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RURAL EDUCATION SUBSECTOR ASSESSMENT

REPUBLIC OF HONDURAS

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Preface

This assessment is intended to provide a basis for designing programs to enhance the development of human resources in the rural areas of Honduras. The major goals of the National Development Plan for Honduras (1974-1978) are to increase rural productivity and to improve income distribution. The productivity of resources devoted to rural education may be measured in terms of education's impact on achieving these stated objectives. The investigation has been limited to the effect of primary and non-formal education on the rural population of Honduras to determine the extent to which education is in fact assisting, or can assist, the rural population to improve their economic and social status; and to suggest ways in which this constructive role of education could be enhanced.

The assessment includes a general description of the educational system of Honduras, with particular emphasis given to the present status of rural primary education. The objectives of the Central/Satellite school program have been described, and the implementation of the concept in several schools has been evaluated. Recommendations have been made to improve the effectiveness of the Central/Satellite schools and increase their impact on rural development.

Current activities in the area of non-formal education in Honduras have been examined, the policies of the GOH in the area of non-formal education have been analyzed, and recommendations have been proposed for further activities in non-formal education.

Various constraints to the achievement of national goals have been identified and steps have been recommended which could remove or abate the effects of the constraints.

In order to reduce the length of the basic assessment, many of the tables and charts have been separated from the text and have been included in a Statistical Annex. A Bibliography includes information about the many documents utilized in developing this assessment. The Glossary will be of assistance to those who are not familiar with the various organizations and special terminology which has been used in reference to Honduras.

USAID/Honduras wishes to express its appreciation to the Education Sector Assessment Team, and to the many people in the Government of Honduras and AID/W who have cooperated in the development of this assessment.

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Glossary

AID	Agency for International Development
ACPH	Honduran Popular Culture Program
ANACH	National Association of Honduran Campesinos
BANAFOM	National Development Bank
COHBANA	Honduran Banana Corporation
CCTI	Technical Industrial Cooperative Center
CEDER	Education Center for Rural Development
CARITAS	Catholic Relief Services (CRS)
COHDEFOR	Honduran Forestry Corporation
CONSUPLANE	Superior Council for Economic Planning
CREFAL	Regional Center for Basic Education
CARE	Cooperative for American Relief Everywhere
CONCORDE	Development Coordinating Council
FAO	Food and Agriculture Organization (UN)
FECORAH	Federation of Honduran Agrarian Reform Cooperatives
FUNDHESA	Honduran Development Foundation
IBRD	International Bank for Reconstruction and Development (World Bank)
IDB	Inter-American Development Bank
IHDEPO	Honduran Institute for Popular Education

ILO	International Labor Office (UN)
INA	National Agrarian Institute
INCAE	Central American Institute of Business Administration
INFOP	National Institute for Professional Training
INVA	National Housing Institute
IPREFA	Functional Education for Parental Responsibility in Adults
JNBS	National Social Welfare Board
MNR	Ministry of Natural Resources
MOE	Ministry of Education
OAS	Organization of American States
ODECA	Organization for Economic Development in Central America
ROCAP	Regional Office for Central America and Panama (AID)
UNAH	Autonomous University of Honduras
UNC	National Union for Campesinos
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Emergency Fund

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I. INTRODUCTION

A. Country Setting

The Republic of Honduras has an area of 112,000 square kilometers (43,277 square miles), making it the second largest country in Central America. It is bordered by Guatemala on the northwest, by El Salvador and the Pacific Ocean on the southwest, by Nicaragua on the southeast, and by the Caribbean Sea on the northeast. Two mountain ranges bisect Honduras northwest by southeast, with peaks ranging up to 10,000 feet. Though extensive fertile valleys and plateaus lie between the mountains, it is estimated that only 16.9 percent of the land is arable.

The population of Honduras is essentially ethnically homogeneous; only 10 percent of the people are pure Indian or Black. Spanish is the predominant language throughout the country.

The national population density in 1974 was 23.7 per square kilometer, with density by department ranging from 1.3 per square kilometer in Gracias a Dios, to 94.5 per square kilometer in Cortés. In 1974, the population in Honduras was 2,653,857, according to the census taken in that year. In the same year, the rural population was 1,828,863, or 68.9 percent of the total. More than 50 percent of the rural population, and 44 percent of the urban population is under 15 years of age. The population in 1975 is estimated to be approximately 2,800,000.

The annual intercensal rate of growth from 1961 to 1974 was 2.7 percent. However, this rate may be somewhat deflated due to an undercount in the census, and to the war with El Salvador in 1969, which resulted in the emigration of Salvadorans from the border areas of Honduras. Other figures indicate an actual rate of growth as high as 3.3 to 3.5 percent per year, which would imply a doubling of the population by the year 2000.

The economically active population, in the census category of 10 years of age and older, rose from 567,988 in 1961 to 743,080 in 1974. In that year, 57 percent of the economically active population was engaged in agriculture, accounting for more than 82 percent of the rural labor force and 14 percent of the urban labor force. Industry accounted for 12 percent of the total labor force, public services for 13 percent, commerce for 9 percent, construction for 3 percent, and transportation for 3 percent.

Males under 30 years of age make up more than 50 percent of the economically active population; approximately 63 percent live in the rural areas. Complete figures on educational levels are available for only those members of the force under 30 years; of that group, 47 percent had attended primary school, and less than 4 percent had attended secondary school.

The Honduran Gross Domestic Product (GDP) was $874,200,000 in 1974, at current prices. This represented an increase of 7.3 percent over 1973.

However, at 1966 prices, the real increase was only 0.1 percent. 1/ The major contributors to the GDP were agriculture (32 percent), manufacturing (15 percent), commerce (12 percent), and services (9 percent). The per capita income in 1974 was US$345 in current prices, but only US$261 in 1966 prices.

In 1974, exports totaled $286,500,000, of which bananas represented 27 percent. Other major exports included coffee (15 percent) and wood (14 percent). Major purchasers of exports were the United States (53 percent) and Germany (10 percent).

Imports totaled $391,400,000 in 1974, with manufactured goods accounting for 27 percent; machinery and transportation materials, for 26 percent; and fuel and lubricants, for 16 percent. The major sellers were the United States (42 percent), Japan (7 percent), and Guatemala (6 percent).

B. General Description of the Rural Sector

The rural sector is crucial to the Honduran economy. It is the principal source of employment, and of food for internal consumption; in addition, agricultural exports finance much of the development investment of the country. In 1974, 69 percent of the total population and 63 percent of the economically active population were in the rural sector. Most of the workers in agriculture are subsistence workers are engaged in modern commercial agriculture.

1. Structure of the Sector

Crop cultivation accounts for 65 percent of the aggregate value of rural sector production in Honduras. Bananas, coffee, and grains, the three principal crops, represent 47.9 percent of all production in the sector. Herding activities account for 20.9 percent of total sector production. Forestry amounts to 12.7 percent, and hunting and fishing account for 1.4 percent of sector production. The total of these four components amounted to 36.5 percent of Honduran GDP in the period from 1960 to 1972, although this decreased in 1974 to 32 percent, due primarily to droughts and to the effects of Hurricane Fifi.

The rural sector is characterized by a dual internal structure, with clearly delineated modern and traditional sections. Although modern marketing and technology are associated with banana, coffee, cotton, tobacco, and other export crops, basic grains are produced and distributed by traditional means. Ecological conditions, market structures, technological differences, and unequal distribution of resources all contribute to the continued demarcation between the modern and traditional agricultural zones. Economic factors often play a major role; for example, only 7.3 percent of the cultivated land is irrigated, and 85 percent of all irrigation is associated with banana or sugar cane cultivation, both of which are cash crops. Investments

1/ Preliminary data from Honduras en Cifras, 1972-1974, Banco Central de Honduras, Tegucigalpa, Honduras: p. 7.

in irrigation projects have been made primarily by private, large-scale agricultural concerns.

Intermediate technology, such as improved seeds, fertilizer, and pesticides, is available in the agricultural sector, but is not widely diffused. An analysis by the Planning Council shows that the primary bottleneck in distribution of this technology is credit. 2/ Greater distribution of available credit is restricted by insecurity in collateral, by the slowness of loan procedures, by the lack of education of potential loan beneficiaries, and by a lack of information concerning the availability of credit.

2. The Agricultural Regions of Honduras

In 1972, only 1,370,000 hectares, or 12 percent of the national territory, were in agricultural use. More than 51 percent were planted in perennial or annual crops; 39.4 percent, in natural pastures; and 8.8 percent, in fruit trees and other crops. Basic grains accounted for one-half of the crop area, and the cash crops of banana, coffee, and sugar cane, for one-third of the acreage.

An important factor to be considered in understanding the natural resources of rural Honduras is the availability of water. Rainfall is the most important source of water for crops, and its availability varies according to the length of the rainy season. In some areas it lasts less than four months; in others, more than seven months. River and underground water is abundant during most of the year, and there is an irrigable surface of 340,000 hectares.

a. The Eight Regions

The climate of Honduras shows numerous micro-environmental variations within a general framework of tropical, sub-tropical, and temperate zones. Cáceres has divided Honduras into eight distinct regions 3/ on the basis of climate and other biophysical factors, as well as socioeconomic conditions. Each has different internal characteristics and distinct development requirements. A brief description of each follows.

1. Northwest. The best biophysical, economic, and social development resources are located in this region, which includes the Valley of Sula. With the exception of the sparsely populated eastern region, the Northwest has the highest proportion of the nation's fertile alluvial valley land, and the most technologically developed agricultural system in the nation. In absolute population density, the Northwest ranks second highest in Honduras, but in relative density, it ranks fifth. There is much unused agricultural potential, despite the fact that it is the most agriculturally developed sector of the nation.

2/ Imagen de la Estructura Económica-Social y Explotación de los Recursos Naturales, CONSUPLANE, Tegucigalpa, Honduras, 1973: p. 22.

3/ Cáceres P., Manuel Antonio, Regionalización Agrícola de Honduras, Instituto Interamericano de Ciencias Agrícolas de la OEA, Turrialba, Costa Rica, 1970.

2. South. There is an effective marketing and communications network in the South, second only to that which exists in the Northwest. The crop that is most adapted to the area is sorghum. The principal agricultural problem is drought, which has plagued the area since 1960. The greatest priority in agricultural development in this region is the creation of an irrigation infrastructure, which would require physical development investments and education programs.

The South has a significant percentage of flat valley and coastal land. It ranks with the Northwest in absolute population density, but has a higher ratio of population to arable land. In contrast to the Northwest, 80 percent of the rural population are concentrated in mountainous areas. This is related to the prevailing pattern of land tenure and land distribution. The peasantry is concentrated in the ten mountainous municipalities with only 10 percent of the arable land. Ninety percent of the arable coastal land in the six coastal municipalities is in the hands of few landholders.

3. Southeast. This region has great potential for agricultural use and for hardwood exploitation. Current national development investment is directed toward building a transportation system. An all-weather road to Juticalpa, the development pole for the region, is nearing completion. The Southeast has a lower proportion of arable land to total land area than the Northwest; with 19.5 percent of the total national land. This region has the best potential for intensive cultivation of annual crops, after the Northwest region having 90 percent of the technically unused valley land. There is, however serious lack of both agricultural credit and marketing facilities.

