corn and rice, although import prices are below wholesale domestic prices, support prices are about the same as import prices. This raises significant questions about price support and marketing of corn and rice. The issue is whether to increase production by providing additional incentives to inefficient, low productivity small farmers (reform and non-reform sectors) for non-entirely economic reasons versus supplying the domestic market with larger-scale, more efficient farms or cheaper imports. Clearly, this has occurred in the past as small farmers shifted production to higher value export crops with intensive development agrarian reform filling the gap.

128. The Agrarian Reform Law exempted from expropriation all farms of less than 50 hectares fully utilized, as well as land planted with bananas, plantains, sugar cane, African palm, coffee, pineapple, citrus, and tobacco, but it failed to protect new crops. This is a special problem for the development of new export crops not exempted from occupation by the legislation and raises considerable uncertainty about land occupations in farms planted with new crops notwithstanding their efficiency. All efficiently cultivated land, regardless of the particular crop for which it is used, should be protected by legislation from invasions. Land redistribution should be undertaken solely within the expropriation criteria established in the agrarian reform legislation, which establish specific maximum limits to private firms depending on soil quality, region of the country, intensity of cultivation, etc. 27/

27/ 1975 Agrarian Reform Law, Article 38.

THE LOWER AGUAN VALLEY SETTLEMENTS

The Settlements

1. The lower Aguan Valley was chosen by the government of Honduras in the late 1960s as a priority area for massive resettlements of landless campesinos from more densely populated areas. This project is managed by INA. The valley is the lower end of the huge Aguan watershed that comprises one entire northern department and parts of two others. The first five settlements were created in 1970/71 under the authority of the 1962 agrarian law and over the considerable protest of the landowners of the region.

2. The government obtained financial support for the lower Aguan project from IDB. An initial loan of US\$7.7 million supported plantations of African palm and citrus, with a total cost of US\$12.8 million. A second IDB loan of US\$40 million, for an additional total project cost of US\$51.5 million, was approved in 1977, following the establishment of 53 cooperative settlements in 1974 and 1975.

3. In 1975, the Standard Fruit Company abandoned more than 2,000 hectares of Aguan Valley banana plantations that had been destroyed by hurricane Fifi in 1974. The government created a large Empresa Asociativa (the Isletas cooperative) on this land, composed of 1,300 former banana company workers, and placed it under the tutelage of a newly created banana corporation, COHBANA, for purposes of technical services, marketing and financing.

4. In view of different institutional management arrangements between the two projects, they are analyzed separately, even though they are located in a geographic and ecological continuum. The lower Aguan Valley has a high exposure to flooding, which takes place almost every year to some extent and sometimes assumes disastrous proportions. (This explains why the United Fruit Company, which had vast holdings in the valley since early in the century, pulled out in the 1950's.) Floods make annual crops very risky in substantial areas of the valley. UNDP has been studying the entire Aguan watershed and reached a preliminary conclusion that, in view of the topography and progressive deforestation of its upper reaches, the only effective, but costly, flood control system would be the construction of a series of barrage dams across the river. Otherwise, the only realistic alternative would be to adapt the land management system to the flood pattern.

5. INA's Lower Aguan Project is the largest of its agrarian reform projects. It has a total area of 45,551 hectares. About 28,000 hectares had been allotted collectively to 83 cooperatives in September 1980. The cooperatives initially comprised about 4,400 members but, by September 1980, their number declined to about 3,200 for an apparent net attrition rate of 27 percent (this hides a much higher actual turnover). As a result, the number of families settled in the two stages of the project have been about half of the project's initial target.

African Palm Production

6. Of the project's 28,000 hectares, about 11,300 hectares were in tree crops and the remainder supposedly in annual crops. The 53 IDB-financed cooperatives had planted about 10,000 hectares of African palm by 1980; fruit production was only about 7,500 tons in 1979 (or about 4.5 percent of the 1985 target of about 100,000 tons of fruit); this is normally explained by the plant producing fruit cycle. Oil production reached only 4 percent of the 1985 production target of 30,000 tons for the same reasons.

7. Flood damage to palm plantations has turned out to be minor as the water ran off quickly from most of the palm areas. Yet, it became clear that tertiary drains--not contemplated under the 1977 plans--were needed; thus, savings in other investments were reprogrammed for this purpose in 1979.

8. Payment of member and family labor during the growing period of the palms, at the rate of three lempiras per day for at least five days a week, is included in project financing. While some cooperatives and members are said to be quite conscious of the need to economize on this item in order not to overburden their indebtedness, there have been some complaints about the L 3 per day wage limit at a time when the minimum wage was L 5.8 and was expected to increase up to L 8.

9. The palm plantations reportedly do not produce any net returns until the eighth year, although the cash flow begins to be positive in year seven. The amortization plan provides a grace period of four years. This creates an amortization problem in the fifth year. INA has been discussing this problem with IDB.

10. Palm fruits are processed into crude oil in two small plants (6 mt/hour) that belong to the associated cooperatives and the crude is sold to commercial refiner/manufacturers (mostly Standard Fruit). The palm kernels are sold as such. Two large, modern plants (15 mt/hour) are under construction and a third one is planned with a capacity of 20 mt/hour, for a total capacity of 62 mt/hour. This is designed to handle an input of 24 tons of fruit per hectare from 2,200 hectares in year eight. It will also process the kernels. The cooperatives are working on plans to install their own refining and manufacturing equipment. Aside from the supervising engineer, the entire labor force of the oil plants is composed of cooperative members and their families.

Citrus Production

11. Grapefruit plantations in the Lower Aguan Valley have proceeded at a slower pace because the off-season market for fresh grapefruit is still being tested. Problems have also emerged with production and transportation costs as well as with fruit quality. About 2,000 hectares are producing about 27,000 tons of fruit. INA has made arrangements with Standard Fruit to process the surplus and below-standard fruit.

Basic Grains Production

12. The production of basic grains have had only limited success because of lack of credit, commercial facilities, and, particularly, frequent floods. Production is well below initial targets. Perhaps the biggest problem that afflicts the project--related to the broader problem of flood control--is the situation of 30 reform groups that have no tree crops. They have concentrated on growing basic grains, but low yields (because of unsatisfactory technology), low prices, marketing and transportation problems, lack of storage, ^{1/} and periodic floods have reportedly left most of these groups with little net income and large bank debts. A partial solution is limiting basic grain planting to the spring cycle when the risk of floods is greatly reduced; this means only one crop a year where the productive capacity of the soil, temperature, and rainfall permit growing at least two crops per year.

Cattle Production

13. So far, agrarian reform settlements mostly have not engaged in cattle production. However, a proposal is to reconvert part of the land used for basic grains to pasture--a state in which much of it was before the land redistribution--and raise cattle for milk and meat. Swiss and EEC aid are backing pilot projects with purebred dairy cattle. Now, INA plans that each cooperative will eventually have a small cattle project consisting at the outset of 50 milk cows and 100 beef animals, which will be funded through the IBRD/Central Bank credit project. Moreover, there is a large-scale cattle development project in one area (section 3) of the valley, on the river's left bank. A total of 12,000 hectares of pasture could apparently be established there for 40 cooperatives.

Titling

14. Virtually all the Aguan cooperatives have been issued title to their land by INA. Membership in the groups does not carry with it a share in the value of the land or improvements. Settlers pay L 200 for the land over 20 years without interest, i.e., a nominal charge equivalent to US\$5 per hectare per year. Neither retiring members nor those who abandon the project receive any compensation. The remaining members are sometimes reluctant to

^{1/} INA's plan for the construction of grain storage facilities has not been implemented.

accept replacements for the departees, partly for social reasons and partly to improve their economic position in the cooperative. Moreover, proposals for increasing the number of members in cooperatives that could provide an acceptable income for a larger number of members are often resisted, even though the standard 500-hectare allotment per cooperative of 80 to 100 members is too large for efficient management without considerable mechanization or hiring of wage labor.

Lack of Social Services

15. The heavy emphasis on economic results is reflected in the low level of social services. Even the most prosperous coops at present have no access to potable water because shallow wells are not potable, and there has not been an adequate deep-drilling program. UNICEF reportedly brought large numbers of water tanks into the area but they are not being utilized for lack of wells. On the other hand, the USAID-supported rural electrification program is said to be moving along at a satisfactory pace. Electrification of the valley may well be the basis for further economic diversification.

Expenditures

16. Total expenditures since 1974, excluding public works, is estimated at about 70 million at current prices, i.e., an average of about L 21,000 per family of remaining project settlers in early 1981. Most of the investments was made on tree crops.

17. Representatives of ANACH complain that investments have been made without consulting the cooperatives, notably in the purchase of excessive numbers of tractors during the first phase of the project. Indeed, in 1971, INA assigned one tractor to every 100 hectares, whether or not the groups needed them or were prepared to use and maintain them -- which most were not. In the project's second stage, in 1977, INA was in charge of an equipment pool and INFOP was responsible for organizing courses in machinery operation, maintenance and repair. Another source of complaint was the recent purchase of about 5,000 tons of fertilizer, the appropriateness and quality of which had been questioned, apparently with some justification. The matter became a subject of public debate.

Technical Support

18. In 1978, there were seven MRN extension agencies, as well as programs for animal health and production, mechanization and crop production and protection. INFOP established a mobile training unit with 12 instructors. The budget cuts in 1981 were beginning to hurt project management. Funds for spare parts for vehicles and equipment were threatening to be a special problem. The national budget strictures were reportedly aggravated by the slowness of disbursements of IDB funds through the government channels; contract payments were said to be delayed as much as six months.

Desertion

19. A common phenomenon in the Lower Aguan is the reportedly high rate of "desertion" by originally recruited settlers. A recent study provides reasons for this phenomenon which is not unique to the Lower Aguan. First, since 1977, recruitment has been nominally handled by the Program for Induced Migrations within INA. Initially, one central and four regional "coordinators" were assigned to this program; one regional coordinator was in charge of reception, installation and follow-up of the new settlers in the Aguan project, while the other three were responsible for recruitment, orientation and transporting of new settlers. By 1980, only the national coordinator remained on board and budgetary allocations were small. Second, of 674 heads of household and single settlers which were moved onto 25 cooperatives in the project area during 1977/78, nearly two-thirds had abandoned the project by late 1980. Most of them returned to their home community in the Northern departments and in Comayagua; the rest stayed on in private employment in the Aguan Valley. Third, a survey of 18 cooperatives in the Lower Aguan that received new migrants in 1979/80, showed that most of the recruits were campesinos who were totally landless or who had only a minuscule parcel. Nearly all were illiterate agricultural day laborers and did not belong to any unions or organizations. A few had abandoned reform settlements in other parts of the country. Except when the new migrants were relatives or former acquaintances, the reception by the host cooperative was typically unenthusiastic, even though these cooperatives had requested new members. The new arrivals also showed little enthusiasm for their new surroundings and complained about lack of housing, water, fruit, and stores as well as about insects and inadequate facilities for food preparation and/or feeding, especially in the case of single workers. Homesickness was also a factor. Fourth, in some settlements, the established members refused to incorporate the new arrivals as full members; they were discriminated and asked to do the hardest jobs. Notable exceptions are those instances where the new migrants were in the majority and where they were thus able to assert themselves.

20. The eighteen cooperatives that had received migrants all had experienced some abandonment by the original members; overall, 78 percent of the original members had abandoned their settlements at some point during the average five years or so of its existence. The rate of abandonment ranged from 36 percent to 100 percent (for two settlements), but one-half of the settlements had experienced abandonment rates exceeding 80 percent and only one had less than 50 percent. Of the 186 migrants who did leave their settlements during the first year, 71 percent returned to their place of origin, 10 percent remained in the area but sought employment outside the project; and 19 percent joined another cooperative in the project.

21. Some progress is reported in reducing the overall abandonment rate. A 28 percent rate in 1979/80 was lower than the 62 percent rate of two years earlier. This is explained mainly by the fact that there was no major flood in 1979/80 and that 15 of the 18 cooperatives surveyed were beginning to have regular earnings from palm plantations and could thus provide regular

employment and "wages" to the new members. Moreover, the northern origin of two-thirds of the 1979/80 migrants made for better adaptation; in 1977/78, the majority came from other regions of the country. More than half of the 1979/80 deserters" were under 25 years of age. The major stated cause of abandonment (35 percent) was "failure to adapt."

22. In brief, many of the problems that caused the abandonment in this project are rooted in the basic defects of the project per se: inadequate training and motivation for self-management; INA's inability to provide essential support and service, especially social infrastructure; failure to tackle the environmental problems, etc. But many of these problems have to do with faulty methods of recruitment, selection and preparation and settlement of the migrants. These are common to "directed colonization" projects. Policymakers and administrators often are primarily concerned with the short-run filling of quotas rather than with the long-run achievement of economic and social objectives.