4. Central. This region is characterized by a predominance of subsistence cultivation on small farms. Twenty four percent of the national population resides here. The relative population density of the region is second highest in the country. However, if the population of Tegucigalpa is removed from consideration, this region would rank fourth in density. Sixty percent of the area is covered with pine forest vegetation utilized mainly for commercial lumber or household firewood.

The climate of the Central region requires irrigation for intensive cultivation. River water is readily available, and is currently being utilized in the Comayagua Valley. However, an education program in water management is needed to obtain maximum benefits from the program.

5. West. The western region of Honduras epitomizes the agricultural problems faced by the peasantry. It is the most mountainous region of the country; although it comprises 16 percent of total national area, it has only 3.1 percent of the valley land. The relative population density is extremely high, 1218 inhabitants per square kilometer of arable land, which is four times greater than the next highest region. This condition forces a great amount of land not strictly suitable for intensive cultivation into use for subsistence farms. In addition to the pressure of the population on the land, the use of mountainsides for slash-and-burn agriculture, has led to erosion problems that are greater than in any other region. The valley lands, where tobacco predominates as a cash crop, are taken up by large, commercial farms.

The small farms are on hillside lands, with small patches of available alluvial soil, and the most practical commercial crops for them are potatoes and some temperate fruits. Soil conservation and improved seed are the most urgent innovations necessary in this region.

6. North. The ecological conditions in this region are similar to those of the Northwest, but the infrastructure for agricultural development is not nearly as developed in the North. Current Government investments in Agrarian Reform are being coordinated with social development programs in a massive campesino cooperative project in the lower Aguan Valley.

While the region has a preponderance of lowlands, the ratio of population to arable land is the second lowest in the country. Government policy has been to stimulate colonization of the region by peasants from the central, south, and western regions of Honduras. The total amount of the migration has not yet significantly altered the population density ratios; the actual use of potentially arable land remains lower than in any but the eastern region.

7. North-Central. This region has almost no agricultural infrastructure and no modern marketing system. There is a large land area suitable for intensive agricultural cultivation, but few modern techniques are applied. The population density is relatively high, so that colonization is not a prerequisite for development, as in the North.

8. East. This region, referred to by most Hondurans as the Mosquitia, is the most underpopulated region of the country, with the lowest absolute density and the lowest relative density. The native population of the region is concentrated along the coast and alongside the numerous regional rivers; crop cultivation is secondary to fishing and hunting. It has 25 percent of the arable land in the country, and none of the infrastructure necessary for agricultural development. To increase land utilization, colonization would have to be coupled with massive infrastructural investments. Since there are still large amounts of arable land in the more accessible northern and southeastern regions, Government policy has not been directed toward development in the East. There have been sporadic efforts to colonize this region, some of which were stimulated by border disputes with Nicaragua. To date, they have not been successful.

AGRICULTURAL REGIONS OF HONDURAS

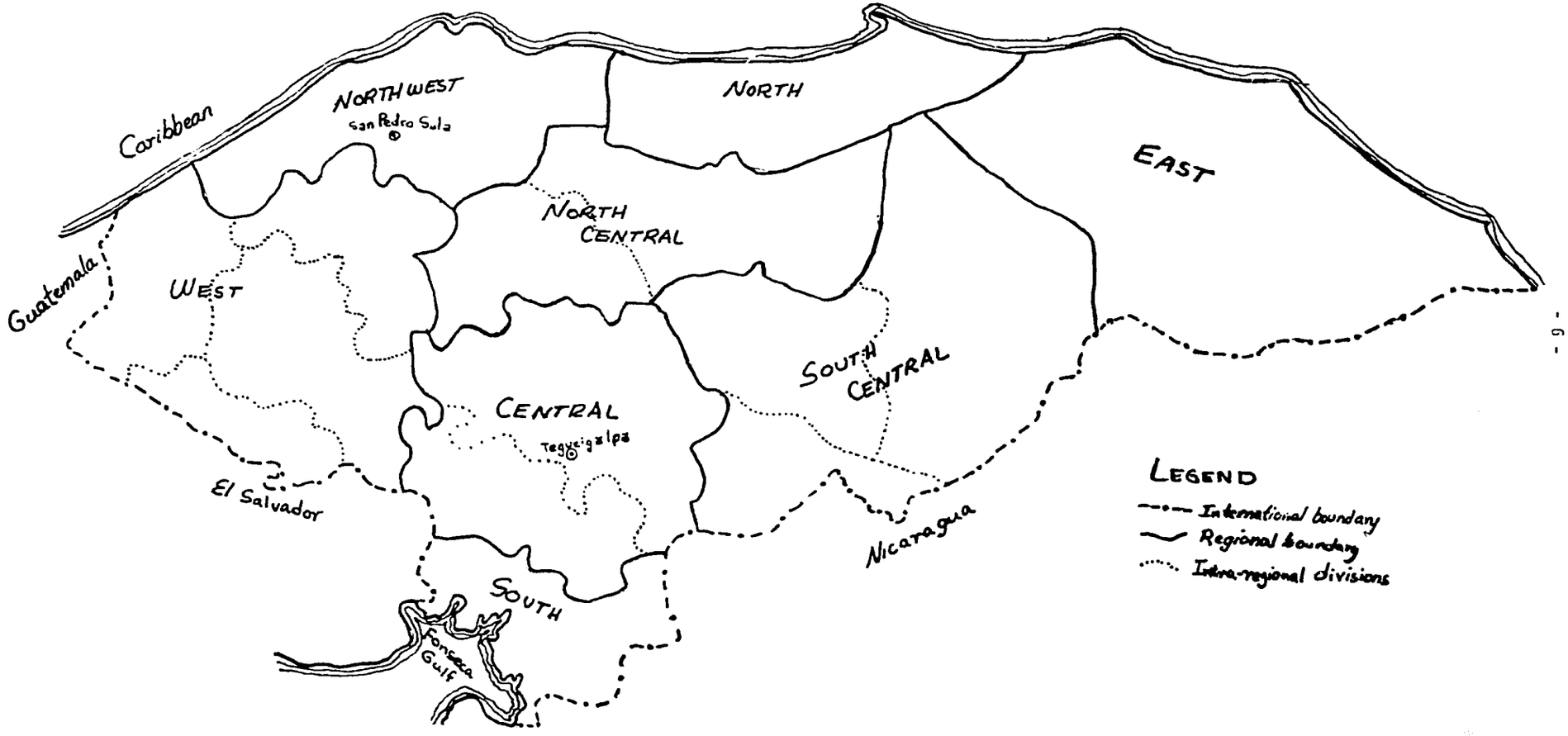

TABLE A

AGRICULTURAL REGIONS OF HONDURAS

Region	Relative Population Density (1)	Absolute Density (2)	Area (Percentage)	Population (Percentage)	Valley Land (Percentage)	Actual Farm Land (Percentage)
West	1,218	21	16.0	16.0	3.1	35
Central	326 (196)	43	12.5	23.8	10.5	18
North-Central	250	22	13.5	7.6	4.3	5
South	186	52	4.5	10.8	8.0	10
Northwest	151 (107)	52	8.5	19.6	18.3	18
Southeast	50	6	19.5	5.3	14.8	8
North	46	17	7.6	5.3	15.8	5
East	5	1	17.9	0.9	25.2	1
TOTAL			100.0	100.0	100.0	100.0

(1) Relative population density here is the number of inhabitants per square kilometer of arable land.

(2) Absolute population density is the number of inhabitants per square kilometer of total area.

SOURCE: Cáceres P., Manuel Antonio, Regionalización Agrícola de Honduras, Instituto Interamericano de Ciencias Agrícolas de la OEA, Turrialba, Costa Rica, 1970.

II. SUMMARY OF THE ASSESSMENT

A. The Target Group

The target group profiled in this assessment is the Honduran peasantry, comprising 70 percent of the national population. Categories within this group are differentiated in terms of ecological, economic, social, demographic, and ideological criteria. The stark constrast between highland subsistence peasantry and valley transitional peasantry is analyzed in detail.

Plans and aspirations for alteration of the target group conditions are analyzed in terms of three models. Some peasants aspire to upward mobility, either through higher education or occupational specialization. Other peasants have an expansionist or entrepreneurial bent, wishing to increase their supply of land, cattle or other resources. This is especially characteristic of those peasants who have participated in recent government colonization schemes. A third category of peasants aspires to intensify production on the land they already possess.

The priority learning needs of the Honduran peasant are a linked set of attitudes, skills, and knowledge that would enable him to implement his plans and aspirations. The principal needs that have been identified are knowledge with which to comprehend the rationale for technical developments in agriculture, health, and nutrition; the specific skills, adapted to regional ecological and socioeconomic conditions, to implement development programs; and attitudes of mutual cooperation between the target group and agencies of the government.

The assessment team has described three types of education that attempt, in various ways, to address these learning needs. Formal education is the highly institutionalized and chronologically graded system designed for the entire target group. Non-formal education comprises those organized and systematic activities outside of the formal system, which serve particular subgroups. Informal education is the lifelong process of accumulating knowledge, skills, and attitudes from daily experiences.

B. Formal Education

The Central/Satellite (C/S) school program was founded in 1972 to provide a form of education which would be more relevant to the daily lives and learning needs of the rural population. There are currently over 48,000 students attending 73 Central schools and 365 Satellite schools. By 1978, 147 more Central and 885 more Satellite schools will be designated; it is projected that 137,250 students or 40 percent of the rural primary enrollment will be attending these schools.

The C/S schools differ from regular rural schools in that in addition to formal curricular activities, each places a special emphasis on agricultural

activities, co-curricular activities, and activities related to the acquisition of basic skills in health and nutrition and in community development. Up to two hours of each school day are devoted to agricultural activities and basic skills projects. In addition, schools in the C/S program are nuclear; there is one Central school with six grades and five to seven Satellite schools that use the Central school as a model and a resource center. Many of the Central schools have a director without teaching responsibilities, and some have a special teacher who may be an agronomist, a carpenter, or a seamstress. Some schools also have watchmen.

A limited number of supplementary materials are being designed for the C/S program. They suggest to teachers how to relate the formal curriculum to the basic skills and agricultural activities. In addition, some of the teachers in the C/S program have received training in these activities. However, as the C/S program expands, more teachers will need to be trained in these areas, and a wider variety of supplementary materials will need to be produced. A number of schools will also need startup materials and basic tools for agricultural activities, sewing, and cooking; more school directors will need to be freed from their classroom responsibilities; some schools will need to have their physicial facilities upgraded to accomodate the technical skills activities; and the administrative personnel supervising the program will need to be increased and trained in planning, in program evaluation, and in the development and maintenance of information systems.

Initial data obtained from Central schools that are functioning effectively indicate that they have a strong amount of community and student support. Additional data suggest that the C/S schools are also beginning to have an impact on agricultural and basic skills practices in communities where they are located and that student retention in the upper grades is increasing.

C. Non-formal Education

The current status of non-formal education in Honduras is assessed by examining six cases: the Adult Education Department of the Ministry of Education, which focuses on basic academic skills training; the National Welfare Board, which emphasizes motivational training; the National Agrarian Institute, which combines agricultural skills and organizational promotion training; the National Professional Training Institute, which carries out skilled professional training; the Family Planning (IPREFA) project, that integrates basic academic skills training with family motivational training; and the Radio Schools, that combines motivation, basic academic skills, and agricultural skills training. These cases are compared in terms of target group and benefit incidence, organization, activity content, methodology, efficiency, and constraints.

The target population ranges from the entire rural poor majority to very selected groups or categories. The purposes and activity content of non-formal education can be placed on a continuum ranging from general motivational training to specialized skills training. The methodology of non-formal education, viewed as an information design and delivery system, ranges from loosely to highly structured techniques.

The data do not permit a comparative analysis of the efficiency of the institutions involved in non-formal education. There are, however, a number of general constraints in the existing non-formal system. The resource base limits the scope of activities both in potential user coverage and in the range of educational opportunities. Management expertise and activity planning are of variable quality; only the Agrarian Institute and the Professional Training Institute use information systems for this purpose, and for measuring achievement. Finally, there is insufficient consideration of the quantity/quality trade-off brought about by the desire for increased coverage; with the exception of INFOP's quality control system, the implicit assumption is that the activities carried on are "good."

These constraints may be alleviated in a number of ways. The content of future non-formal education programs should address specific learning needs of the target group. Because of limited resources, the non-formal programs should have high benefit:cost ratios. Thus, mass media and other means should be used when feasible. The management model should build from the bottom up, with the target group participating fully in the non-formal system.

D. Informal Education

There are two principal modes of informal education: socialization practices and cultural diffusion. The family is the primary unit of socialization. Socialization practices are functional because all are related to the subsistence activities of the family. In rural Honduras, the importance of the rural community as a socializing agent is conditioned by its degree of isolation from society-wide mechanisms of informal education.

There are three principal means of cultural diffusion in rural Honduras. They are radio, newspapers, and commercial advertisements. The characteristics of cultural diffusion are encouragement by non-peasant agencies of peasant participation and the attempt to include peasants in goals that are functional for these agencies.

E. Efficiency of Rural Primary Education

The internal efficiency of Honduran rural primary schools are summarized in terms of the cost incurred to produce a unit of useful output, i.e. one student who has graduated from the system or otherwise attained a specified level of achievement. A comparison of the relatively favorable Central school promotion and dropout rates with the corresponding rates for regular primary schools shows that the efficiency of the Central schools has been much higher. The Central schools have been highly successful in decreasing desertion. The results suggest that curriculum content and teaching techniques are very significant factors in determining retention in school and that improvement in these factors can increase efficiency in Honduran rural primary schools. Central schools required 6.2 pupil years to produce a fourth-grade graduate as compared to 9.9 pupil years to produce a sixth grade graduate while the regular system requires 18.4. The Central school costs per graduate are 28 percent and 37 percent below comparable figures for the traditional rural schools.

The available data on external efficiency suggest that the higher the educational level, the higher family income is likely to be. Although no studies exist which define rural manpower needs, it is clear that the vast majority of new employment opportunities are related to agricultural production. Education, therefore, must respond to the need for skills related to agriculture.

III. GOH NATIONAL GOALS

The Government of Honduras has formulated a National Development Plan for the period from 1974 through 1978. Its execution has been made more difficult because of two major natural disasters: Hurricane Fifi, which struck the north coast in September 1974, and a drought in 1975 which severely reduced agricultural production. Nevertheless, the Government is continuing to work toward the achievement of the objectives set forth in the Plan.

The fundamental goals are to increase rural productivity and to improve income distribution. These goals are to be achieved by means of improvements in health, education, and housing conditions; by creating the economic and social infrastructure required for the optimum use of natural resources; by supplying the productive sectors with the human resources necessary for productivity increases; by increasing public sector activity for the purpose of increasing employment and the efficiency of resource utilization; and by extending the economic planning activities of the Government to all aspects of national production.

The plan gives priority to increasing rural productivity and improving the income level of the campesino. The key mechanism for achieving these two goals is Agrarian Reform, to include providing land to landless campesinos, supplying technical assistance and credit, and assisting small farm families to increase the profitability of their production units.

A. National Education Goals, 1974 to 1978

The Government's education policy emphasizes the creation of equal educational opportunities and the linking of education to national development. These features coincide with the aspirations of the Honduran community, with the overall National Development Plan, with the objectives of other sectors, and with responsibilities of the educational system.

Education will be integrated into the development process by a reorientation of basic primary education and by skills training in priority subjects of the labor force in specific geographic areas.

1. The Reduction, Both Middle and Long Range, of the Illiteracy Index and the Unemployment Index

The primary school cycle is the basic component of the Honduran educational system. Its raison d'etre is preparation for further education and/or for employment. Priority assistance is needed in rural areas, particularly Agrarian Reform regions, to increase the effectiveness of primary education and reduce the number of illiterates in the school-age population. Training in skills necessary for the preservation and utilization of natural resources will be given to adults who have benefited from the formal system, to increase the effectiveness of their occupational activities.

2. Cultural Improvement, Both Middle and Long Range, of the Work Force

Both formal and non-formal programs will be designed to develop positive attitudes towards technological advances and alternative means of production of goods and services. Non-formal activities will provide preparation for increased production and for democratic life, as well as encourage the development of scientific attitudes and an awareness of general conditions. NFE programs will also be intended to facilitate occupational promotion; to provide preparation for changing work demands, and to permit self-directed learning. The labor force will be stimulated to develop both individual and cooperative attitudes toward work.

3. Contribution to Productivity Increases in Other Sectors

A priority need is for technical, vocational, and skills training to increase the productivity of the work force. Technical schools must be upgraded and better equipped, and the analytical and problem-solving activities of higher education should be developed through the use of scientific investigation techniques.

An increase is required in the resources devoted to investigation, planning, experimentation, innovation, application of new technologies, learning materials development, technical assistance, administration, teacher training, and scholarships.

4. Increase in the Internal Efficiency of Education

The internal efficiency of education should be increased, by providing better incentives for rural teachers; differentiating salaries according to hourly and functional criteria; allocating additional resources for facilities; increasing the percentage of GDP devoted to education; and developing the educational infrastructure.

5. Evaluation of the Different Roles of Education in the Development Process

Implied in the development process is the contribution of a higher standard of living to increases in human dignity, productive capacity, and the cultural and educational level of the population. In the rural areas, educational efforts need to be integrated with programs relating to agricultural production, nutrition, and health. The rural primary school should become the institutional base for the process of development.

The Plan provides recommendations for achieving the objectives of the public policy. The general strategy for equalizing educational opportunity is to improve the formal system and expand non-formal education activities. The tactical objectives for formal education are to increase retention and promotion rates, to provide improved educational materials and equipment for primary schools, and to encourage cooperative participation in the administration of the system. The recommendations related to non-formal education include a substantial expansion of educational and cultural activities in the mass media,

the development of non-formal education programs for youths and adults, and participation by communities in all programs intended for their benefit.

Education is linked by the Plan to development priorities, through the improvement of the general education and skills level of the population. Recommendations include increasing the delivery of adapted educational services to the rural areas, using appropriate technologies and educational innovations; and upgrading educational personnel while making them aware of development priorities. Educational content will be adapted to regional development needs, while the integrity of the core curriculum is maintained.

B. National Health and Nutrition Goals

The goals of the Government for improving health conditions are very specific: 1) to prolong the life expectancy to nearly 58 years; 2) to prevent communicable diseases through vaccinations and better observation; 3) to lessen the morbidity rate, especially with regard to infants; 4) to boost individual and collective health and well-being through integrated health services; and 5) to increase the coverage of health services.

The strategy for achieving these goals places first priority on the rural expansion of the health service system and preventive health activities. Groups of the rural population with the greatest incidence of morbidity and mortality will receive special attention. The productivity of the rural health service system will be improved by adding human, physical, and financial resources.

The nutrition program of the Government is based on the assumption that more than 70 percent of the population suffers from some degree of malnutrition. In light of this, the goals are: 1) to raise the nutritional level of the population, especially that of the mother and child; 2) to increase the availability of foods to a level that will satisfy the biological requirements of the population; 3) to better utilize supplementary food; 4) to reduce nutrition related diseases; and 5) to improve the diet of workers, campesinos, and students in order to increase their productivity and social well being.

The Government's plan places fundamental strategic importance on increasing the real income of the rural and urban poor by improving the production of small and medium-size farms and by creating new employment opportunities. Nutrition education will enable the rural poor to utilize existing resources more effectively. The government will seek better methods of quality control in marketed food, and will seek to bring foods with higher nutritional value into the market system. Finally, the strategy of last resort is to combat malnutrition by direct interventions, including hospitalization of intensive care cases.

IV. LEARNING NEEDS OF THE RURAL POPULATION

A. General Profile of the Rural Population

Most of the 72 percent of the national population classified as rural in the 1974 census are peasants, or campesinos, defined by involvement in semi-subsistence agricultural production. Traditional techniques are used on small farms, primarily for family subsistence needs, in rural communities dispersed throughout Honduras. Land holdings extend from farm plots too small for family subsistence, to those capable of supporting significant production for the market. Occupations range from full-time dependence on market activities to full-time involvement in subsistence production. The only group sharply differentiated by these criteria is the full-time laborer who has no land. The rest of the peasantry is ranged along a continuum with no clear occupational or land tenure distinctions.

Crop specialization is determined primarily by the geography of the rural areas. Corn and beans are grown throughout the country, while sorghum, wheat, potatoes, and other crops are found where favorable conditions exist.

Different types of community organizations exist within the target group. Although the most widespread is the traditional community patronato, 1/ a significant number of peasants are involved in the more recent land reform and cooperative groups.

1. Economic Characteristics

A socioeconomic survey of southern Honduras 2/ shows that the peasant population has three strata: the "rich" peasant, a small-scale capitalist producing for the market and for subsistence; the middle peasant, producing primarily for subsistence with some market production to meet family needs; and the day laborer (jornalero).

In the 136 communities surveyed, the middle peasantry represented 80 percent of the rural sector. Detailed data for the rest of the country are not available. While percentages vary from region to region, the national average is about 70 percent.3/ The CONSUPLANE has estimated that 12 percent of all cultivated land in Honduras is in plots of less than five manzanas; 40 percent in "family" plots between five and fifty manzanas in size; 28 percent in medium properties, from 50 to 300 manzanas; and 20 percent in "latifundios," farms above 300 hectares. The peasantry subsists on the land in the first two categories, occupying 52 percent of the cultivated land area.

1/ A semi-formal community organization with a variety of development and maintenance functions.

2/ White, p.7.

3/ 1974 census: Income Characteristics (unpublished results)

a. Land

There are three patterns of land usufruct in Honduras: private property, ejido property, and national lands. Private holdings can be either individual or communal, but communal holdings should not be confused with other communal forms found in Central America. In Honduras, communal land is titled to a group of people; it does not belong to an entire community. Ejido lands are held by the municipality; they are usually farmed in individual plots that are fenced in, but the community holds disposal rights over unused land. This form of usufruct is found mainly in the western region. The national lands are found throughout Honduras, but they predominate in the underpopulated areas of the country. In the highlands, the most mountainous land is often national land.

A fourth pattern, introduced by recent Agrarian Reform legislation, is that of asentamientos. Land title is granted by the GOH to collectives which are legal entities. The land for asentamientos is either purchased from private owners or taken from available national land.