THE ISLETAS BANANA ENTERPRISE (EACI)

1. Isletas is perhaps the most famous agrarian reform "project" in Honduras, both because of its economic dimensions and the socio-political turmoil in which it has found itself. The 1975 project has 5,000 acres (2,024 hectares) of prime land in the lower Aguan valley, which was abandoned by the Standard Fruit Company after hurricane Fifi. ^{1/} The land and fixed installations were turned over to INA. INA recruited 1,300 former plantations workers and created one huge enterprise even though the plantation was easily divisible into its traditional production sections. At the same time, the government created a public banana corporation (COHBANA); its principal function to date seems to have been that of intermediary between EACI and the Standard Fruit Co., which continues to market the bananas in the U.S. through its facilities in La Ceiba. ^{2/} COHBANA provides technical assistance and financing to EACI and takes responsibility for road and bridge rehabilitation. Campesino representatives feel that these services can be furnished more efficiently and for a smaller overhead and that COHBANA does not drive a hard enough bargain with Standard Fruit.

2. According to COHBANA, EACI's output of bananas is now greater than it was under Standard Fruit management. Annual sales to Standard Fruit are over five million boxes. According to COHBANA's EACI office, Standard Fruit pays COHBANA a negotiated, nominal price of L 7.32 per box of 40 lbs., from which the export tax (L 1.00) and the box cost (L 1.40) are deducted. COHBANA then credits EACI with a nominal gross price of L 4.60 per box, from which deductions are made for payments to Standard Fruit for railroad transport to La Ceiba (L 0.53 per box) ^{3/} and ship loading (L 0.32 per box), as well as COHBANA's overhead charge of L 0.39 per box ^{4/} This leaves a net price of about L 3.63 per box for EACI. After servicing its debts, EACI retains L 2.81 per box.

3. Data from the local COHBANA office for the standard four-week accounting period corresponding to December, 1980, shows the following:

^{1/} Another 2,000 acres of bananas belonging to independent entrepreneurial growers were also destroyed. This land was also acquired by INA but is still lying fallow.

^{2/} COHBANA also manages two banana plantations with a total of 1,424 acres.

^{3/} EACI pays a total of about 2.5 million lempiras in transport charges per year; the government also pays Standard Fruit an annual rental of one million lempiras for the use of the rail line.

^{4/} About L 2 million a year.

ANNEX II

	<u>Thousand Lempiras</u>	<u>Percent</u>	<u>Lempiras per Box ^{1/}</u>
Gross nominal price to COHBANA	2,753	100	7.32
Less deductions by Standard Fruit:			
Export tax	376	13.7	1.00
Irrigation	20	0.7	0.05
Transport to La Ceiba	201	7.3	0.53
Loading	120	4.4	0.32
Cartons ^{2/}	<u>526</u>	<u>19.1</u>	<u>1.40</u>
Total	<u>-1,243</u>	45.2	3.30
Gross receipts by COHBANA	1,570	54.8	4.02
Standard COHBANA deduction 147		<u>5.3</u>	<u>0.39</u>
Gross sales receipts of EACI	1,363	49.5	3.63
Financial deductions by COHBANA:			
Loan Amortization	189		
Interest on Loans	<u>120</u>		
Total	<u>309</u>	<u>11.2</u>	<u>0.82</u>
Net income of EACI	1,054	38.3	2.81

^{1/} Calculated on 376,000 boxes on basis of export tax receipts.

^{2/} An additional amount of L 506,000 was deducted for other "materials and supplies," reported to be mostly for plantation inputs which are part of EACI's cost of production.

COHBANA deducted L 518,000 for advances to EACI for wages of member workers, and L 372,000 for other advances, for a total of L 890,000. Since Standard Fruit deducted L 506,000 for materials and supplies, there was a negative cash balance for EACI at the end of the accounting period of L 342,000, equivalent to L 0.91 per box. This negative cash balance was converted into new indebtedness to COHBANA.

4. Consolidated accounts for 1980 were not available at the time of the mission, but EACI's cumulative operating loss for the year was estimated at about five million Lempiras. The accumulation of such losses over the last few years had produced a debt of about 12 million Lempiras to COHBANA. Amortization and interest on COHBANA's loans amounts to 11 percent of the FOB price. COHBANA borrows on the private international market and passes the interest charge on to EACI.

5. Wage receipts of EACI's members are about 6.8 million lempiras per year, which provide each family with about 5,200 lempiras. COHBANA's accounts indicate that these wages are being paid at the cost of increasing indebtedness.

6. The unsustainable deficit situation is clearly at the root of the underlying malaise and sporadic outbreaks of violence in Isletas. The membership, and even some of the leaders, vent their frustration often simultaneously on COHBANA, INA, and Government and the Standard Fruit Company, all of whom evidently take a bite out of the final value of the product. But the major complaint is related to graft and corruption in this multimillion dollar semi-public enterprise. Corruption is almost guaranteed by the impossibility for a group of largely untrained--and partly illiterate--banana workers to manage an organization of this size efficiently.

7. In the opinion of experts, the empresa asociativa system that was chosen to administer this complex was not appropriate. They agree that it is not easy to control either supplies or the payroll. Thus, maladministration of funds and corruption have obviously been responsible for the present debt level, thereby increasing the level of frustration because part of the problem is internal.

8. In an election held in October, 1980 among the members of EACI, the so-called linea larga won by a large majority. When the elected majority called for an independent audit and inventory, they were replaced. In response to this, they declared a general strike, which lasted for about a month until the end of February. No bananas were cut and the losses to the empresa members, COHBANA, Standard Fruit and the government were substantial. In an attempt to break the impasse, the Executive Director of INA declared the ousted board of directors of the empresa, dissolved, and appointed an "interventor" to take over temporary management, get production going again, take stock of the financial situation and prepare the ground for a new elected management. At the same time, the Constituent Assembly appointed a commission of three, including a campesino leader, to investigate the situation and make recommendations for permanently defusing the situation in Isletas. In its report of January 28, the commission recommended a training program for empresa members designed to make them better aware of their rights and duties; prompt election of a new board of directors under INA supervision; joint civilian/military guarantees that the new board will be able to serve out its full term; an audit of EACI's books by the Controller General, and application of the legal requirement that EACI's general manager be bonded for the amount of L 100,000.

9. In February, INA's interventor agreed with representatives of EACI that the empresa would be divided into two, with separate administrations for the two groups in dispute with members freely transferring their residence and work areas in accordance with their respective sympathies. However, by mid-February, the Constituent Assembly expanded the special Isletas commission and the campesinos unions threatened a nationwide strike. Another transitory solution was chosen with the EACI membership reluctantly agreeing to resume work under the interventor management for three months but without dividing the enterprise.

10. In brief, with proper accountability, the financial outlook for EACI can be improved, although a "final solution" package should probably include forgiveness of part of EACI's indebtedness. The operation should be reorganized into about a dozen independent production enterprises, with the packing plant and other central services and installations managed by a second enterprise, composed of the presidents of the production units, ex-officio membership of COHBANA and/or INA and a permanent external controller/auditor appointed by the Controller General. A long term program for literacy and training in cooperative organization, accounting, and management is essential for all members and their families. For this purpose, a systematic internal information and accounting system would be helpful.

ANNEX III

AGRARIAN REFORM SETTLEMENTS IN THE SOUTHERN REGION

1. A sample survey of 15 percent of the 222 agrarian reform groups located in the Southern Region, i.e., departments of Choluteca and Valle and one municipality in the department of La Paz ^{1/} shows that the average gross land allotment of seven hectares per member of a settlement exceeds the statutory minimum of five hectares, but that "cultivable" area averaged slightly under five hectares per member. Thus, a large proportion of the land allocated to reform settlers is in use. Indeed, if double cropping of maize and sorghum is counted, and cashew plantings and pasture are added, the utilized area turns out to be equivalent to 60 percent of the total land area allotted to the groups and 131 percent of the assumed "cultivable" area.

2. Several significant phenomena appear in the preliminary analysis of the cropping pattern. Only one settlement does not grow either maize or sorghum, or both; this group had 21 members who received only 26 hectares, apparently of good quality cropland that was planted to rice and beans in 1980. Next, the average area per group of each of the basic grains appears remarkably uniform (around 25 hectares). However, this may be a coincidence given the variability of the average number of members per groups. The average area in basic grains per member ranges between one and five hectares for 79 percent of the groups. Five groups (15 percent) depended entirely on basic grains; the others grew one or more "cash" crops and/or raised cattle. Furthermore, one group had a cattle hide tannery and another planted 2,000 fruit trees. Planting of cashew trees was apparently not generally associated with serious limitations for growing other crops; the eight groups with cashew trees ranged from 0.8 hectares to 11 hectares planted with basic grains per member. Ten groups owned cattle averaging 67 head per group. Oddly, the land use data for only one of the ten cattle-raising settlements showed any pasture, while one group that owned no cattle had 160 hectares of pasture.

3. Six of the settlements grew 111 hectares of sugar cane under contract with a nearby partly Government-owned sugar mill. The mill controls directly 5,000 hectares of cane in the area, compared with 3,500 for the agrarian reform settlements and 1,500 for the private independent growers. The campesino groups complain of the mill's highhandedness in dealing with them. At harvest time, the mill arrives with its own equipment and cane cutters (it employs about 3,000 cane cutters). According to local informants, the mill management does not allow settlement members or their families to participate in the cutting, probably because it creates administrative complications. Moreover, the mill often does not meet the contractual two-week notice for cane burning in preparation for cutting; them, it refuses to accept the cane when the burning could not be done on time. Finally, the campesinos feel that cane prices and deductions for harvesting and transport are set too unilaterally and that they are not adequately represented at the factory's weighing station. Representatives of

^{1/} The survey covered 613 members, representing a population of 3,478 in 34 groups, through direct interviews. Indirect information was gathered on an additional eight groups. Field work has begun in July, 1980 and terminated about the end of the year.

campesinos organizations are reluctant to make common cause with the independent entrepreneurial cane growers for fear of being dominated by them.

4. About 40 percent of the household members were over 40 years old. This means that they presumably had one or more adult children who could be potential candidates for full membership; another 25 percent will be in that position within a few more years.

5. The survey shows that virtually no social or economic infrastructure exists outside the city of Choluteca. The road system was mostly in poor condition. Storage facilities for farm produce were completely absent. Furthermore, there were no rural health centers. Infant mortality was high as a result of lack of safe water. In addition, anopheles mosquitos have become resistant to insecticides, and 60 percent of the rural population are estimated to be infected with malaria. The poor social infrastructure observed in the reform settlements contrasts somewhat with the relatively satisfactory situation--at least as regards schools and health centers--found in some of the nearby communities.

6. Visits to two of the groups that had been included in the survey illustrated some of the problems and development potential as well as the substantial differences in social and physical conditions between groups that make certain types of generalizations rather meaningless. Both groups were composed of former day laborers earning L 0.75 per day, who had migrated from a nearby hill community in search of work or land; in both cases the privately occupied land was recovered by INA for the public domain. Familias Unidas was composed of 20 member families (out of the initial 28) that had been assigned 98 hectares of dry, sandy land near a beach in 1977, of which 86 percent is considered tractorcultivable. Carmen de los Mapachines, on the other hand, consisted of only eight members who had been granted 150 hectares in 1975, of which 27 percent is considered cultivable (20 percent by machine). The soil is poor and rainfall is unreliable.

7. The families in both groups were living, at the time of the visit, in extremely primitive huts and had no potable water supply. Also, both groups had similar poor experiences with maize growing: one good crop in five years and one in seven years, respectively. Familias lost L 6,000 in the 1980 maize crop, but they were still receiving gifts of maize from the German COHAAT aid program. Yet, even though Los Mapachines had a two-year headstart on Familias Unidas, the latter were far more advanced in many respects. In both cases, INA and other institutions have begun to take an active interest in assisting development.

8. Despite the difference in size, both groups had planted similar acreages in maize, sorghum and sesame in 1980. However, Familias Unidas in addition had about one hectare of watermelons and two hectares of cassava and assorted vegetables, as well as 92 head of cattle. Los Mapachines has no other visible source of income. No one in either group was interested in wage work off the farm.

9. Familias Unidas members asserted that their surplus in 1980/81 amounted to the equivalent of L12,000 of which L 8,000 has been distributed at the rate of L 400 per family. This appeared to be the total family cash

earnings because this group does not pay itself any daily labor advance. The housing institute--INVA--was providing technical assistance, skilled labor and L 6,000 per family (15 years at 6 percent) for new housing in accordance with the member's own design; the concrete and brick houses were nearing completion at the time of the visit. The educational level was surprisingly high; perhaps this is a clue to their relative success. The literacy rate was 73 percent. Of the 48 people over 10 years of age, 11 had finished 6th or 7th grade. One-third of the population of 100 was in school.

10. Los Mapachines tried to grow rainfed rice in 1975 and 1976 with credit from BANAFOM. The first year, the rice combine promised by the official machinery service did not arrive. They were able to harvest 2.5 hectares by hand; the remaining 17.5 hectares were lost. The next year there was not enough rain; the rice had hardly germinated before it died. By this time, they owed L 12,000 to the official agricultural bank. The group has received a L7,500 credit (10 years, no interest) from the Junta de Bienestar Social for buying nine heifers and one bull and building a milking shed for the dual-purpose cows. For this purpose, cement and lumber had arrived but the group had neither tools nor skills for using them. Though the Ministry of Natural Resources was advising on the construction, neither they nor other programs were able to fund the purchase of tools.

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Table 1.1: HONDURAS - POPULATION PROJECTIONS 1975-1985

Departments	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Total	3,093,299	3,202,324	3,318,040	3,439,017	3,563,823	3,691,027	3,820,951	3,955,116	4,092,175	4,231,567	4,372,487
Atlántida	173,332	181,219	189,039	197,080	205,464	214,102	223,023	232,325	241,934	251,814	261,972
Colón	91,555	95,821	100,136	104,567	109,154	113,864	118,674	123,661	128,785	134,023	139,369
Comayagua	159,118	164,997	171,140	177,626	184,309	191,111	198,044	205,180	212,456	219,830	227,299
Copán	175,152	179,906	184,933	190,279	195,718	201,172	206,653	212,213	217,770	223,309	228,828
Cortés	436,118	454,356	475,450	496,940	519,384	542,693	566,937	592,209	618,463	645,798	673,535
Choluteca	224,165	231,517	239,241	247,465	255,878	264,328	272,888	281,636	290,460	299,341	308,215
El Paraíso	162,966	167,900	172,990	178,312	183,766	189,265	194,840	200,564	206,383	212,214	218,058
Francisco Morazán	531,879	554,998	578,970	604,046	629,914	656,269	683,138	710,844	739,180	767,784	796,772
Gracias a Dios	24,513	25,760	27,026	28,333	29,688	31,084	32,519	34,004	35,531	37,088	38,683
Intibucá	93,822	95,838	97,950	100,203	102,476	104,728	106,963	109,223	111,468	113,677	115,836
Islas de la Banía	15,271	15,708	16,139	16,564	17,004	17,452	17,910	18,382	18,862	19,352	19,845
La Paz	75,494	76,885	78,288	79,814	81,338	82,836	84,308	85,767	87,203	88,598	89,929
Lempira	146,648	149,874	153,259	156,840	160,478	164,087	167,690	171,363	175,025	178,671	182,282
Ocotepeque	58,021	58,749	59,553	60,442	61,321	62,153	62,943	63,720	64,454	65,135	65,764
Olancho	175,761	181,546	187,511	193,753	200,189	206,775	213,525	220,613	227,309	235,139	242,593
Santa Bárbara	216,325	224,031	232,321	241,319	250,524	259,769	269,054	278,543	283,061	297,613	307,109
Valle	105,441	107,733	110,138	112,713	115,317	117,909	120,498	123,136	125,769	128,382	130,963
Yoro	227,217	235,486	243,956	252,721	261,901	271,430	281,344	291,733	302,562	313,799	325,435

Source: CONSUPLANE.

Table 1.2: POPULATION PROJECTIONS FOR MAIN POPULATION CENTERS, 1975-85

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
TOTAL	750,649	798,106	848,627	902,414	958,847	1,017,787	1,080,498	1,146,324	1,215,242	1,286,857	1,361,176
Tegucigalpa	326,534	347,495	369,831	393,633	418,633	444,749	472,610	501,861	532,519	564,416	597,512
San Pedro Sula	187,450	202,687	219,132	236,865	255,763	275,864	297,310	320,191	344,497	370,152	397,201
La Ceiba	45,355	47,184	49,085	51,041	53,005	54,955	57,050	59,150	61,248	63,313	65,371
Puerto Cortés	30,420	31,557	32,740	33,949	35,151	36,376	37,645	38,952	40,249	41,514	42,682
Choluteca	31,875	34,111	36,474	39,002	41,672	44,480	47,434	50,553	53,835	57,265	60,782
Ciudad Progreso	33,875	35,867	38,002	40,266	42,630	45,128	47,628	50,278	53,033	55,875	58,798
Tela	22,216	22,874	23,524	24,167	24,777	25,328	26,040	26,709	27,343	27,925	28,476
Danlí	12,853	13,424	14,036	14,673	15,322	15,958	16,640	17,309	17,986	18,659	19,362
Cómayagua	19,122	20,128	21,165	22,254	23,377	24,522	25,694	26,893	28,121	29,366	30,693
Copán	14,353	14,973	15,547	16,134	16,722	17,286	17,893	18,479	19,055	19,612	20,211
Juticalpa	11,582	11,908	12,254	12,598	12,925	13,193	13,549	13,848	14,121	14,361	14,509
Siguatepeque	15,014	15,898	16,837	17,832	18,870	19,948	21,005	22,101	23,235	24,399	25,579

FUENTE: CONSUPLANE

Table 1.3: HONDURAS - ECONOMICALLY ACTIVE POPULATION BY SEX AND AGE
1970-1985

	1970			1971			1972			1973			1974			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
TOTAL	777,916	666,314	111,602	800,234	683,905	116,329	823,240	702,508	120,732	848,053	722,387	125,666	874,845	743,854	130,991	904,742	767,875	136,867
10 - 14	52,974	48,820	4,154	54,498	50,179	4,319	56,164	51,667	4,497	57,931	53,244	4,687	59,772	54,884	4,888	61,761	56,630	5,131
15 - 19	120,414	102,013	18,401	123,949	105,205	18,744	128,000	108,376	19,624	132,222	111,652	20,570	136,770	115,183	21,587	141,888	119,153	22,735
20 - 24	116,566	96,320	20,246	120,846	99,591	21,255	125,942	103,521	22,421	131,614	107,885	23,729	137,584	112,461	25,123	144,150	117,563	26,587
25 - 29	102,957	85,937	17,020	104,976	87,433	17,543	106,940	88,865	18,075	109,193	90,514	18,679	112,060	92,669	19,391	115,889	95,617	20,272
30 - 34	88,164	74,407	13,757	89,880	75,713	14,167	91,582	76,994	14,588	93,396	78,349	15,047	95,427	79,881	15,546	97,794	81,689	16,105
35 - 39	73,404	63,193	10,211	75,912	64,449	11,463	77,562	65,749	11,813	79,309	67,117	12,192	81,169	68,575	12,594	83,171	70,148	13,023
40 - 44	61,549	53,146	8,403	63,025	54,275	8,750	64,335	55,424	8,911	65,816	56,624	9,192	67,395	57,906	9,489	69,110	59,304	9,806
45 - 49	50,261	43,727	6,534	51,574	44,835	6,739	52,941	45,985	6,956	54,369	47,180	7,189	55,845	48,413	7,432	57,376	49,692	7,684
50 - 54	39,457	34,580	4,877	40,631	35,594	5,037	41,857	36,651	5,206	43,134	37,748	5,386	44,458	38,882	5,576	45,827	40,052	5,775
55 - 59	29,750	26,154	3,596	30,756	27,033	3,723	31,820	27,965	3,855	32,939	28,942	3,997	34,098	29,953	4,145	35,293	30,993	4,300
60 - 64	20,121	17,892	2,229	20,875	18,557	2,318	21,685	19,273	2,412	22,541	20,029	2,512	23,437	20,821	2,616	24,366	21,641	2,725
65 - 69	12,451	11,218	1,233	12,968	11,683	1,285	13,528	12,188	1,340	14,125	12,725	1,400	14,751	13,288	1,463	15,397	13,870	1,527
70 - 74	6,446	5,825	621	6,749	6,100	649	7,078	6,400	678	7,428	6,719	709	7,799	7,056	743	8,183	7,406	777
75 and more	3,402	3,082	320	3,595	3,258	337	3,806	3,450	356	4,036	3,659	377	4,280	3,882	398	4,537	4,117	420
15 - 64 YEARS	702,643	597,369	105,274	722,424	612,885	109,739	742,664	628,803	113,861	764,533	646,040	118,493	788,243	664,744	123,499	814,864	685,852	129,012

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Table 1.3: HONDURAS - ECONOMICALLY ACTIVE POPULATION BY SEX AND AGE
1970-1985

	Total	1976		Total	1977		1978			Total	1979		1980		
		Men	Women		Men	Women	Men	Women	Men		Women	Men	Women		
TOTAL	936,505	793,248	143,257	970,508	820,415	150,093	1,006,761	849,391	157,370	1,044,433	879,353	165,080	1,083,520	910,303	173,217
10 - 14	63,804	58,443	5,361	65,969	60,365	5,604	68,458	62,602	5,856	70,560	64,446	6,114	72,597	66,221	6,376
15 - 19	147,435	123,491	23,944	153,457	128,179	25,278	159,825	133,111	26,714	166,407	138,178	28,229	173,071	143,270	29,801
20 - 24	150,102	122,012	28,090	156,137	126,473	29,664	162,389	131,065	31,324	169,004	135,922	33,082	176,116	141,162	34,954
25 - 29	120,949	99,568	21,381	127,004	104,338	22,666	133,671	109,596	24,075	140,569	115,014	25,555	147,315	120,265	27,050
30 - 34	100,362	83,657	16,705	103,053	85,721	17,332	106,073	88,049	18,024	109,631	90,812	18,819	113,936	94,180	19,756
35 - 39	85,361	71,824	13,537	87,613	73,590	14,023	89,966	75,459	14,507	92,463	77,447	15,016	95,146	79,569	15,577
40 - 44	70,988	60,839	10,149	73,002	62,488	10,514	75,118	64,220	10,898	77,299	66,002	11,297	79,505	67,798	11,707
45 - 49	58,955	51,009	7,946	60,583	52,363	8,220	62,266	53,762	8,504	64,032	55,232	8,800	65,834	56,725	9,109
50 - 54	47,249	41,265	5,984	48,731	42,525	6,206	50,250	43,816	6,434	51,825	45,154	6,671	53,361	46,448	6,913
55 - 59	36,501	32,037	4,464	37,741	33,107	4,634	39,016	34,203	4,813	40,326	35,328	4,998	41,674	36,485	5,189
60 - 64	25,334	22,496	2,838	26,345	23,391	2,954	27,389	24,314	3,075	28,454	25,253	3,201	29,528	26,196	3,332
65 - 69	16,069	14,474	1,595	16,767	15,102	1,665	17,493	15,754	1,739	18,243	16,428	1,815	19,016	17,123	1,893
70 - 74	8,585	7,770	815	9,005	8,150	855	9,442	8,545	897	9,896	8,955	941	10,364	9,378	986
75 and more	4,811	4,363	448	5,101	4,623	478	5,405	4,895	510	5,724	5,182	542	6,057	5,483	574
15 - 64 YEARS	843,236	708,198	135,038	873,666	732,175	141,491	905,963	757,595	148,368	940,010	784,342	155,668	975,486	812,098	163,388

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Table 1.3: HONDURAS - ECONOMICALLY ACTIVE POPULATION BY SEX AND AGE
1970-1985

	Total	1981		Total	1982		1983		Total	1984		Total	1985		
		Men	Women		Men	Women	Men	Women		Men	Women				
TOTAL	1,124,216	942,467	181,749	1,166,506	975,830	190,676	1,210,510	1,010,455	200,005	1,256,349	1,046,415	209,934	1,304,137	1,083,776	220,361
10 - 14	74,683	68,043	6,640	76,729	69,815	6,905	78,755	71,577	7,178	80,835	73,375	7,460	83,003	75,249	7,754
15 - 19	179,866	148,427	31,439	186,876	153,721	33,155	194,034	159,094	34,940	201,271	164,487	36,784	208,515	169,843	38,672
20 - 24	183,771	146,837	36,934	191,882	152,868	39,014	200,371	159,171	41,200	209,158	165,662	43,496	218,162	172,257	45,905
25 - 29	153,786	125,246	28,540	160,235	130,176	30,059	166,852	135,209	31,643	173,820	140,495	33,325	181,327	146,188	35,139
30 - 34	119,188	98,326	20,862	125,250	103,138	22,112	131,818	108,354	23,464	138,595	113,715	24,880	145,278	118,960	26,318
35 - 39	97,838	81,679	16,159	100,514	83,771	16,743	103,436	86,059	17,377	106,864	88,758	18,106	111,063	92,086	18,977
40 - 44	81,697	69,574	12,123	83,901	71,356	12,545	86,176	73,191	12,985	88,582	75,132	13,450	91,182	77,230	13,952
45 - 49	67,734	58,302	9,432	69,711	59,943	9,768	71,750	61,633	10,117	73,842	63,366	10,476	75,979	65,130	10,849
50 - 54	54,919	47,761	7,158	56,485	49,077	7,408	58,079	50,415	7,664	59,732	51,800	7,932	61,464	53,252	8,212
55 - 59	43,068	37,682	5,386	44,506	38,916	5,590	45,977	40,177	5,800	47,467	41,451	6,016	48,965	42,727	6,238
60 - 64	30,604	27,137	3,467	31,690	28,082	3,608	32,795	29,042	3,753	33,932	30,028	3,904	35,107	31,048	4,059
65 - 69	19,814	17,840	1,974	20,636	18,580	2,056	21,482	19,340	2,142	22,348	20,117	2,231	23,231	20,908	2,323
70 - 74	10,846	9,814	1,032	11,343	10,262	1,081	11,857	10,725	1,132	12,386	11,203	1,183	12,935	11,698	1,237
75 and more	6,402	5,799	603	6,757	6,125	632	7,128	6,468	660	7,517	6,826	691	7,926	7,200	726
15 - 64 YEARS	1,012,471	840,971	171,500	1,051,230	871,048	180,182	1,091,288	902,345	188,943	1,133,263	934,894	198,369	1,177,042	968,721	208,321