Land may be used by the holder of the title, by a colono, or by a renter. Land rental is common throughout Honduras, with payment most often being a fixed amount of cash or crop.

b. Labor

The economically active population in 1974 was 57 percent agricultural; 75.5 percent worked for themselves, and 24.5 percent were salaried employees. The proportion of salaried agricultural laborers is much lower than in El Salvador and Guatemala, as is the incidence of seasonal labor migration.

In general, Honduras is a country of independent farmers who are the decision-makers for land that they own or lease, rather than earners of wages. In this respect, it resembles southeastern and eastern Guatemala. The labor in subsistence agriculture is done principally by family members; 45 percent of the active agricultural force works on a family plot. Those who employ labor are usually the medium to large landholders. Peasants often exchange labor, but very rarely hire wage labor.

c. Agriculture

The digging stick 4/and the two-ox plow constitute the two technologies of agriculture in most of rural Honduras. They are used concurrently in the south, with plows on flat land and the stick on hillsides. The plow is not found in the northern regions. The machete, hoe, and ax are distributed throughout Honduras. There are two different types of machete, a curved and a straight machete. The curved machete is found in the areas where the plow is used.

The digging stick is used for planting seeds, both on the hillside and in

4/ The digging stick is used to make a small hole in which seeds are dropped during planting.

the flat areas of the north. Machetes and hoes are used for various agricultural tasks, while the ax is used for heavy clearing and for preparing firewood.

There is a certain amount of crop specialization in Honduras. The peasant economy is based on corn and beans throughout the interior of the country, but other crops are distributed differentially. Sorghum is common in the south, although in parts of the west and central regions it is becoming more common. Wheat was common in the west, but its production has declined in the last two decades. Potatoes are the speciality of the El Paraiso area in the southeast. Tobacco has long been grown in Copan, and has in the last decade spread through parts of western region. Yuca is found in two areas. Bitter yuca is grown by the Black Caribs on the north coast. Sweet yuca is grown by the peasantry of the mountainous region. Cotton is an important cash crop in the south. Sugar cane is replacing cotton as a cash crop in the south, and it is important in northwest coast areas. It is grown in small quantities all over Honduras, as is the banana. Banana is grown intensively in the northwest, along with pineapple. Rice is cultivated in various temperate regions. Cattle are raised throughout Honduras.

The major constraints of the peasant economy are the man-land distribution pattern, and the limitations of agricultural technology. The description of land distribution shows a large number of small farms, with less than 5 manzanas. On good quality land, five manzanas are just sufficient for subsistence, but on average to poor quality land it is barely enough for subsistence. The technology of agriculture sets a limit on the amount of land that one family can clear and plant. The low fertility of hillside soils is dealt with by the swidden 5/agricultaralist who moves on to other land after one or two years of use. In the more heavily populated regions, this is not always a viable option.

2. Demographic Characteristics

There are three different age categories in the target group which require consideration. Children aged 0- to 10 represent 50 percent of the total rural population; adults aged 15 to 59 represent 45 percent and the elderly 5 percent.

The target group includes both men and women, there is a slightly higher proportion of women. Both sexes are engaged in agricultural tasks although the extent of particpation by women is difficult to assess from statistical sources. In general, when labor demand is heavy, women assist in planting and harvest activities. Women also have the primary responsibility for family solares; that is, the plots of land immediately adjacent to the rural dwellings. These

5/ Swidden agriculture is the agriculture complex of shifting cultivation for which "slash-and-burn" techniques constitute the preparatory phase.

solares are important components of the family production: vegetables, fruit trees, and intensive crops are often grown. In addition, women have responsibility for the care of domestic animals. Therefore, in terms of total agricultural production, women are an important part of the target group.

3. Sociocultural Characteristics of the Target Group

The general social structure of Honduras has four categories: the urban elite, the rural elite, the local middle class, and the lower class. There is, increasingly, a distinction between the rural and the urban lower class. The urban elite is limited to the cities of San Pedro Sula and Tegucigalpa. The rural elite is based on the criteria of wealth and/or age and importance of the family. Its members reside in towns or departmental capitals. Its children typically go to professional schools, and go into the political and administrative structure of the country.

The middle group is composed of entrepreneurs, small storekeepers, and well-educated people with lower incomes. It also includes a category of people often referred to as los intelectuales, among which are the school teachers. This group tends to prefer residence in towns, even though they may sometimes live in aldeas (school teachers especially live in aldeas, they are usually the only representatives of this class in the aldea.)

The lower class includes laborers, small landholders, renters, colonos, and squatters. According to anthropological and sociological studies, these groups are generally depreciated by the upper class. 6/ The lower class maintains a respectful independence from the upper class. They do not have the inferior attitudinal position that one finds in Guatemala and other Central American countries. This is probably directly related to the different general landholding pattern in Honduras, where only 25 percent of the active labor force is wage labor.

Various sociocultural groups do not easily fit into the above classification scheme -Indian groups in the highlands, Black Caribs, Antillean groups, and Miskito Indians. These groups constituted 11 percent of the population in the three censuses taken between 1935 and 1950. More contemporary data are not available.

4. Community Organization

The peasant community is a group of peasant families located within a specific geographical area linked by patterned and repetitive interaction which is directed toward the fullfilment of certain needs which cannot be solved by the peasant family alone. These interactions are: (1) economic transactions, which are exchanges of goods and services between peasant families; (2) social control activities, directed to the maintainance of social order and collective decision making; (3) socialization activities, for the transmission of cultural values and knowledge to the young; and (4) mutual

6/ c.f., White, 1972

support activities, whereby peasant families aid those in crisis.

The Honduran peasant community falls midway between the corporate and open community types identified in anthropological analyses of Latin American peasantry. 7/ It is not based on the corporate ownership of land, it is not closed to the outside world, but it is not as open and receptive to external influence as are mestizo communities in some lowland areas of Latin America.

The Honduran village is a rural community of semi-subsistence cultivators with approximately 50 to 100 families, within a geographical area that is served by a single primary school. 8/ Place names, football teams, chapels, or patron saints may serve to identify a Honduran community. The passive bases of community solidarity are a common culture and a shared geographical identification. The village does not have a formal civic or civico-religious system which serves to demarcate its boundaries and by which membership in the community is defined. Rather, membership is based on co-residence, shared norms, kinship, and other factors that are not sharply defined.

The most common organization in the villages is the patronato, a local board of officers elected to carry out specific development projects. The patronato tradition is a result of the physical isolation of rural communities and the absence, until recently, of stront central government programs for schools, roads and other community improvements. 9/ Patronatos are the means by which communities set out to solve problems by their own efforts.

In many Honduran villages, there are local groups which form part of the Honduran peasant movement. This movement, a relatively recent phenomenon in rural Honduras, has three aspects. First, there are the peasant leagues—national political groups with numerous affiliate local groups. These are the ANACH (National Association of Honduran Peasants),the UNC (National Peasant Union), and the FECORAH (Federation of Agricultural Cooperatives of Honduras). A second aspect of the movement are the peasant asentamientos formed under the agrarian reform program of the government's National Agrarian Institute (INA). These asentamientos are defined as farm businesses operated on land rented by the GOH under provisions of Decree Law # 8 of December 26, 1972, by previously unemployed or under-employed farm laborers or small-farm operators associated into groups as proteges of INA . 10/ The third aspect of the movement is the cooperative organizations and associations, formed to assist agricultural development among peasants.

These leagues claim 150,000 families or about 40 percent of the target group, Membership is not adequately defined. One of the groups defines members as those persons who contact local officers for assistance. There is more information about the INA asentamiento program, As of February 1976, there were 625 asentamientos with 19,000 families in various parts of the

7/ c.f.,Wolf, Eric and Edward Hansen. The Human Condition in Latin America. 1973.

8/ White, 1972. The school is the single most agreed upon locus of community identification in the area surveyed by White.

9/ White, 1972

10/ USAID Honduras. "Agriculture Sector Program" Annex I, Exhibit B. p. 1

TABLE IV-1 FUNCTIONS OF PEASANT COOPERATIVES *

GROUP	SPONSORSHIP	CREDIT	MARKETING	AGRICULTURAL EXTENSION	ORGANIZATIONAL ASSISTANCE	REMARKS
(1) Dirección de Fomento Cooperativo	G.O.H. (Ministry of Finance)		x	x	x	
(2) FUNDHESA and Related Agencies	Private (CONCORDE)	x	x	x		Works with AGPH-organized peasant groups
(3) FACACH	Private	x			x	
(4) CONACAL	Private (ANACH	x			x	Works with ANACH peasant groups; organizes extension services from DESAGRO
(5) FECOAGROH	G.O.H.	x	x			Works with individual small farmers; is administered by the Dirección de Fomento Cooperativo since USAID withdrew support.
(6) FECORAH	G.O.H. (INA)	x		x	x	Credit is provided through the BANAFOM

* SOURCE: USAID, Honduras: Agricultural Sector Programs. Annex I, Exhibit C.

country. Asentamiento activity is heaviest in the north, northwest, southeast, and southern regions of the country. The asentamientos are discrete land units, legally owned by the GOH and operated by the peasant member families. Their organizational form permits agricultural credit, production, marketing, and education activities to encompass groups rather than individuals. About 11 percent of the target group belong to cooperatives with credit, marketing, or production assistance. Table IV-1 summarizes the activity dimension of the cooperatives. Their principal activity is provision of credit.

Villages and asentamientos are linked to residential and administrative town or regional centers with communication, market, commercial, political, and religious functions. The regional center is usually the nexus of bus lines and the locus of radio communications for the rural area surrounding it. With the development of the road network and rural bus lines, there is increased direct communication between the peasant and the regional center.

5. Cultural Values

The relation of peasant cultural values to rural stability and change is a difficult problem in the analysis of the Latin American peasantry. There are two opposing points of view about the role of peasant values in maintaining the status quo. One stresses their restraining influence on change. The other sees ecological and economic factors as determinants of this conservatism. For this assessment, an eclectic viewpoint is adopted: ecological, economic, and ideological factors interact to determine stability and/or change in peasant society. On the one hand, there is a gap between the value system of the peasant and that of the urban change agent. This is true of most peasant societes. It is often accompanied by feelings of superiority on the part of the urbanite, and feeling of mistrust by the peasant toward the urbanite. In Honduras, the change agent more often exhibits a benevolent, but misguided, attitude of patronizing paternalism than of outright cultural superiority. There are also cogent ecological and economic reasons for the observed stability. Keeping this in mind, the emphasis here is on the value system of the peasantry.

On the other hand, there has been a lack of pressure for change coming from the peasantry. However,the recent peasant activities are a departure from this non-activist tradition. Government policy and campesino values are changing. National development plans exhibit a significant rural thrust. Increasing numbers of rural communities are involved in petitions for school, health, and nutrition services. Part of the stimulus for this is increased communications; part is probably due to increasing awareness among peasants of the beneficial changes that can be brought about in their living conditions.

The fundamental value of the peasant is ensuring a minimum food supply for his family. This is constrained by factors such as the crops that are traditionally known to produce well in particular climate and soil conditions, his food tastes, the amount of land for cultivation and its productivity, the available technology, and his credit and marketing system. This value is related to the circumstances of the peasant economy and production activities discussed earlier.

An important value in peasant culture is the maintenance of family health. Concern about diseases and their cure is very high in most Honduran peasant communities. Personal identity and self-worth are high priority values. The characteristic of responsibility, including honesty and the keeping of one's word, is part of the personal value system of most rural Hondurans. Communication between change agents and the peasantry is often impeded by insufficient consideration of these values.

Extended family loyalty is a common value for Honduran peasants. This loyalty is one means of dealing with the insecurity of rural conditions. Alliances between equals, be they kith or kin, are strategies for dealing with this insecurity. Alliances with patrons, or asymmetrical alliances, are means of dealing with problems that can not be handled through relatives or friends. Both of these kinds of relationship are important considerations in analyzing the organization of peasant communities.

6. Health and Nutrition Characteristics

A fairly well-developed system of traditionally explained illnes and an active empirical curing system exists in Honduras . 11/ The traditional curers are pharmacists, curanderos, parcheros, midwives, spiritualists, and "people who know".

Traditional systems of curing are far from adequate. The infant mortality rate in rural Honduras is much higher than in urban Honduras. Of 1,000 births in the rural area, there are 128.1 deaths; the comparable urban ratio is 85.1 per 1,000. Infant mortality is linked to problems of malnutrition and intestinal diseases. These conditions are due in part to the lack of sanitary prevention techniques and the conditions of available water supply in the rural areas.

The Honduran rural curing system is not antithetical to doctors or modern medicines. Adamas 12/ has noted that where there are doctors available they are well-accepted, and integrated into the peasant's curing system. The problem is basically a lack of medical personnel, not resistance to it.

In the area of nutrition, CONSUPLANE has estimated that 50 percent of the Honduran population, mostly in the rural areas, consumes less than the recommended caloric minimum and has an insufficient intake of proteins. 13/ The reasons for this are the pattern of income distribution, the lack of nutrition education, and the lack of adequate national planning for nutritional programs.

11/ c.f., Adams, Richard. Cultural Survey of Honduras

12/ Adams, 1956.

13/ There is not yet an adequate study of the caloric intake and diet practices of the target group. Thus is contemplated under the proposed USAID/H nutrition loan.

B. Plans and Aspirations for Alteration of Target Group Conditions

Three sources of information were used for the analysis of the plans and aspirations for altering the conditions of the Honduran peasantry. One source is the sociological and anthropological analysis of the southern region. In addition, a second source is information gathered through interviews with secondary sources conducted for this assessment; these include teachers, agricultural extension agents, and other professionals with extensive rural experience. The third source was information gathered through field investigations conducted in the two sample regions, combining directed and open-ended interview techniques.

1. General Considerations

The general frame of reference for analysis of these plans and aspirations is ecological in orientation. The social system of the peasantry evolves as a result of decisions about the allocation of time and resources, made by the peasants themselves, within an ecological framework. Neither cultural traditions nor imposition by an elite determine the conditions of the target group. Rather, they come about through adaptations to the ecological surroundings of the peasantry. Changes in the conditions of the peasantry require changes in the way they allocate their time and resources. Ecological, internal (peasant), and external (governmental) sources of change must all be considered to fully understand the process of altering target group conditions.

2. External Plans and Aspirations for Alteration of Target Group Conditions

This traditional social structure is the mechanism by which modernization and industrialization reach the peasantry. Improvements in transportation, communication, technology, supply of credit, education, market conditions, and income are filtered to the peasantry through the urban sector. The model of socioeconomic development which has been followed until recently is one of rapid industrialization and capitalization using inexpensive labor of the peasantry and migrants from the rural areas. To base the increase of rural productivity on the peasant sector has been considered a hopeless cause. The main opportunity for advancement for the peasant was vertical mobility, which implied a change of identity as well.

This must be kept in mind to understand contemporary lack of change in the peasant sector, and the initial peasant reluctance to cooperate in urban-originated change programs. A history of domination and monopoly of modernization advantages by the urban-based elite affects contemporary peasant perception of change efforts.

The Honduran Development Plan represents a significant departure from earlier rural development programs. Emphasis in all sectors is on increasing productivity and improving the quality of life of the peasant population. Educational efforts are part of a combined effort targeted to the peasantry.

3. Internal Plans and Aspirations for Change of Target Group Conditions

Organized movements and individual aspirations for alterations originate

from the target group. Organized movements have a general ideology of agrarianism --a reassertion by the peasantry of its sociocultural, political and economic self-determination. They differ in tactics, but have a common general goal of improving peasant conditions.

There are individual peasant aspirations which are not formulated in organizational terms. These aspirations may become explicit when programs of change are initiated, and must be taken into account by educational development plans.

It is widely thought that the peasant's fatalistic outlook brings about a lowering of aspirations. This deserves careful analysis. It is stated in classic form, by White for the southern peasantry. He quotes from an interview with a peasant:

> "I don't understand why we have persons who have been born so ignorant that they have no thought for anything better...I would like my children to have a better life...but with such a start (as we have had) one never knows..."14/

White's interpretation is that this represents a lowering of aspirations. The values manifested in the interview suggest something quite different. In the first place, the lack of aspirations is equated with ignorance. Secondly, the peasant has aspirations for his children "to have a better life". He realizes that these aspirations must take the facts of life into consideration. One sees a positive regard for desires and a realistic appraisal of aspirations, a state of mind which is common to non-peasants.

a. The Western Region

An analysis of the village of Gualan, described in Annex will illustrate the implicit, explicit, and organized aspirations of the highland peasantry.15 A great majority (80 percent) of the villagers interviewed have a generalized desire to improve their conditions. However, only 45 percent of the villagers have actually joined the patronato of the community, a general organization for village improvement. The reactions of the villagers to an organized attempt at improving village conditions are significant. The Central/Satellite (C/S) primary school has had an extensive agricultural pilot program in the village for some years. The school director estimates that 40 percent of the village is actively supportive of this pilot program, 40 percent is indifferent, and 20 percent is opposed.

Numerous factors govern the decision to participate; some are based on the cultural values of the peasants in the village. For example, the pilot school project was introduced to the villagers as a communal labor project. Initial opposition to the project was based on a misunderstanding of the nature of communal labor — villagers considered it to be "communist" and wanted nothing to

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14/ White, 1972, p. 71.

15/ It is not claimed that this is representative of the entire highlands, but in the absence of more complete surveys it will suffice.

do with it. Other factors are the villagers' commitment of their time and resources to certain goals. The patronato is building a chapel for village meetings and which would add prestige to the village. An extension agent who visits Gualan criticized this as a waste of time, suggesting that they spend more time in the fields. He was ostracized for his criticism. In fact, the villagers only invest leisure time in certain seasons and do not infringe on field labor time to build the chapel. In this case, the programs of an external change agent were stymied because he failed to take into account the villagers' commitment of their own leisure time to projects of their own choosing.

A sizable percentage of the villagers (38 percent of the sample) are already undertaking individual attempts to change agricultural production methods. Some use fertilizer on parts of their coffee land and most are using improved varieties of coffee trees. A number of villagers are experimenting with the use of cornstalks as compost fertilizer on their fields.

Two-thirds of the villagers have desires to implement improvements in agriculture. Some of these involve technical skills, such as pruning techniques, or the proper use of fertilizer. Other improvements are more generally phrased, i.e. "I would like to improve the earth that I plant in." Some skills are corollary to actual cultivation, but would decrease the costs of cultivation. Thus, one man wished to learn metal working in order to shape his own tools from scrap iron.

The aspirations of villagers in Gualan are directed toward improving local conditions. When asked what they wished to do to improve their living conditions, none of them stated emigration as an alternative. The organized and explicit aspirations of the villagers are directed toward local conditions. Thus, one of the advantages of the C/S shool agricultural projects is that it prepares school children to remain within the village.

b. The Northern Region

Aspirations of peasants in government agrarian reform programs are different from those of the typical highland village. The peasants who have joined Aguan Valley cooperatives, for example, are self-selected on the basis of their aspirations. They have made a major decision to migrate from their areas of origin, because of their desire to improve. Leaders of Aguan Valley cooperatives have requested the Adult Education Directorate to conduct a functional education program for adults in the area. Several of the cooperatives have invested time and resources in the building of primary pilot schools, and have donated land for the agricultural activities of the school.

Other areas of agrarian reform present a similar context of aspirations. The Guanchias banana cooperatives in the Sula Valley all have articulated aspirations for their children by formally requesting the Ministry of Education to expand agricultural education in the primary schools. The ANACH national leadership has requested the Adult Education Directorate to conduct literacy and functional education programs in its groups. All of these actions are the result of specific aspirations that the organized peasantry of Honduras have for itself and for its children.

Aspirations of peasants in Aguan Valley are at three levels. At one level, the peasantry aspires to basic literacy, both for illiterate adults and for their children. Some cooperatives have taken the initiative of paying cooperative development funds for the services of an adult education instructor. At another level, there are aspirations for specialized productive skills. For example, adult education instructors conduct special sessions for literate adults who want to improve numeracy skills. Parents stress the vital importance of numeracy for their children. Numeracy is important to the member of the cooperative so that he can keep his own records of work and credit balances. Parents state they do not want to be cheated, and they want their children to have numeracy skills to carry out purchases at local stores. These skills, then, are necessary for the day-to-day functioning of cooperative life.

There is a third level of skills which includes management and agricultural components. The cooperatives want to train their own membership to manage internal affairs. This includes training in leadership skills and attitudes, accounting skills, and the skills necessary to deal with government agencies effectively. Agricultural skills would reduce their dependence on the agricultural extension agent for assistance. Since the ratio of agents to cooperative members is 1:500, each individual member of the cooperative cannot get the assistance that he needs. Most of the agent's time is devoted to the cash crop operations , leaving little for corn and vegetable production on the family plots. Another set of agricultural skills relate to operation and maintenance of the farm machinery. Some of the cooperatives have their own personnel trained in these skills, but others depend on salaried laborers.

Literacy skills are seen by members of the cooperative as the means to an end. The ends explicitly mentioned by those interviewed for this assessment were to read newspapers, to be able to take correspondence courses in mechanics or agriculture, and to be able to read and comprehend the instructions that come with bags of fertilizer and insecticides. Literacy is perceived as an adjunct to the productive activities of the cooperatives.

Members of the cooperatives also stress the necessity of learning cooperative attitudes. A great number of parents feel that schools should teach children the proper attitude toward work. For example, attitudes of collective decision-making were mentioned by Guanchias parents as an example of what children should learn in civics class.

c. The Southern Region

The aspirations of peasants in the South are reviewed by White. 16/ One such aspiration is to basic literacy skills. When asked why literacy was important, most peasants stressed its utility in non-agricultural contexts. Most of the reading that peasants presently do is not related to the productive activities of the campo. The reason for this, quite simply, is that there is little material written for peasant audience. No organization has mass-produced agricultural instructional material for distribution to the peasantry.

16/ White, 1972.

Other aspirations of the southern peasantry are closely related to the principal values of their culture making a living through agriculture, maintaining family health, and preserving one's identity and self work. These aspirations are conditioned by a realistic appraisal of their living conditions.

d. The Central Region

The learning aspirations of the peasantry in the central region of Honduras are conditioned, in part, by the proximity of urban influence and the presence of development agencies in most of the region. Interviews with extension agents from this region reveal that they prefer to work with this peasantry more than that of the western area because cooperation is more easily elicited. On the other hand, C/S schools have had more success with their agricultural projects in the western region than in the central region. This difference is probably due to different aspirations for different age categories in these areas. In the central area, the peasantry views schools as an avenue of mobility for their children out of the peasant sector. Schools, therefore, should be directed toward these aspirations. In the western area, most of the parents aspire for a better life for their children, but they view this life in the rural context.