Source: CONSUPLANE

Table 1.4: RURAL POPULATION PROJECTIONS BY AGE, 1970-85

	1970	1975	1980	1985
TOTAL	1,879,195	2,097,211	2,367,280	2,635,212
0 - 4	389,034	437,012	493,124	533,150
5 - 9	301,651	346,374	391,494	439,801
10 - 14	236,350	269,313	308,450	343,206
15 - 19	181,237	201,269	228,014	252,566
20 - 24	139,906	158,407	177,082	199,077
25 - 29	122,009	128,497	151,154	171,284
30 - 34	106,668	111,364	121,277	143,263
35 - 39	91,881	97,333	104,871	114,593
40 - 44	78,085	83,769	91,564	99,383
45 - 49	64,793	70,991	77,955	85,752
50 - 54	52,429	58,286	64,961	71,468
55 - 59	40,960	46,388	52,542	58,754
60 - 64	30,101	34,755	40,016	45,445
65 - 69	20,624	24,379	28,709	33,346
70 - 74	12,905	15,618	18,916	22,538
75 - 79	7,104	8,942	11,114	13,696
80 y mas	3,458	4,544	6,037	7,890

Table 1.5: PROJECTED RURAL POPULATION^{1/}, 1975-2000

(in thousands)

	ACTUAL	ESTIMATE	PROJECTED		
	1975	1980	1985	1990	2000
<u>Rural Population by Sex</u>	<u>2,097</u>	<u>2,367</u>	<u>2,635</u>	<u>2,893</u>	<u>3,124</u>
Male	1,072	1,212	1,352	1,488	1,616
Female	1,025	1,155	1,283	1,405	1,508
<u>Percentage of Total Population</u>	<u>67.8</u>	<u>64.1</u>	<u>60.3</u>	<u>56.6</u>	<u>44.8</u>
<u>Rural Population Age Structure</u>					
0-9	783	884	973		
10-14	269	308	343		
15-64	461	1,110	1,242		
Over 64	53	65	77		
<u>Rural Labor Force</u>	<u>597</u>	<u>673</u>	<u>756</u>	<u>840</u>	<u>930</u>
10-14	54	61	68		
15-64	522	586	657		
Over 64	21	26	31		
<u>Rural Labor Force</u> <u>Population (%)</u>	<u>28.5</u>	<u>28.4</u>	<u>28.7</u>	<u>29.3</u>	<u>29.7</u>

^{1/} Based on a one-third decline of the total fertility rate.

Source: CONSUPLANE and Bank estimates

Table 1.6: RURAL WORKING FORCE, 1974

(in thousands)

Occupation	Agriculture Cattle Forestry	Artisans	Blue Collar Workers	Other	Total
Employers	35	2	-	2	39
Self-employed	189	20	-	8	217
of which: <u>1/</u>					
Farmers less than 3 has	101	-	-	-	101
Farmers 3 to 4 has	24	-	-	-	24
Farmers 5 to 20 has	48	-	-	-	48
Farmers 20 to 50 has	15	-	-	-	15
Wage earners	134	12	9	26	181
Non-renumerated family workers	103	3	-	1	107
Other	-	-	-	5	5
TOTAL	<u>461</u>	<u>37</u>	<u>9</u>	<u>42</u>	<u>549</u>

1/ May include some employers

Source: 1974 Population and Agricultural Censuses, Anuario Estadístico, 1975.

Table 1.7: ANNUAL POPULATION GROWTH RATES BY DEPARTMENTS
1961 - 74

(in percentages)

Departments	Total	Urban	Rural
<u>In-Migration</u>			
Gracias a Dios	4.89	-	4.89
Cortes	4.65	5.72	3.52
Colon	4.56	5.20	4.48
Atlantida	3.54	3.04	3.88
Francisco Morazan	3.50	5.11	1.15
Yoro	3.04	4.64	2.58
<u>Out-migration</u>			
Ocotepeque	0.20	1.15	0.38
La Paz	0.58	2.79	0.26
Intibuca	0.85	2.34	0.70
Valle	0.90	4.36	0.24
Lempira	1.02	2.52	1.00
Copán	1.39	3.64	0.96
Santa Barbara	1.77	0.47	1.91
Choluteca	1.94	4.85	1.41
El Paraiso	2.11	3.39	1.90
<u>Equilibrium</u>			
Islas de la Bahia	2.96	2.39	3.21
Comayagua	2.59	3.62	2.25
Olancho	2.41	3.63	2.19
<u>Country</u>	<u>2.61</u>	<u>4.58</u>	<u>1.85</u>

Source: CONSUPLANE, Taller de Poblacion, 1980

Table 1.8: Population and Agricultural Regions^{1/}

(1974)

Region	Area (%)	Actual Farm Land (%)	Valley Land ^{2/} (%)	Population (%)	Population Density (per km ²)	Population per Valley Land (per km ²)
West	16	35	3	23	35	2,030
Central	13	18	11	24	45	341
North-Central	13	5	4	7	13	148
South	4	10	8	9	50	179
Northwest	9	18	18	22	61	177
South-Central	19	8	15	6	7	58
North	8	5	16	8	24	65
East	18	1	25	1	1	5
Total	100	100	100	100		

^{1/} Although the figures are somewhat older, they illustrate the interrelations of population, area, and farm land.

^{2/} Less than 20 percent gradient.

Source: Caceres, Manuel A. Regionalización Agrícola de Honduras, IICA, 1970.

Table 2.1: HONDURAS: LAND USE INTENSITY AND ANNUAL CROPS SHARE BY FARM SIZE, 1974
(in percentages)

Farm Size	In Pastures ^{1/}	Cultivated ^{2/}	Cultivated Area in Annual Crops
Less than 1 hectare	1.5	97.4	88.0
1 to less than 2 hectares	4.2	91.2	82.5
2 to less than 5 hectares	14.2	72.8	67.6
5 to less than 10 hectares	26.9	52.4	53.3
10 to less than 20 hectares	36.8	39.6	46.4
20 to less than 50 hectares	49.0	27.4	41.1
50 to less than 100 hectares	60.9	19.4	40.8
100 to less than 1,000 hectares	70.5	12.8	40.9
1,000 to less than 2,500 hectares	69.8	0.9	24.0
Over 2,500 hectares	<u>43.3</u>	<u>0.9</u>	<u>9.8</u>
Total	51.3	27.3	51.0

^{1/} Natural, improved and cultivated pastures.

^{2/} Crops and fallow land.

Source: Agricultural Census, 1974.

Table 2.2 HONDURAS: CROP DISPOSITION BY FARM SIZE, 1976

(Percentages)

Farm size (hectares)	Marketed	Farm Consumption	Family Consumption	Rent Payment
0.6 - 1	14.0	11.3	73.4	1.3
1 - 2	18.6	9.4	70.7	1.3
2 - 3	36.1	8.4	54.5	1.0
3 - 5	43.7	7.5	48.2	.4
5 - 20	49.5	7.9	42.4	.2
20 - 35	42.1	8.4	49.5	.0
TOTAL	38.9	8.4	52.1	.6

Source: USAID, Agricultural Sector Assessment of Honduras, Annex K

Table 2.3: HONDURAS: CROP DISPOSITION BY REGION, 1976

(Percentages)

Region	Marketed	Farm Consumption	Family Consumption	Rent Payment	Total
Sur	42.8	10.5	46.4	.3	100.0
Oriente	57.8	3.8	37.9	.5	100.0
Norte	50.2	8.5	41.2	.1	100.0
Centro Oriental	24.6	8.2	66.1	1.1	100.0
Gen. Occidental	28.5	10.9	60.4	.2	100.0
Occidente	22.9	9.1	56.6	1.4	100.0
Total	38.9	8.4	52.1	.6	100.0

Source: USAID, Agricultural Sector Assessment of Honduras, Annex K.

Table 2.4: SMALL AND MEDIUM SIZE FARM INCOME BY SOURCES, 1976

(in lempiras and percentages)

Farm size (in hectares)	Total net income	Family labor		Farm surplus		Outside income	
		Amount	%	Amount	%	Amount	%
0-2	896	219	25	209	23	468	52
2-3	1,199	326	27	378	32	495	41
3-5	1,284	419	33	396	31	468	37
5-10	2,161	554	26	1,041	48	566	26
10-20	2,384	587	25	1,375	58	422	18

Source: USAID, INVEST, ATAC Expanded Survey of the Rural Poor in Honduras.

Table 2.5. HONDURAS: NET FARM INCOME BY FARM SIZE, 1976

Farm Size (hectares)	Farm <u>1/</u> Surplus (US\$)	Origin of Income (%)			
		Crops	Livestock	Forestry	and Other
0-2	105	73	25		2
2-3	189	67	28		5
3-5	198	58	31		11
5-10	521	69	30		1
10-20	687	56	40		4

1/ Excluding family labor income.

Source: ATAC Survey (Revised)/INVEST.

Table 2.6: HONDURAS: SOURCES OF FARM INCOME, 1976
(in percentages)

Farm Size (in hectares)	Farm Income	Outside Income	Total	Total Net Income <u>1/</u> (US\$)
0-2	61.5	38.5	100.0	448
2-3	72.4	27.6	100.0	600
3-5	76.3	23.7	100.0	642
5-10	84.9	15.1	100.0	1,081
10-20	90.4	9.6	100.0	1,192

1/ Including family labor imported income.

Source: ATAC Survey (Revised)/INVEST.

Table 2.7: HONDURAS: SMALL FARMS RELATIVE LEVELS OF INCOME BY REGION, 1976 (indices) 1/

Region	Less than 2 Hectares	2-3 Hectares	3-5 Hectares
Atlantic Littoral <u>2/</u>	100	100	100
North	45	68	79
West Central	32	67	71
Northeast	32	69	61
South	32	102	104
West	22	77	88
East Central	20	67	72

1/ Atlantic littoral income equals 100.

2/ Farmers in the Atlantic littoral region in the 2-3, 3-5 hectares group earn only about 49 percent and 55 percent of the income of the farmers with less than 2 hectares because of non-farm incomes.

Source: ATAC Survey (revised)/INVEST.

Table 2.8: HONDURAS: SMALL FARMS RELATIVE LEVELS OF FARM INCOME, 1976 (indices) 1/

Region	Less than 2 ha	2-3 ha	3-5 ha
Atlantic Littoral	100	100	100
North	29	78	120
West Central	61	99	80
Northeast	34	86	89
South	36	108	120
West	31	107	120
East Central	27	74	91

1/ Atlantic Littoral income equals 100.

Source: ATAC Survey (revised)/INVEST.

Table 2.9: HONDURAS: LABOR UTILIZATION BY FARM SIZE, 1976
(in man-days per farmer per year)

Farm Size (hectares)	Work in Farm	Work outside Farm	Total	% Outside Farm	% of Available Man-days ^{1/}
0-2	73	85	158	54	69
2-3	109	66	175	38	76
3-5	140	46	186	25	81
5-10	185	32	217	15	94
10-20	196	27	223	12	97
20-35	222	5	227	2	99

^{1/} Assuming that available man-days are about 230 per year. This is a lower number than the usual norm of 260 man-days per year which assumes a five-day week over the whole year considered typical for a more urbanized labor force. Estimates of excess labor will depend significantly on the standard applied, which must be reasonable for the special characteristics of agricultural production.

Source: ATAC Survey (Revised), INVEST.

Table 2.10: HONDURAS: TECHNICAL ASSISTANCE BY FARM SIZE, 1976
(Percentages)

Farm Size (hectares)	Technical Assistance Received	No Technical Assistance	Unreported	Total
0.6 - 1	6.6	91.7	1.7	100.0
1 - 2	6.5	93.5	0.0	100.0
2 - 3	11.0	88.1	.9	100.0
3 - 5	9.5	89.2	1.3	100.0
5 - 20	11.7	87.1	1.2	100.0
20 - 35	22.4	76.1	1.5	100.0

Source: USAID, Agricultural Sector Assessment of Honduras, Annex K

Table 2.11: HONDURAS: EDUCATIONAL LEVEL OF FARMERS BY REGION, 1976
(Percentages)

Region	Secondary	Primary (6 years)	Literate	Illiterate	Total
South	1.9	3.0	50.5	44.6	100.0
East	1.6	7.9	45.3	45.3	100.0
North	0.9	8.4	50.3	50.3	100.0
East Central	0.3	2.3	39.0	58.4	100.0
West Central	3.3	11.7	59.2	25.8	100.0
West	0.6	6.1	47.4	45.9	100.0
TOTAL	1.4	6.4	48.3	43.8	100.0

Source: Agricultural Sector Assessment of Honduras, Annex K

Table 2.12: HONDURAS: EDUCATIONAL LEVEL OF FARMERS BY FARM SIZE, 1976
(Percentages)

Farm size (hectares)	Secondary	Primary (6 years)	Literate	Illiterate	Total
0.6 - 1	0	5.8	38.8	55.4	100.0
1 - 2	1.8	3.5	40.5	54.3	100.0
2 - 3	0.9	6.9	47.2	45.1	100.0
3 - 5	1.1	6.1	51.5	41.4	100.0
5 - 20	1.9	7.3	51.4	39.3	100.0
20 - 35	0.0	9.0	56.7	34.3	100.0
TOTAL	1.4	6.4	48.4	43.8	100.0

Source: Agricultural Sector Assessment of Honduras, Annex K

Table 3.1: HONDURAS LAND REDISTRIBUTION BY PEASANT ORGANIZATION

Agrarian Reform Regions	ANACH			UNC			FECORAH			INDEPENDENTS			TOTAL		Land Granted Per Member Has.	
	Camp. Groups	Members	Land Granted Has.	Camp. Groups	Members	Land Granted Has.	Camp. Groups	Members	Land Granted Has.	Camp. Groups	Members	Land Granted Has.	Camp. Groups	Members		Land Granted Has.
Atlantic Litoral	98	2,259	17,867	12	186	1,089	57	2,538	32,741	41	2,253	13,244	208	7,236	64,941	9.0
Northern	189	6,043	23,475	116	3,135	13,844	36	1,582	9,876	69	1,987	9,408	410	12,747	56,603	4.5
Western	68	2,324	8,913	46	953	1,663	4	119	610	20	568	1,802	138	3,964	12,988	3.3
Central (Comayagua)	47	1,253	6,049	44	1,151	10,725	1	42	319	14	517	3,307	106	2,963	20,400	6.9
South	66	1,259	6,663	74	1,808	9,277	51	987	7,039	31	780	3,578	222	4,834	26,557	5.5
East Central	50	1,156	7,407	9	165	921	4	129	1,153	45	1,016	10,501	108	2,466	19,982	8.1
Olancho	42	634	2,786	49	657	4,374	5	87	381	9	122	1,071	105	1,500	8,612	5.7
TOTAL	560	14,928	73,160	350	8,055	41,893	158	5,484	52,119	229	7,243	42,911	1,297	35,710	210,083	5.9

Source: Instituto Nacional Agrario. Annual Operating Plan, 1980

Table 3.2 : HONDURAS - AGRARIAN REFORM "CONCENTRATION" PROJECTS, DECEMBER 1978

Name of Project	Department	Number of Groups	Number of Members	Land Allotment		Cult. per Member	Proportion Cultivable
				Total	Cultivable		
				----- Hectares -----			-- percent--
Bajo Aguan	Atlantida	81	4,762	47,485	47,485	10.0	100
La Masica	Atlantida	61	1,080	7,266	6,475	6.0	89
Puerto Arturo	Atlantida	28	526	4,223	3,459	6.6	82
Tabaco	Cortes	19	667	2,214	1,580	2.4	71
Guaymas	Cortes	53	1,546	6,523	5,746	3.7	88
San Manuel	Cortes	31	938	5,705	5,379	5.7	94
San Bernardo	Choluteca	82	2,222	11,830	8,769	4.0	74
Ola-Monjaras	Choluteca	27	508	2,736	2,396	4.7	88
Jamastran	El Paraiso	9	181	1,943	1,598	8.8	82
TOTALS		391	12,430	89,925	82,887	6.7	92
		===	=====	=====	=====	=====	=====

a/ According to group's appraisal.

Source: INA "Resumen de Datos Generales del Sector Reformado, December 1978." No breakdown available of 1979 total of 12,652 members in 403 groups on 92,838 has.

Table 3.3: LOWER AGUAN VALLEY DEVELOPMENT
(as of June 1, 1980)

CATEGORIES	TARGETS		ACTUAL RESULTS		% REALIZED	
	Stage II	1/S.I+II	Stage II	S.I+II	Stage II	S.I+II
<u>Land (Ha) Cultivated With:</u>						
African Palm	6,000	10,500	7,305	9,820	121.0	96.7
Citrus Fruits	1,870	2,000	1,674	1,804	89.5	89.9
Basic Grains ^{2/}	25,200		13,605		53.9	
Land Cleared	7,200		13,522	41,049	187.8	
Of which: cultivable				(32,944)		
cultivated				(15,094)		
<u>Number of Cooperatives</u>		70		69		98.6
Number of Families	3,000	6,000	557	2,761	18.4	46.0

^{1/} Stage I is from 1975 to mid-1977
Stage II is from mid-1977 to mid-1982

^{2/} These figures are the sum of the cultivated area for each year.
The actual number of hectares cultivated with basic grains is 2,375.

Source: IDB

Table 3.4: HONDURAS - AGRARIAN REFORM PRIORITY VALLEYS, 1978

VALLEY	DEPARTMENT	AREA (Hectares)
Sula	Cortes and Yoro	230,500
Aguan: Upper	Yoro	30,500
Middle	Yoro	45,700
Lower	Colon	138,700
Total		214,450
Atlantic Coast and Lean Valley	Atlantida, Colon Yoro	107,400
Guayape	Olancho	99,200
Choluteca	Choluteca	120,000
Agalta	Olancho	56,700
Comayagua	Comayagua and La Paz	49,500
Nacaome and Amates Coast	Valle	36,400
Jamastrán	El Paraiso	17,940
Quimistán	Santa Barbara	28,200
Paulaya and Sico	Colon	27,750
Talanga	Fco. Moarazán	26,800
Siria	Fco. Moarazán	20,200
Patuca	Olancho	17,600
La Entrada	Copan	16,200
Cuyamel	Cortes	15,300
Naco	Sta. Barbara and Cortes	12,900
Sensenti	Ocotepeque	5,000
Nueva Ocotepeque	Ocotepeque	6,000
El Negrito	Yoro	9,400
Morazan	Yoro	7,300
Zamorano	Fco. Morazan	4,300
San Juan de Flores	Fco. Morazan	2,000
Moroceli	El Paraiso	12,000
Lepaguare	Olancho	13,200
Azacualpa-Guayambre	Olancho	15,400
Gualaco	Olancho	6,300
Guarabuquí	Fco. Morazan	2,075
Yoro	Yoro	30,400
Jalán	El Paraiso	2,250
Villa San Francisco	Fco. Morazan	5,100
Jesus de Otoro and Masaguara	Intibucá	14,400
Salvadoran border area	La Paz	7,600
	TOTAL	1,239,765

Source: Programa del Catastro Nacional, unpublished data.

Table 3.5: HONDURAS - AREA AND PRODUCTION TARGETS FOR SPECIFIC CROPS IN REFORM SECTOR, 1980

Crop	Reform Sector		Percent of Total Sector	
	Area (1000 has)	Production (1000 M.T.)	Area %	Production %
Maize	47.3	81.2	15	30
Rice	4.0	10.9	24	41
Beans	4.5	5.3	7	12
Sorghum	<u>1.0</u>	<u>1.4</u>	<u>2</u>	<u>3</u>
All basic grains	56.8	98.8	12	20
Sesame	1.9	1.5	n.a.	n.a.
Cotton	3.3	5.3	27	21
Yuca and Potatoes	0.5	2.8	n.a.	4
Tobacco	0.3	0.7	5	8
Sugar cane	1.3	87.5	2.6	30.3
Banana ^{1/}	2.0	95.0	10	7
Plantain	1.0	855.0	n.a.	1
Citrus	1.4	2.8	n.a.	5
African Palm	2.9	29.6	39	46
Cashew	2.5	-	100	-
Coffee and Cacao	1.1	-	1	-
Total Crops	75.0	-	-	-

1/ Including Isletas production.

Sources: INA Plan Operativo y Presupuesto 1980, Table 3, and Central Bank.

TABLE 3.6: CROP TARGETS FOR THE REFORM SECTOR, 1980

	<u>IMPROVED TECHNOLOGY</u>		<u>TRADITIONAL TECHNOLOGY</u>		<u>TOTAL</u>	
	Area (Has.)	Production (Metric Tons)	Area (Has.)	Production (Metric Tons)	Area (Has.)	Production (Metric Tons)
Basic Grains	26,165.0	-	30,666.0	-	56,831	-
Corn	21,178.0	42,402	26,120.0	38,755	47,298	81,157
Rice	2,846.0	8,130	1,178.0	2,806	4,024	10,936
Beans	1,419.0	1,179	3,049.0	4,079	4,468	5,258
Sorghum	722.0	1,162	319.0	211	1,041	1,373
Annual Crops	6,821.0	-	328.0	-	7,149	-
Yuca	66.0	1,197	302.0	4,256	368	5,453
Potatoes	128.0	1,741	-	-	128	1,741
Chile	166.0	1,073	-	-	166	1,073
Vegetables	245.0	-	7.0	520	252	520
Soya	84.0	125	-	-	84	125
Watermelon	363.0	726,000	14.0	28,000	377	754,000
Melon	300.0	192,771	-	-	300	192,771
Pineapple	21.0	693	5.0	50	26	743
Sesame	1,850.0	1,480	-	-	1,850	1,480
Tobacco	294.0	705	-	5	294	710
Cotton	3,304.0	5,349	-	-	3,304	5,349
Semi Permanent Crops	1,530.0	-	872.0	-	2,402	-
Plantains	225.0	259,349	810.0	595,750	1,035	855,099
Bananas	48.0	874	-	-	48	874
Sugar Cane	1,257.0	84,755	62.0	2,732	1,319	87,487
Permanent Crops	7,650.0	-	269.0	-	7,919	-
Coffee	292.0	-	172.0	-	464	-
Cacao	560.0	-	93.0	-	653	-
Citrus	1,373.0	2,793	4.0	-	1,377	2,793
Cashew	2,501.0	-	-	-	2,501	-
African Palm	2,900.0	29,579	-	-	2,900	29,579
Tropical Fruits	24.0	-	-	-	24	-
TOTAL	42,166.0	-	32,135	-	74,301	-

Source: INA, Plan Operativo Anual y Presupuesto, 1980

Table 3.7: RELATIONSHIP OF LAND AREA TO CROPS SEEDED BY REFORM GROUP, 1980

	Affiliation				TOTAL
	ANACH	FECORAH	UNC	INDE.	
(in percentages of total area)					
A. ANNUAL CROPS					
1. Corn	64.0	37.7	53.0	64.2	53.5
2. Sorghum	3.3	0.6	12.3	3.7	4.2
3. Beans	5.1	1.0	2.0	1.7	2.5
4. Rice	14.5	4.4	9.9	14.1	10.3
5. Sesame	0.1	-	0.6	0.1	0.1
6. Cotton	2.9	13.3	5.1	10.1	8.1
7. Yucca	0.2	0.1	0.2	0.2	0.3
8. Watermelon	0.4	0.1	0.1	0.3	0.1
9. Melon	0.1	-	0.1	0.3	0.2
10. Others	<u>0.5</u>	<u>0.4</u>	<u>0.2</u>	<u>0.3</u>	<u>0.3</u>
TOTAL A	91.1	57.6	83.5	95.0	79.6
B. PERMANENT CROPS					
1. Banana	1.7	10.6	0.1	-	4.-
2. Plantain	2.5	6.5	0.3	0.7	3.0
3. Coffee	0.5	-	0.2	0.2	0.1
4. Sugar Cane	0.7	10.8	0.2	2.8	4.3
5. African Palm	-	12.0	-	-	3.9
6. Cashew	0.6	0.6	1.6	1.2	0.8
7. Pineapple	-	-	0.1	-	0.2
8. Citrus	0.3	0.9	-	-	0.4
9. Others	<u>2.6</u>	<u>1.0</u>	<u>14.0</u>	<u>0.1</u>	<u>3.7</u>
TOTAL B	<u>8.9</u>	<u>42.4</u>	<u>16.5</u>	<u>5.0</u>	<u>20.4</u>
TOTAL	100.0	100.0	100.0	100.0	100.0

Source: INA

Table 3.8: HONDURAS - SELECTED INDICATORS OF 34 AGRARIAN REFORM SETTLEMENTS
SURVEYED IN THE SOUTHERN REGION

		<u>L A N D U S E</u>				
		<u>AGGREGATE</u>	<u>AVERAGE PER MEMBER</u>			
TOTAL NUMBER OF MEMBERS	613					
AVERAGE PER SETTLEMENT	18.3					
<u>AGE DISTRIBUTION (%)</u>						
Less than 20 years	8.8	TOTAL LAND				
21 - 25 "	14.7	ALLOTMENT, HAS	4,370		7.1	
26 - 30 "	11.8	CULTIVABLE, HAS	2,011		4.7	
31 - 40 "	25.0	%	46			
41 - 50 "	17.5	CULTIVATED, ^{1/} HAS	1,720		2.8	
51 years and older	22.2	% of				
		cultivable area	85			
Total	100.0	<u>CROPPING PATTERN</u>	<u>HAS</u>	<u>%</u>	<u>NO. OF GROUPS</u>	<u>AVERAGE PER GROUP (Has)</u>
TOTAL POPULATION	3,478	Maize ^{2/}	717	31.1	29	24.7
AVERAGE PER MEMBER		Sorghum ^{2/}	509	22.1	21	24.2
HOUSEHOLD	5.7	Rice	147	6.4	6	24.5
		Beans	130	5.9	5	26.0
		Sesame	151	6.6	13	11.6
		Sugar Cane	111	4.8	6	18.5
		Watermelon	8	0.4	3	2.7
		Melon	50	2.2	5	10.0
		Cashew Trees	235	10.2	8	29.4
		Pasture	237	10.3	2	118.5
		TOTAL	2,295	100.0		
		Cattle, No.	669		10	67

^{1/} Annual crops and sugarcane, physical area.