4. Models of Target Group Aspirations

On the basis of available information, one can generalize about the aspirations of the target group in the highland regions (western, central, southern, southeastern, and north-central). There are three different general models of aspiration. These may be held by different peasants in the same region simultaneously, or one may predominate over the other. They will be delineated briefly in order to assess the learning needs related to them, though through baseline study is needed for a complete analysis.

The first is the upward mobility model. Several strategies may be followed in this model. One is that of higher education. This is the least common of the strategies, as few of the children in rural areas continue in their schooling. Another strategy is to learn a skill such as carpentry that will provide an alternate source of income. Another strategy is to emigrate to the urban areas into low-paying service jobs. This strategy is becoming increasingly more common.

The second model is the expansionist model where a peasant feels that the only way to better his conditions is to increase his supply of land, cattle, and other sources of production. Entrepreneurs in every generation increase their income by increasing the amount of land they work. One strategy is to open up virgin land. This often involves a temporary change in residence during the planting and harvest season, to have access to distant virgin land. This alternative is less viable in the more densely populated areas. Another strategy involves the accumulation of capital over several years for reinvestment in the purchase of land. Numerous activities contribute to this process of accumulation, and the peasant must have control over sufficient resources to allow accumulation of surplus, no matter how small that surplus is. Another strategy is that of resettlement on available fertile land, through government

colonization efforts and through the pressure tactics of land invasion. The peasants who emigrate to the Aguan area do so in order to extend the amount of land they have access to, as most of them come from the crowded highlands.

The third model of aspirations is that of intensification of agricultural and other productive activities within the context of available land. The aspirations in this model are to utilize more efficiently the resources already available. In the western region, this seems to be the dominant model of aspirations. Most of the students in the school aspire to remain and work in their father's fields. All of the adults who aspired to better their conditions phrased their strategies in terms of improving their knowledge and skills, not in terms of emigration or expansion.

This mode of agricultural development has been called "agricultural involution", by Geertz.17/ The cause of involution is usually a combination of circumscription and increasing population density. With more and more peasants in a non-expanding area of land, the only viable alternative is to intensify production activities. Terracing and other agricultural techniques are the outcome of such intensification. In the western region, population density has reached this level, but there is not yet the circumscription that would tend to force intensification. As long as emigration is a viable alternative, and as long as expansion is still possible, not all peasants will choose the option of intensification. The investment of labor and capital in improvement of agricultural techniques will not be carried out spontaneously when other alternatives are more feasible.

A significant number of peasants surveyed in the western region judge the intensification model to be a more viable option. They feel, realistically, that migration to an urban center does not imply upward mobility, and that not all children can find jobs after higher education. They do not wish to emigrate to the lowlands for various reasons, e.g. kinship ties, differences in climate, uncertainty about the continuity of Agrarian Reform programs. The aspirations of these peasants are directed toward the improvement of local conditions.

Some members of the target group do not have any significant aspirations. The percentage varies from village to village. Entire sections of the population are in isolated and self-sufficient conditions. An interview with a Miskito leader revealed that it is difficult to convince members of a village that it is necessary to build a school. There are also scattered pockets of peasantry in the western and central highlands that have allegedly resisted development programs because they were satisfied with their present conditions of life.

17/ Geertz, 1969.

C. Learning Implications of the Plans and Aspirations to Alter the Target Group Conditions

1. Learning Needs Implied by Rural Development Plans

a. Literacy and Development

The current development plans of the Honduran government assume a level of literacy in the rural population for their successful execution. Development workers in the Aguan project, for example, find that cooperatives with a higher percentage of functional literates are more successful. Literacy is a vehicle of communication which facilitates the work of extension and development agents.

The constraint in assuming literacy for development programs is that there is a very high illiteracy rate in the rural areas despite years of literacy compaigns by public and private agencies. The time that would be required to achieve acceptable literacy rates in the rural area would significantly retard the pace of rural development.

The primary learning need, in this context, is to develop a means of permanent communication with the target group which bypasses literacy and which also will serve to stimulate interest in the eventual achievement of literacy by peasants. The communication network should not assume literacy but neither should it assume perpetual illiteracy.

b. Productivity and Development

The priority learning need is to provide the knowledge, skill, and attitudes necessary for the modernization of Honduran agriculture. The majority of the target group uses traditional technology and practices in agriculture. The development plans of the government are to provide technical assistance and credit to the peasantry so that modern intermediate and heavy technology can be adopted, where it is ecologically feasible.

Most of the rural regions of Honduras are relatively underutilized in comparison to the densely populated El Salvador. By introducing high yield crop varieties, and such yield-increasing production factors as fertilizers, crop rotation and diversification systems, and soil conservation practicies the present peasant economy could be significantly altered. But in the typical isolated highland community small farmers are not using these agricultural innovations nor is technical assistance available. This is, in part, due to the inefficiency of the development agencies of the government. On the other hand, it is also related to the lack of field-proven yield-increasing technology which will give results to the peasant. There has been research in Honduras, but there is a gap between the applied research level and the field demonstration level which would attract the small cultivator.18/

18/ Basico: 1970, Part Three, pp. 36-43

In this situation, reluctance to adopt some productive techniques is partly due to the strategy of adaptation to a low risk margin. The strategy of minimum risk represents the Minimax principle in agriculture practices: one tries to minimize maximum losses at the cost of minimizing the maximum gains. This strategy results from a rational assessment of the smallness of peasant reserves, the severity of a negative result, and the high risk involved in attaining a positive result. Any program of agricultural education must take into account the weighing of alternatives by a peasant who has little capital or land to risk. White found that 69.2 percent of those interviewed would not risk any property to obtain a loan. Agricultural interventions, to be accepted in this risk situation, must represent actions which do not place the peasant's reserves in jeopardy.

c. Knowledge, Attitudes and Skills for Development

The specific learning needs implied by these development plans are as follows:

(1) Knowledge of appropriate technological innovations.

a. Instructions in the methods of applying fertilizer, for specific crops.

b. Instruction in techniques for preventing soil erosion.

c. Instruction in techniques for utilizing improved seed varieties.

d. Instruction in improved planting practices.

e. Instruction in the utility of mixed crop practices.

f. Instruction in the necessity and methods of crop rotation.

g. Instruction in the introduction of new crops that might be appropriate for a certain area.

h. Instruction in the methods of intensifying cultivation in certain ecological areas, eg.terracing of hillsides.

i. Instruction in the construction of irrigation systems.

j. Instruction in various animal-husbandry projects, (rabbits, bees, etc.).

k. Instruction for more rational utilization of forest resources (e.g. rational resin-tapping techniques, reforestation, etc.).

(2) Skills in developing organizational forms appropriate to agricultural development.

a. Learning of philosophy and management techniques for agricultural cooperatives (as intermediate credit and distribution agencies in the semi-subsistence context).

b. Learning of the skills needed to deal with existing development agencies (the preparation of users of government services who understand the function of these agencies).

c. Learning of leadership and organizational techniques to deal with active and passive resistance to development efforts.

(3) Attitudes

a. Development of attitudes of mutual cooperation in the target group and government agents.

b. Development of attitudes oriented toward productivity increases per se.

d. Higher Education and Development

Some tendencies in rural development plans in recent Honduran history do not always respond to the learning needs of the rural population. One such tendency is to seek the expansion of the formal education system, beyond primary school, without considering demand. There is a tendency for small regional towns to seek construction of secondary schools because they are considered to be a symbol of development. However, it is less costly for most parents with professional aspirations for their children to send them elsewhere.

e. Local Education for Development

Another tendency in rural development has been to take peasants out of the rural milieu for extended training. The rationale for this is that extended training in agricultural skills can best be done at agricultural schools and experimental stations. This has several drawbacks. First, it is difficult, if not impossible to train the peasant in all of the skills of the agricultural extension agent; the role of the agent and his technical knowledge is not learned in the short periods of time available to adult peasants. Second, agricultural learning is best accomplished in situ. One of the principal results of the Puebla project in Mexico was to demonstrate that agricultural innovations learned by or suggested to peasants under the conditions of agricultural experiment stations are often not applicable to the ecological setting in which the peasant actually grows his crops.19/ Third, the INA/IDF peasant training

19/ Coombs, 1975

programs in Honduras have established that a peasant who is taken out of his village for a period of several months is often mistrusted by his fellow villagers when he returns. Thus, for educational, technical, and political reasons it is more advisable to respond to the learning needs of the rural population with programs in the actual peasant milieu.

2. Learning needs of the Rural Population

a. Learning Needs and Target Group Characteristic

The minimum learning needs of the target group are the skills, knowledge, and attitudes for the conduct of the household economy. These needs are differentiated by age, by geographical region, by occupation, and by sex. Occupational distinctions are correlated with geographical, sex, and age differences. Geographical differences, as discussed in the profile of the target group, condition the crop, forestry, and animal husbandry activities of the peasant. The occupation of the peasantry in each region is governed principally by the predominant crops in each area.

Age differences set four stages in the life cycle of the peasantry, which are related to occupational differences. Up to the age of three or four, the child is indulged and does not have any responsibilities. From age four to early adolescence, the child is gradually introduced to productive responsibilities in the household economy, e. g. gathering firewood, bringing water, assisting in agricultural activities, running errands, From early adolescence until establishment of an independent household, the peasant labors in his household as a full-fledged member of the labor force. From the establishment of his own household to late adulthood, the peasant is responsible for his household economy. These stages are part of a developmental cycle in the household economy, so that it is impossible to set up absolute age categories for them. But the occupational concerns gradually shift from one stage to the next.

Sex differences establish a division of labor in the peasant household. The differentiation of activities is not rigid, nor is it identical in each region of Honduras. For example, the role of the woman in the household economy of the eastern region is much more pronouncedly agricultural than in other regions. The households in the cash-crop, mechanized areas of the Aguan Valley have a much clearer division of labor where men do all the agricultural work and women work in the household and house site.

1. Learning Needs and Peasant Life Cycle.

The following brief description summarizes the typical developmental pattern of peasant males and females, in order to differentiate some of the learning needs of the target group. A young boy in the pre-adolescent phase is introduced to two categories of activity: household and agricultural. There is, apparently, no rigid sexual differentiation before age 9 or 10. Both young boys and young girls carry water, firewood, and do other jobs around the house. Sometime around age 10 the separation between agricultural tasks and purely household tasks begins. Young boys may be sent to cut grass for

the family horse. They may help with clearing and harvest activities. The degree of actual participation is governed by a variety of factors: the ordinal positions of the child in relation to his siblings, the child's performance in school, the amount of labor necessary for household support, and other factors. Thus, a third or fourth male child is less likely to begin early participation in agricultural tasks because an older brother is assisting the father in the fields. A child who shows promise of being a scholar will oftentimes be encouraged to concentrate on school work. The seasonal cycle of activities sometimes makes it necessary for all children to participate at times of peak demand. All of these factors must be considered in understanding the learning situation of the pre-adolescent child.