^{2/} Approximately 345 members double-cropped.

Source: Computed from preliminary tabulations of INA Sample Survey of 1980.

TABLE 3.9: HONDURAS: PERSONNEL OF THE AGRARIAN REFORM INSTITUTE, 1981

SPECIALTY	AREA OF ASSIGNMENT				Total
	Management ^{1/}	Land Acquisition and Administration	Settlements "Consolidation"	Concentration Projects	
Lawyers	46	11		2	59
Public Administrators	10			3	13
Economists	26			3	29
Auditors	5			1	6
Ingen. Agron.	9	2	2	62	75
Agronomos	3	36	7	66	112
Veterinarians				1	1
Architects and Engineers	1	15		3	19
Journalists	2				2
Nutritionists, nurses, teachers				5	5
"Other middle level"	85	68	255 ^{2/}	196 ^{2/}	604
Sub-total	187	132	264	342	925
Other personnel					1,036
Total					1,961

^{1/} Includes regional headquarters staff.

^{2/} Presumably mostly field promotores.

Source: INA, unpublished data.

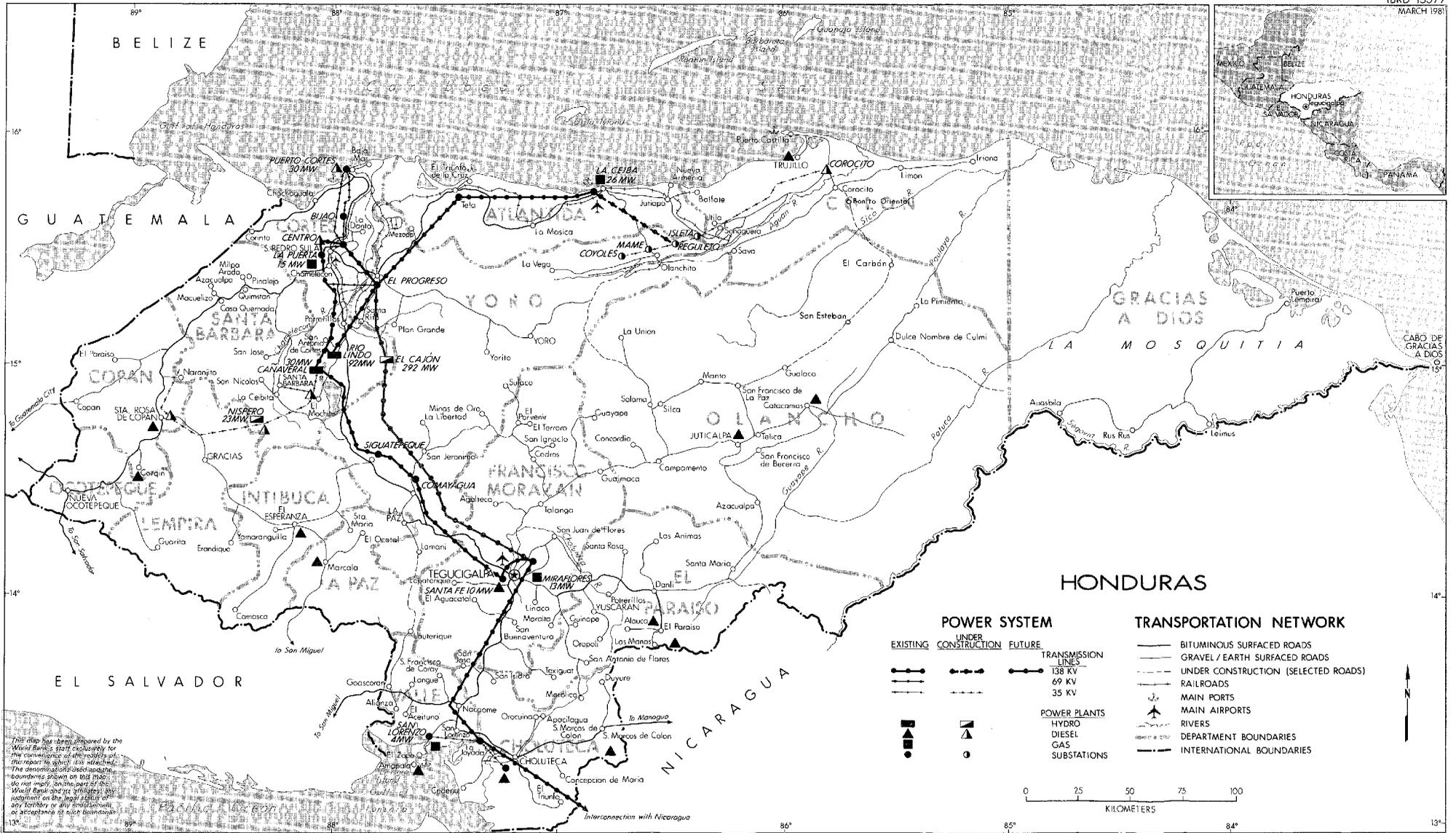
Table 3.10: HONDURAS: OFFICIAL SUPPORT, AVERAGE ANNUAL WHOLESALE,
AND CIF IMPORT PRICES OF BASIC GRAINS, 1973/74 TO 1979/80
(Lempiras per quintal)

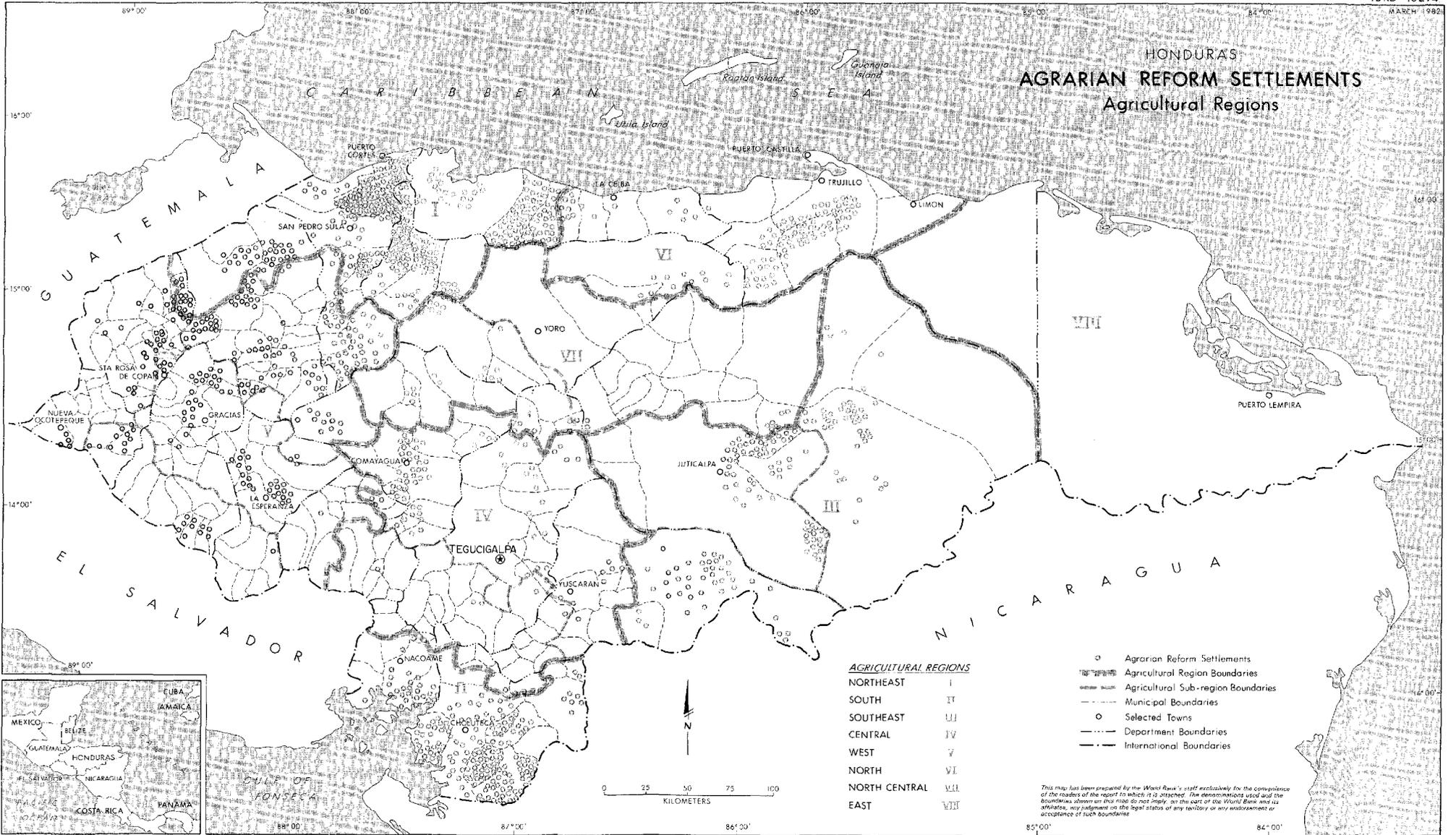
<u>Y e a r</u>	<u>M a i z e</u>			<u>B e a n s</u>			<u>R i c e</u>		
	<u>Support</u>	<u>Wholesale</u>	<u>Import^{1/}</u>	<u>Support</u>	<u>Wholesale</u>	<u>Import^{1/}</u>	<u>Support^{2/}</u>	<u>Wholesale</u>	<u>Import^{1/}</u>
1973/74	6.75	8.11	30	15.00	24.65	--	18.64	28.00	45
1974/75	8.00	12.52	14	20.00	24.75	23	22.31	38.59	36
1975/76	14.00	11.67	37	20.00	25.87	--	26.15	40.42	42
1976/77	10.00	16.20	11	24.00	30.81	45	24.62	43.38	22
1977/78	11.25	16.44	11	24.00	43.79	--	29.23	50.75	28
1978/79	12.50	13.63	15	28.00	29.71	68	32.31	55.82	23
1979/80	13.75	17.94	14	38.00	64.17	73	35.38	62.68	36