While young boys are being guided toward field activities, young girls assume more and more responsibilities with the care of younger siblings, the preparation of meals, the maintenance of the house, and the supply of water and firewood. An older girl in the family with several younger siblings may be called upon to care for them full-time. Again, family size and birth order influence the participation of girls in household tasks.

From early adolescence until sometime after marriage, the typical peasant youth assumes full-time responsibilities in the household economy. At this point, the sexual division of labor mirrors that of adults in general. There is usually a period after marriage when the newlyweds live patrilocally 20/ while they establish their own farm and build their house. This period may last from one to six years, and sometimes even longer. During this time, as members of an extended family household, the young couple contribute of the parental household economy while gradually establishing an independent household.

From the time the independent household is established until late adulthood, the peasant couple has full responsibility for the economy of their household. Their occupation during this time is governed by the size of the family, by the size of their landholding, by the geographical conditions, and other factors.

The learning needs of the target group change significantly form one phase to the next, although the actual shifts may be gradual. Learning needs are also governed by the same factors that determine the conditions of the peasant economy during these stages. The pre-adolescent child is culturally defined as a learner and as a doer. School learning is viewed as an essential component of the child's development in most of rural Honduras, but it is defined by most peasants as learning the ability to read, write, and do arithmetic. Primary schools are sufficiently institutionalized in most of rural Honduras that these skills have become an ineradicable component of the felt learning needs of the peasantry. The learning that takes place in the household, however, is not culturally defined as learning or as knowledge. Most

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20/ Patrilocal refers to residence of a married couple in the groom's parent house.

of the peasants interviewed for this assessment were uanble to define the learning needs for minimal performance of agricultural and household tasks because they do not categorize these activities as something involving learning. A typical response to the question:"What knowledge do you feel is necessary for your occupation?" was: "We do not use any knowledge in our work. We do our work a lo natural (in a natural way)". Peasants consider their traditional occupation as something that is not learned.

The minimum learning needs of the pre-adolescent, though not culturally defined as such, are literacy and numeracy skills from the schools and agricultural-household skills for the home. In addition to these skills, there is one basic attitude that is of primordial importance for peasants: a willingnes to work hard. A majority of the peasant adults interviewed stated that learning to work was the principal value they wished to imbue in their children. Conversely, several parents complained that youths sent out of the village would return "spoiled" and no longer wanting to work. This attitude toward the necessity and importance of work is the most important minimal learning attitude. These felt learning needs are part of the ongoing peasant sociocultural system.

2. Felt Learning Needs and Development Aspirations.

There are also learning needs that are felt by those with aspirations for development. The felt needs are related to the three general models of aspirations. Those who aspire to learn skilled occupations want the possibility of learning or sending their children to learn these skills, and they want primary schools that will give the child an adequate and competitive background to undergo further training. For example, one parent wants her son to become a radio technician. She knows that what she needs for him is an adequate local primary education and the means to finance his technical education.

The peasantry that expressed aspirations to intensify their production refer to specific skills and knowledge that they need to learn. These include learning the proper methods of fertilizer use, the techniques of pruning, methods for insect control, knowledge of improved seed varieties, knowledge of sewing techniques, and other specific production-related knowledge and skills. They also have general aspirations expressed in felt attitudinal learning needs, that is, they want technical instruction in general, or they want to teach their children how to attain a better future. Their felt learning need is a general desire for improvement, which is not as focused as some of the others.

b. Implicit Learning Needs

This assessment has considered two sources of information for the learning needs of the rural population. One source is the learning needs as defined by the national government plans for the rural population. The other source is the peasants themselves. One other context for defining learning needs is from an observational point of view, derived by the educational analyst after reviewing government plans and interviewing peasants. The following section of this assessment analyzes both of the above sources from an independent point of view, and suggests some of priority learning needs for the peasantry.

1. The purpose of productivity increase. The principal emphasis of national development plans is on the raising of productivity in the rural area, with the assumption that the quality of life will improve when the peasantry has the necessary knowledge, skills, and attitudes to raise productivity The interviews with peasants for this assessment and other available data shows that a great majority of the peasantry wishes to improve its living conditions. There is, therefore, a general coincidence of aspirations and plans from these two sources. It is fundamentally important to recognize that parallel aspirations do not signify that educational programs addressed to this need will function by simply designing a technically sound educational system.

Any program of technical education for production must consider a social development learning need.

This learning need exists because of the past history of development programs, political promises, and general relationship of the nattional government and the peasantry. The general development approach of the GOH has fostered the continuation of dependency relations between the urban and peasant sector. The peasantry often manifest an initial mistrust of government initiatives. This mistrust may be manifested openly, or it may be disguised as passive non-cooperation, or it may be become apparent in an unwillingness to follow through with initiatives that were apparently accepted enthusiastically.

2. Attitudes toward development. Rural education programs must establish attitudes of mutual cooperation and equal participation by the peasant sector and the government development programs. The government agents need to learn that they must seek active participation of the peasantry on an equal footing. The peasantry needs to learn, and in most cases must be convinced, that educational programs are intended for their benefit. The basic learning need for both groups is an attitude of equal civic participation in the rural development process.

Related to this general attitudinal learning need is the learning of basic skills by both the target group and the government agents to communicate effectively with each other. This is a process of concientization which is based on a mutual regard for the self-worth of the individual.

Another attitudinal learning need is also apparent at the interface of peasant aspirations and government development plans: this is the complex of motivations that accompany the general desire to increase the quality of life. Government development plans tend to stress increase in production and income; peasant aspirations are to increase income and production for a specific purpose, which is to better his living conditions. Innovations in agriculture are judged by peasants not only in terms of their productive results, but also in terms of the household economy. The opportunity costs of innovations tend to be calculated differently by peasants than by agricultural extension agents. They often outweigh the motivation to increase production and income. Judgments of the benefit/cost ratio made by peasants in evaluation of an innovation might differ from those made by the development agent because the characterization of cost are made differently. For example, peasants on coffee-growing cooperatives were offered the opportunity to raise their own seedlings rather than purchase them.

The agronomist's calculations weighed the costs, in labor and materials, of establishing a nursery for the cooperative against the costs of purchasing commercial seedlings; the commercial seedlings were more expensive. The members of the cooperatives rejected the innovation because they included costs not considered by the agronomist. The labor for caring for these seedlings came at a time of the year that was slack time in the labor cycle and was devoted to festival activities. The peasants calculated that the savings involved did not justify interruption of the festival cycle. They were motivated to increase their income, but not at the expense of interrupting activities that they considered to be necessary.21/

3. Skills for Development. The learning needs which are of most crucial importance for both peasant and government development aspirations are basic, practical skills for agricultural production. These are specific skills that are adapted to the agricultural conditions of the region. The ecological conditions, the current crop cycles, the labor situation, and the general economic matrix of an area must be related to the skills.

The skills instruction must take into consideration the local crop practices and their adaptation to ecological conditions. For example, it would be useless to teach contour plowing to peasants in the western region. Soil erosion prevention requires other techniques where it is impossible for topographical reasons to introduce tractors.

Where corn is grown by swidden techniques, the most logical skills to be taught are the uses of improved seed and the techniques of cornstalk composting between crops. There are few areas of Honduras where swidden agriculture is practiced exclusively. Intensive cultivation of beans and other legumes, fruit trees, and other cash crops are found on a small-scale in most of the regions.

1. The West

In the western region, the most practical skills to be taught are those that would improve the intensive cultivation of cash crops--vegetables and coffee, and which would enable the introduction of some crops that are ecologically suitable. Since most families devote small portions of land to onions and cabbage, practices that would increase their productivity would be of first priority. These crops are already sold for cash, they are grown in the flatter, more fertile pockets of land, and they are amenable to productivity increase of their cash value in relation to the cost of modern inputs. Fertilizer, insecticides, and soil conservation techniques are already being used by some peasants in the area who have experimented with them and found them to be functional.

21/ This example is from field work conducted by the author. It must be pointed out that the average number of work days in the region is 270; the reluctance to give up festival days is not a sign of laziness on the part of the peasants.

2. The North

In the northern region, the skills that must be learned to develop agriculture are of a different type. African palm cultivation is already technically developed through the INA programs; corn cultivation on some cooperatives is done with heavy machinery and insecticides. There are, however, numerous cooperatives where African palm cannot be introduced, and where the development priority is basic grains. These cooperatives have family parcels of land. The skills that are of first priority here involve improved seed varieties, seed planting techniques to replace the traditional digging stick method, and the installation of small irrigation systems to allow for year-around cultivation. This last innovation involves infrastructural investment, which is planned planned by INA, as well as education in irrigation techniques.

3. The South

In the southern region, various development agencies are introducing new cash crops. There are markets for these crops, both national and international. To introduce the crops to individual small farmers, a readily packaged and easily delivered guide for their production can be developed. There are already various agencies working in the south, including the radio schools, the INA, the FAO, and the BANAFOM. These agencies are developing the infrastructure and the organizational basis for modernization of agriculture. The priority learning need here is to develop easily replicable and readily diffused information and instruction packets, and also to assist in establishing a permanent network of agricultural education that would assist development efforts already underway. The FAO has demonstration plots of rice to which the leaders of peasant cooperatives are brought for instruction. However, the FAO has neither the time nor the resources to follow up their instruction at the local level. A permanent communications and information delivery system is needed to provide ongoing assistance to cooperatives that have received credit for new crops. This information delivery system would be based on the community paraprofessional who transmits learning packages and information from the regional center. An ongoing learning system, with the agricultural technicians as the source of information, will assist crop introduction efforts in the south. The FAO has not been able to set this system up because of the low literacy and basic skills level of the peasantry in the cooperatives.

4. Knowledge for Development

The specific practical skills needed for rural production vary from region to region. There is, however, a general knowledge need which cuts across regions to develop a more technical understanding of agricultural processes. This is not a need to develop a pragmatic approach to agriculture, nor does it involve teaching an ability to question traditional patterns of agriculture. By and large, what the observer-technician considers to be "traditional" patterns of agriculture are adapted to the ecological and technical circumstance of the peasantry. It is not the ability to question tradition and to be pragmatic about the agriculture, because the peasant already has a pragmatic approach to solving the problems faced in crop cultivation.

What is needed is a scientific understanding of the context of agricultural innovations, so that the peasant can judge the utility of innovations. The peasant knows, for example, that rain is necessary for crops to grow and it is not difficult to introduce irrigation where it is feasible and necessary. The peasant does not usually have a similar understanding of the func-

tions of fertilizer. Swidden agriculturalists know that the soil becomes "tired" after two or three years use, and they know from experience that they must open up new fields. The learning need for most swidden agriculturalists is to understand why the soil becomes "tired", and what are the appropriate remedies. It is difficult to introduce this type of knowledge without a general background in the natural sciences, with rudiments of chemistry and plant biology. The learning need, then, is to introduce sufficient background understanding of the natural science so that the peasant can understand the exact functional mechanisms of fertilization and other technical innovations.