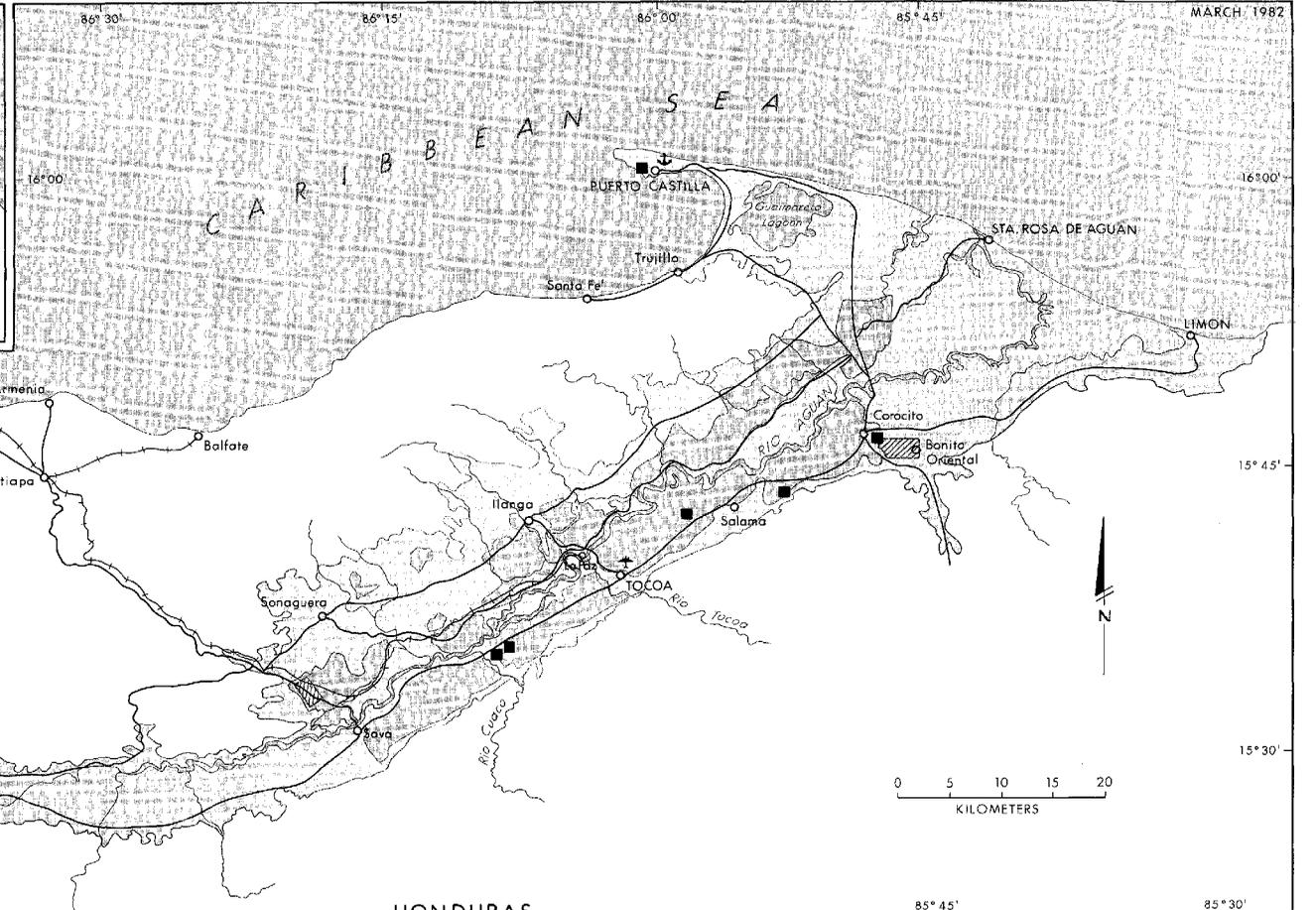
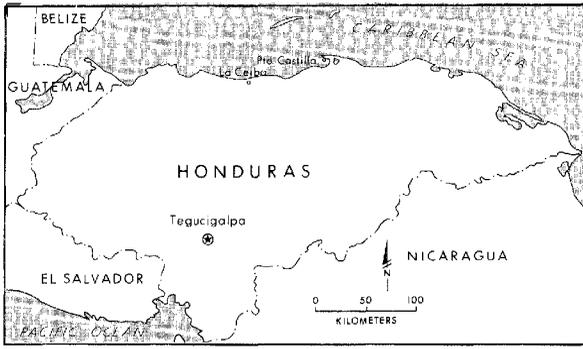
1/ Calendar year 1974, etc. Quantity imported divided by value imported, rounded to nearest Lempira.

2/ Price for paddy rice

Source: IHMA, unpublished data and DGEC, Comercio Exterior.

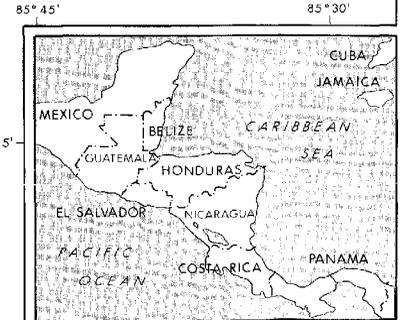






HONDURAS LOWER AGUAN VALLEY

- | | |
|---|--|
|  LOWER AGUAN VALLEY AREA |  MAIN PAVED ROAD |
|  AGRICULTURAL AREAS |  ALL-WEATHER ROADS |
|  INDUSTRIAL SITES |  RAILROADS |
|  INDUSTRIAL AREAS |  AIRPORTS |
| |  PORTS |
| |  RIVERS |
| |  INTERNATIONAL BOUNDARIES |



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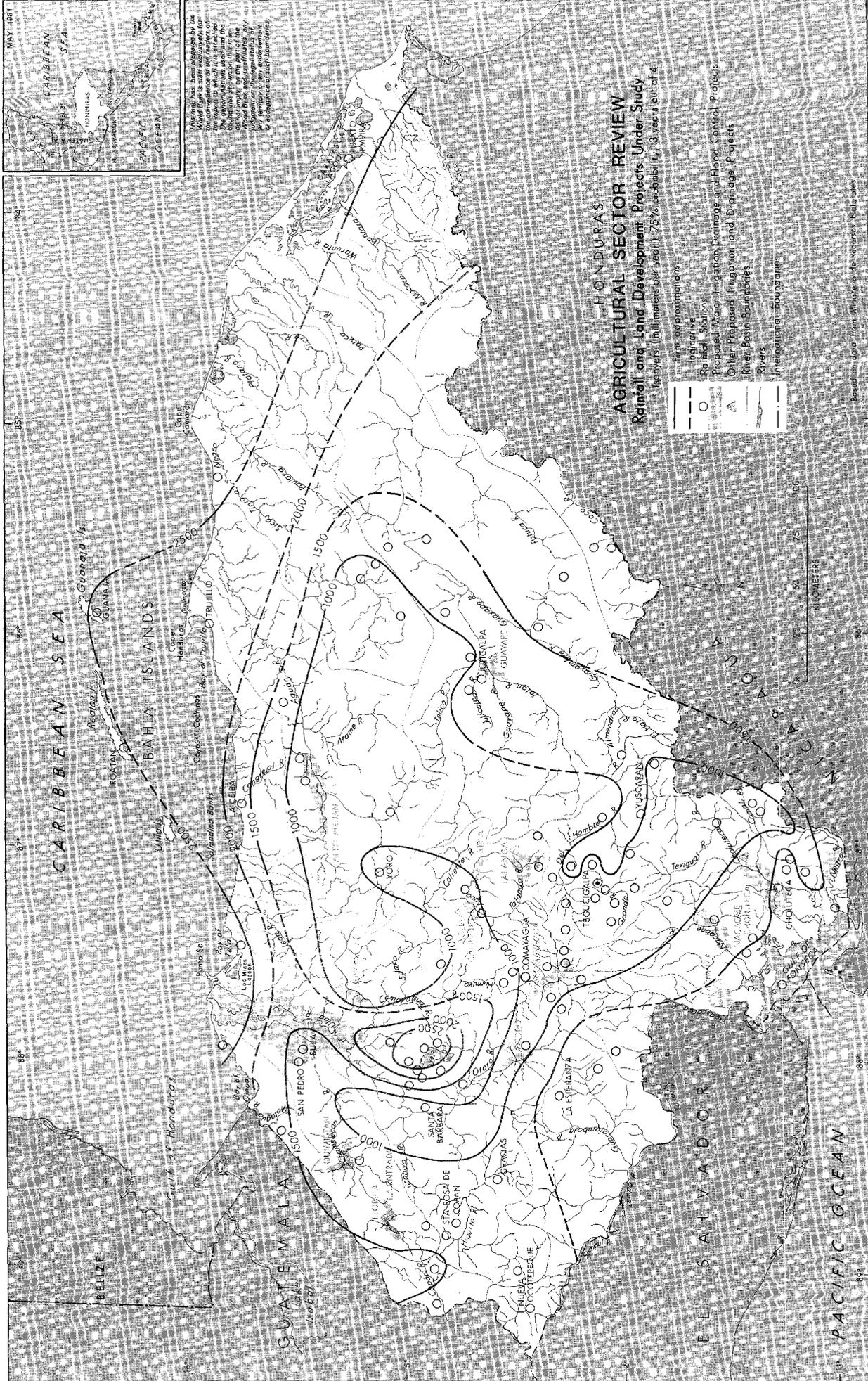
87° 00'

86° 45'

86° 30'

86° 15'

86° 00'

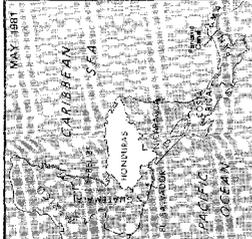


HONDURAS
AGRICULTURAL SECTOR REVIEW
Retail and Land Development Projects Under Study

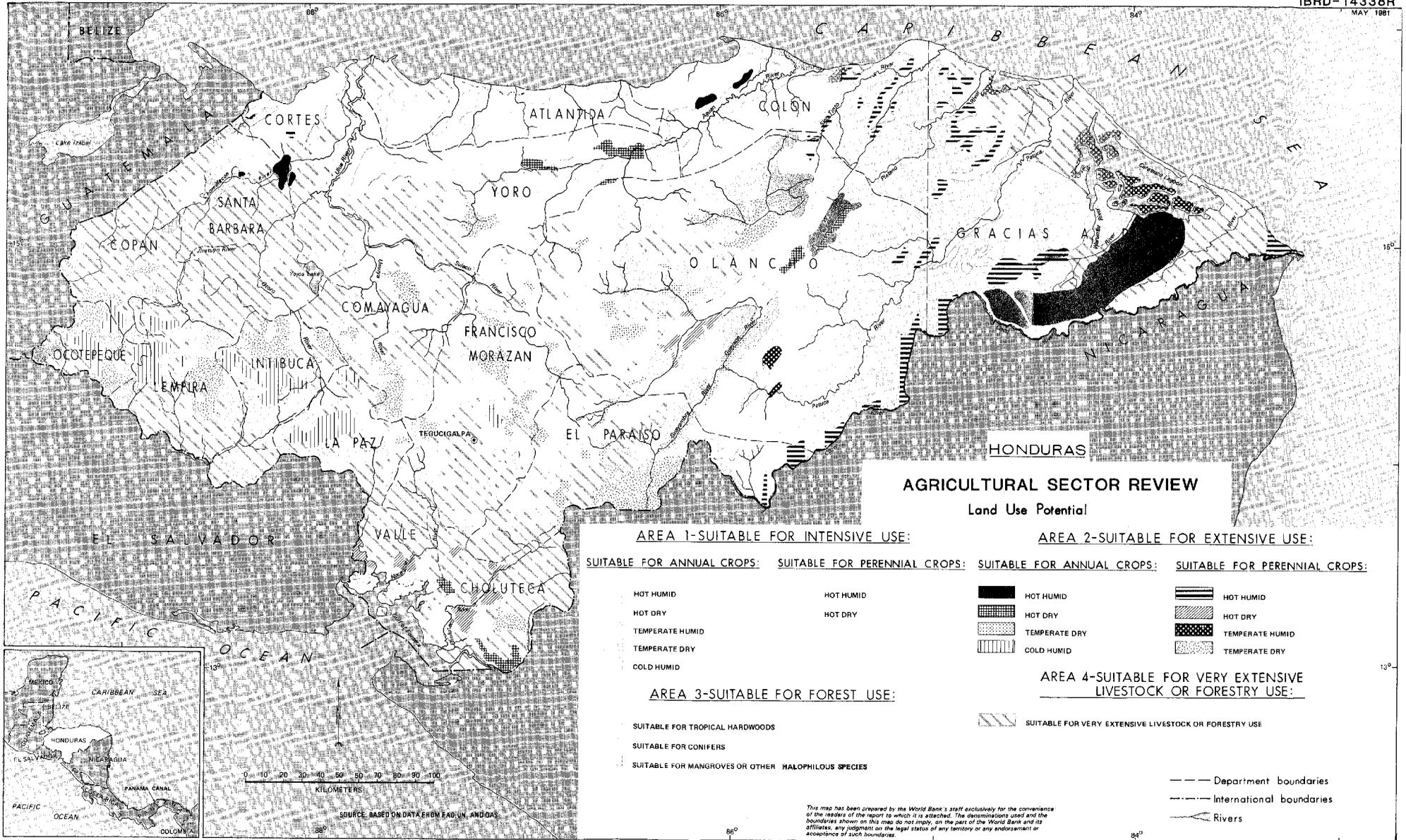
Isobars (millimeters per year): 75% probability, 3 years out of 4

- 1:500,000 approximate
- Indicative
- Retail Station
- Proposed Water Irrigation Canals and Flood Control Projects
- Other Proposed Irrigation and Drainage Projects
- River Basin Boundaries
- Rivers
- Interpolation Isohyets

Procedencia: datos de la Oficina de Estudios de Recursos Naturales



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AGRICULTURAL SECTOR REVIEW
Land Use Potential

AREA 1-SUITABLE FOR INTENSIVE USE:

- SUITABLE FOR ANNUAL CROPS: SUITABLE FOR PERENNIAL CROPS:
- HOT HUMID
 - HOT DRY
 - TEMPERATE HUMID
 - TEMPERATE DRY
 - COLD HUMID

AREA 2-SUITABLE FOR EXTENSIVE USE:

- SUITABLE FOR ANNUAL CROPS: SUITABLE FOR PERENNIAL CROPS:
- HOT HUMID
 - HOT DRY
 - TEMPERATE HUMID
 - TEMPERATE DRY

AREA 3-SUITABLE FOR FOREST USE:

- SUITABLE FOR TROPICAL HARDWOODS
- SUITABLE FOR CONIFERS
- SUITABLE FOR MANGROVES OR OTHER HALOPHILIOUS SPECIES

AREA 4-SUITABLE FOR VERY EXTENSIVE LIVESTOCK OR FORESTRY USE:

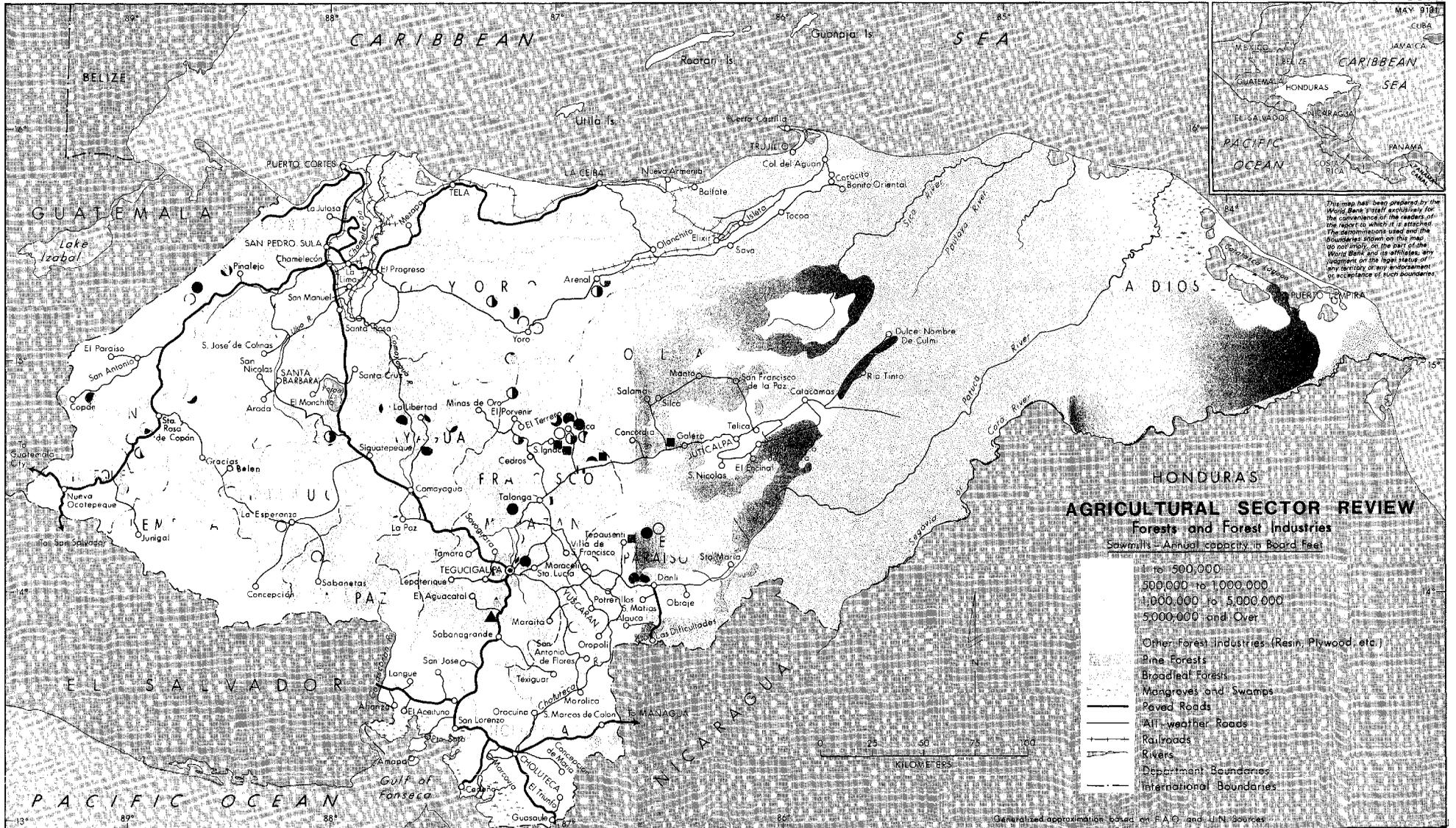
- SUITABLE FOR VERY EXTENSIVE LIVESTOCK OR FORESTRY USE

- Department boundaries
- International boundaries
- Rivers

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SOURCE: BASED ON DATA FROM FAG, UN, AND OAS

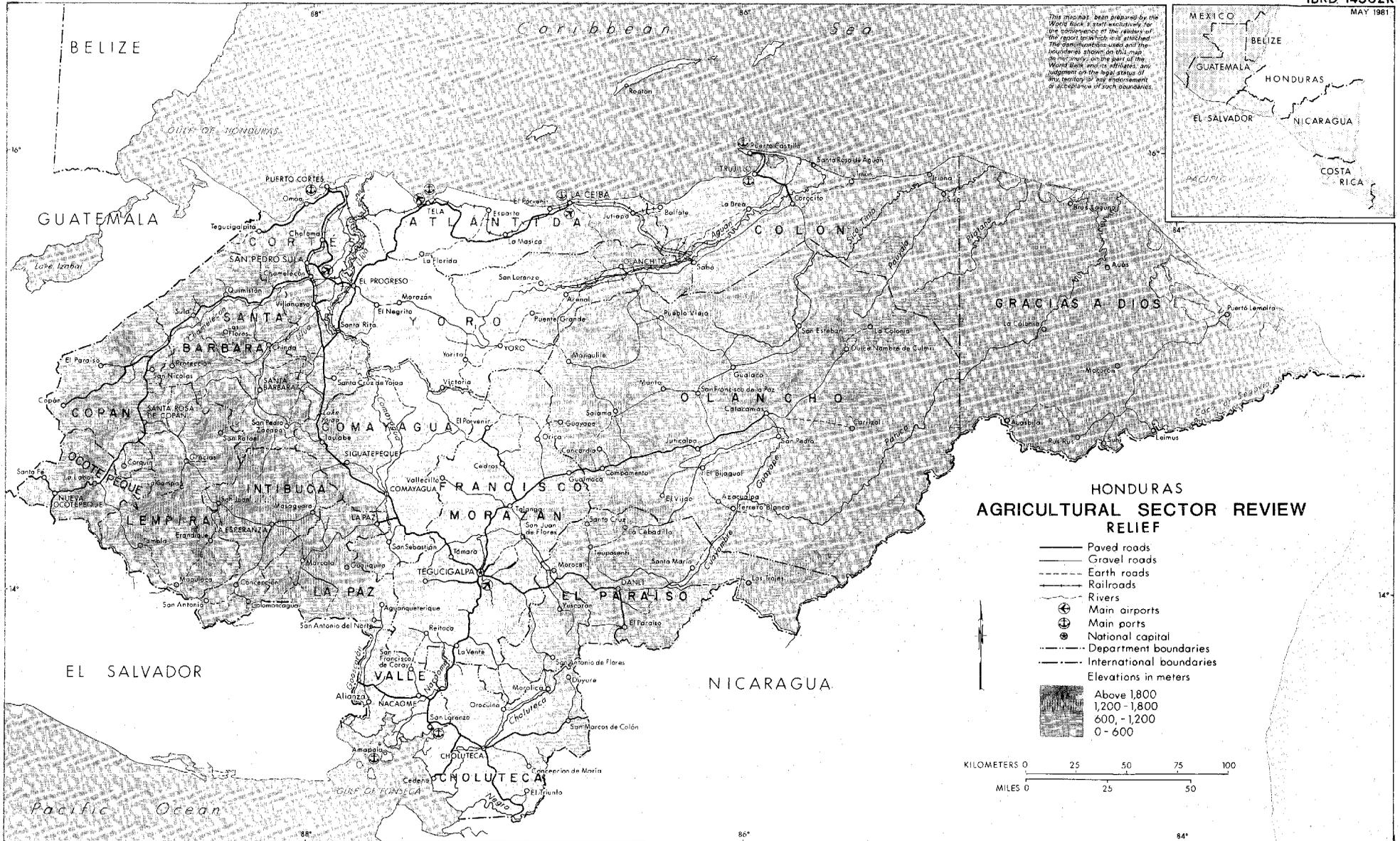
0 10 20 30 40 50 60 70 80 90 100
KILOMETERS



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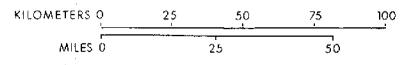
Generalized approximation based on FAO and UN sources

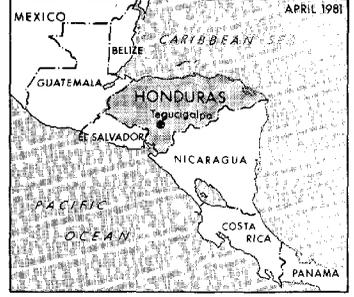
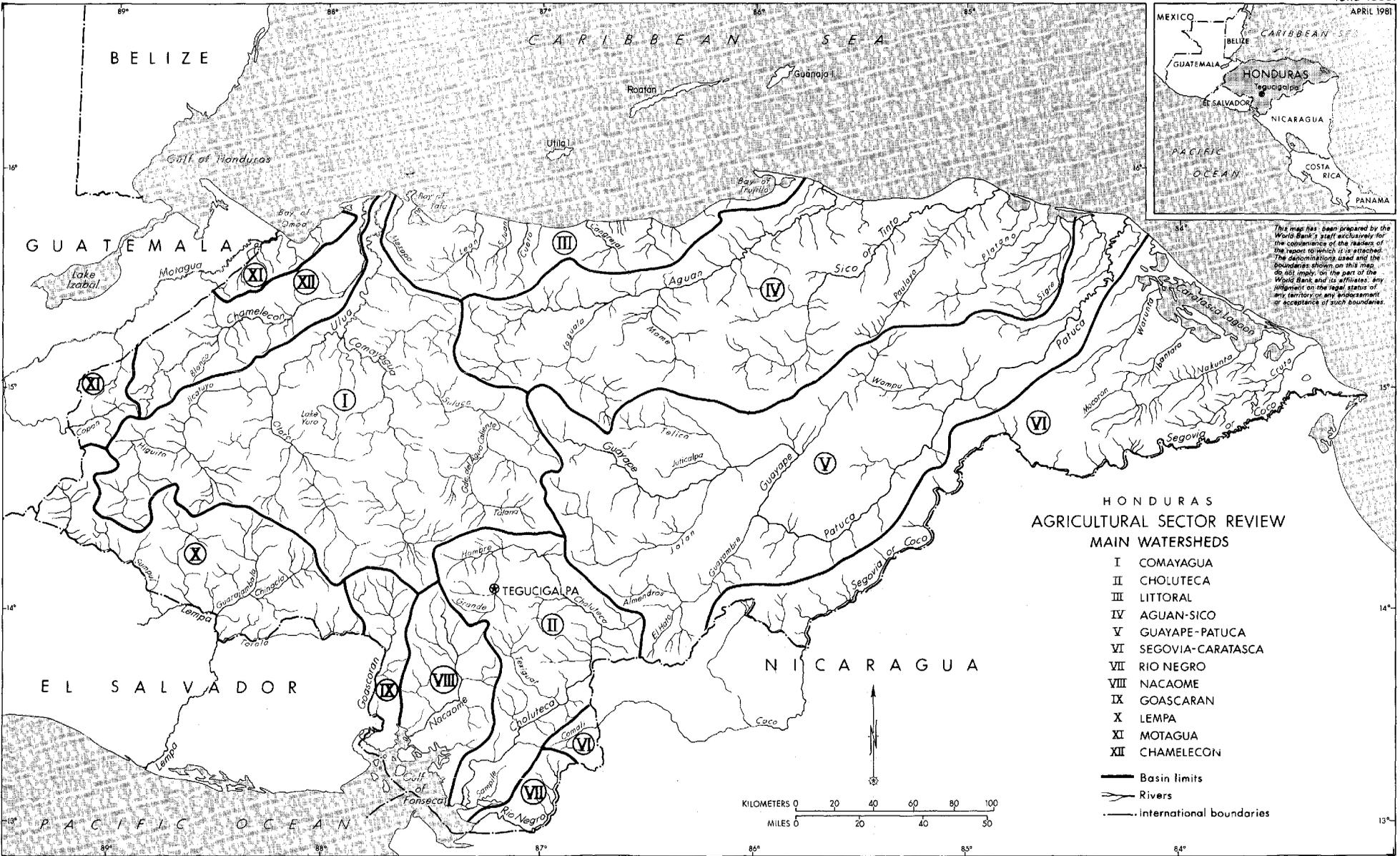
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HONDURAS AGRICULTURAL SECTOR REVIEW RELIEF

- Paved roads
- - - Gravel roads
- - - Earth roads
- Railroads
- Rivers
- ✈ Main airports
- ⊕ Main ports
- ⊙ National capital
- - - Department boundaries
- - - International boundaries
- Elevations in meters
- ▒ Above 1,800
- ▒ 1,200 - 1,800
- ▒ 600 - 1,200
- ▒ 0 - 600





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HONDURAS
AGRICULTURAL SECTOR REVIEW
MAIN WATERSHEDS

- I COMAYAGUA
- II CHOLUTECA
- III LITTORAL
- IV AGUAN-SICO
- V GUAYAPE-PATUCA
- VI SEGOVIA-CARATASCA
- VII RIO NEGRO
- VIII NACAOME
- IX GOASCARAN
- X LEMPA
- XI MOTAGUA
- XII CHAMELECON

— Basin limits
 ~~~~~ Rivers  
 - - - international boundaries