The peasant does not have a pre-logical mentality; he is able to understand cause and effect relationships. But his understanding of cause and effect is limited by the scientific information which is available to him. His learning need is to expand his fund of available scientific information so that he can understand cause and effect relationships that are not obvious. For example, the peasant knows that if he selects the seed from the most productive corn plants from one harvest for planting the next year, they will give a better result. He understands the effect-better harvest-produced by the cause-selection of his seed. However, the peasant does not have the scientific information available to understand the mechanism of this causal relationship-he does not know plant genetics. In order to understand the utility of improved seed varieties, he must have some more information than he does about the utility of selection over several plant generations. This learning need is not contradictory to his traditional practices. Rather, it builds on the facts that he himself has observed. He is not learning to question tradition but to understand why the traditional selection of seed and how this relates to adoption of new seed.

V. DESCRIPTION OF THE RURAL FORMAL EDUCATION SYSTEM

A. Introduction

1. A General Description of Primary Education

In 1975, there were 459,925 students in the Honduras primary education system an apparent 93 percent of the school age population (ages 7-12). Principal responsibility for administering the 4,602 schools in this system and its 13,045 teachers is with the Directorate of Primary Education, the largest unit of the Ministry of Public Education (MOE). Since its creation in 1963, the MOE has maintained a centralized primary education system. All administrative curricular and supervisory matters are handled by the Directorate. An organizational chart is in the statistical annex.

Other units of the MOE has functions that relate to the primary education system. The Directorate for School Construction supervises construction and maintenance of primary schools. The Directorate for Secondary Education administers the Normal schools, and supervises the Superior Teacher Training School (ESP), which has charge of a special inservice training program for teachers lacking full qualification. The ESP also has a training program for primary school directors and supervisors. The Personnel Office has major responsibility for hiring teachers, assigning pay status, granting salary increases, and handling promotions.

Decisions regarding salaries, salary increases, and retirement benefits are all made by the Personnel office. Primary teachers are competitively hired by the office of Primary Education. Decisions regarding where to open new schools, where to send additional teachers, and where to locate new building construction tend to receive their impetus from below. Every year the Directorates of Primary Education and School Construction receive requests from communities in various regions of Honduras for opening schools and aid in constructing school buildings. The Directorate of Primary Education was able to comply with only half of the petitions in 1975 due to budgetary constraints. Decisions are made on the basis of such criteria as adequate enrollment and community interest in previous projects. The availability of a school building or temporary facilities are also taken into consideration.

The Directorate's centralized system of supervision and administration has helped alleviate many of the problems inherent in an educational system previously supervised and administered at a municipal level. There is, however, serious consideration of decentralization although no decision appears to be near on this question.

2. GOH Commitment to Rural Primary Education

In 1975, 258,241 (56 percent) of Honduran primary students attended schools in rural areas. They were served by a total of 4,057 schools and 7,006 teachers, 88.1 percent and 53.7 percent of the total number of public primary schools and teachers in Honduras. The GOH has recently given strong indication of its special commitment to rural primary education, as outlined in the goals of the National Development Plan.

Evidence that the GOH, and more specifically the MOE, is attempting to meet each of the goals of the Plan comes from a variety of sources. Data for the 1974 and 1975 school years indicate that 79 percent and 57 percent, respectively, of new

student enrollments were in rural areas. The rural teaching staff received 65 and 49 percent of the total increase in those years. In 1974, 89 percent of the new schools opened were in rural areas while in 1975 this percentage was 92. 1/ For the 1976 school year the goals include opening 300 new schools, of which 288 will be in rural areas; adding 550 teachers of which 300 will work in rural areas; increasing student enrollment by 30,000, giving preference to rural 21,000 students; and increasing the number of complete schools in rural areas.

Three hundred and ninety three classrooms were built in 1974 and 682 in 1975 through a self-help program funded by CARE and the national government. Approximatelly 95 percent of these were in the rural areas.

There are 438 Central/Satellite schools in a special program for rural areas. The normal schools are attempting to develop modifications of the primary curriculum to meet the needs of the rural population. They are developing adaptations to the multi-grade teaching situation typical of rural schools to include practical subjects. Short in-service training courses are provided by the MOE for qualified teachers in technical and agricultural subjects. An investigation unit is producing supplementary curricular materials for rural teachers with suggestions for relating the standard curricular subjects to the rural milieu.

One indicator of the GOH's commitment to rural education is its policy of providing salary supplements to teachers working in the Frontier zones and in areas that present health hazards. In addition, teachers receive an extra six months recognition toward salary increases and retirement for every year they work in rural areas. The retirement policy also recognizes service in rural schools.

1/ If the above data were to be compared with the same data for 1970, the latter would reveal that only 24% of new student enrollments were in rural areas. In addition only 32% of new teachers were assigned to rural schools and 35% of new schools opened were rural.

B. Description of the Rural Primary System

1. Enrollments 2/

The 1975 enrollment figures for primary school students indicate that of a total of 435,861 students, 246,761 were enrolled in rural primary schools. Compared with similar data for 1965, this represents a significant increase both in number of students and percentage of rural children of primary school age enrolled in school. Whereas in 1965, roughly 60 percent of the rural primary school population was enrolled in rural schools, by 1975 the rural primary school enrollment represented approximately 70 percent of the rural primary school age population. 3/

In spite of this, high dropout rates and relatively high rates of repetition continue to be significant barriers to educational advancement among rural students. Of the students who enter first grade each year, a large percentage drops out during the school year and another large percentage fails final exams. The latter either drop out between school years or repeat grade one. Although not as marked, this pattern continues in the upper grades. By grade four the student enrollment is nearly a quarter of the first grade enrollment and by the end of grade six it is down to 14 percent of the original grade one enrollment.

A further barrier to educational achievement in rural areas is the broad age distribution that can be found in all grades. In 1975, age/grade enrollment figures for rural areas indicated that the majority of the students in first grade were over age. In fourth grade, where the average age should be 9 or 10, over 60 percent of the students were 11 years of age or older.

Possible Reasons for the High Dropout Rate in Rural Areas

There are no easy answers to why so many children in rural areas drop out of school in the early years and why so few finish sixth grade. The problem is very complex; it is little understood; and it is affected by a wide variety of interrelated factors.

The first andprobably key factors are those related to environmental, social, and economic constraints; the child begins school but he must either drop out for several weeks or months or leave school entirely to help his father in the fields; the child must stay home to take care of his younger brother and sisters while his mother works; the child begins the school year but since he and his family move during the year he cannot finish the school year; or during the rainy season there may be periods when the stream separating his house from the school is so swollen that he can't cross it.

2/ A detailed discussion of primary school enrollments, and dropout and retention rates and cost implications may be found in Chapter VIII.

3/ These percentages are only an approximation designed to show the magnitude of increase in school age population enrolled in school over years. In order to arrive at these figures, the population projections for 1965 and 1975 from the 1961 census were multiplied by .70 on the assumption that, like the national population, approximately 70 percent of the primary school age population lives in rural areas.

Another group of factors are related to the education system itself; there are not enough teachers and they are insufficiently trained; the school facilities are inadequate; instructional materials are lacking; the curriculum is not relevant to his everyday activities and his learning needs; the child's parents do not comprehend what school is and how it may be of use to their children; or the child is insufficiently nourished and cannot pay proper attention in classes.

Several of the factors included in the latter part of this group, while not traditionally a concern of the educational system, have become a special focus of MOE efforts in recent years through a variety of new programs and modifications in existing programs. One new program designed specifically for the rural child that focuses on several of the factors is the Central/Satellite school program, which will be discussed in more detail in Section C.

2. Teachers

In 1975 the rural primary teaching force in Honduras consisted of 7,004 teachers, an increase of 997 since 1971. This progressive increase in rural teachers has almost kept up with increases in student enrollment. In 1971 there was approximately one teacher for every 36 rural students and in 1975 the corresponding ratio was 1:37.

One of the notable changes in teachers working in rural areas in the past five years has been the progressive increase in number and percentage of fully qualified teachers. Whereas in 1971, 55.8 percent of rural teaching force was fully qualified, the corresponding figure for 1975 was 66.4 percent. If the GOH can meet its goal of "professionalizing" 1,600 of the remaining 2,431 teachers who are at present not fully qualified, and if it can be assumed that the MOE will continue to implement its current policy of no longer hiring teachers that are not fully qualified, then the percentage of non-qualified teachers working in rural areas should drop to less than 7 percent by 1979. 4/

The added grade responsibilities of the rural teachers are compounded by the lack of preparation these teachers have to handle multigrade classrooms. A common complaint of teachers who have graduated from Honduras' Normal schools in the last ten years is that they have been prepared for a one teacher, - one grade situation and not the one-teacher, several grade situation which is the norm in rural areas. The MOE, recognizing the importance of this concern, is attempting to rectify this unrealistic preparation. 5/

Other problems cited by teachers working in rural areas are: difficulties in getting pay (some must go to the principal city to get their paychecks - a procedure that can be quite costly); lack of teaching materials and difficulties

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4/ By the end of 1978, the 1,600 teachers in "professionalization" should complete the training program they began in 1974.

5/ See part 5 of this section, Teacher Training.

in obtaining them (in some areas materials such as chalk and paper are extremely expensive or impossible to obtain); and high-student-teacher ratios. It is not uncommon to find teachers in rural areas with 60 students or more; to 90 or 100 students.

The last, and perhaps most pressing problem is the limited ability of the MOE to meet the requests it receives from rural communities for teachers. Due to a limited supply of new positions for primary teachers last year, the Directorate General of Primary Education was forced to reject half of the applications of rural communities for teachers.

Finding fully-qualified teachers who are willing to teach in isolated rural areas continues to be a problem. Despite recent incentives (salary benefits for teachers in frontier zones, six month extra recognition for salary and retirement purposes for lack year worked), most fully-qualified teachers prefer to teach in urban zones. In 1975, 98.7 percent of teachers working in urban areas were fully qualified. Resons cited by fully-qualified teachers for prefering to work in cities, escpecially Tegucigalpa include opportunities for advanced study; closeness to relatives or friends; and better, more stimulating living conditions.

Another problem faced by the rural teacher which does not confront the urban teacher is the necessity for working with more than one grade simultaneously. Whereas in 1975 all but 78.1 percent of the teachers working in urban areas taught only one grade, the corresponding figure for rural teachers was 25.7 percent.

3. Physical Facilities and Equipment

Over the past five years, 2375 classrooms have been built by the Office of School Construction in collaboration with CARE. Although some have been constructed under contract to local firms, over 80 percent have been built through self-help programs. 6/ Of the latter, 95 percent have been carried out in rural areas.

Although the classrooms constructed under the self-help program generally take longer to build than classrooms constructed under contract, there are certain distinct advantages to the self-help program.

a. Costs per classroom are much lower. Whereas an average classroom built in a rural area under contract cost $4,085, each classroom built under self-help costs approximately $1,900.

b. Community participation in all phases of the project permits a closer feeling of identity with the construction once completed. Acts of vandalism are less apt to occur.

6/ In the self-help program the GOH provides the basic building materials not available to the community, such as cement, asbestos roofing, and iron rods. In addition, skilled labor is provided. The community donates the rest, including sand, gravel, and rock for foundations; bricks or adobe blocks for walls; and unskilled labor.

c. The construction process offers opportunities for students, parents, and other community members to acquire skills on masonry and carpentry.

For the above reasons the MOE considers this program to be the most cost-effective and feasible way of continuing school construction in rural areas. As it currently functions, however, this program has certain constraints:

a. Demand from communities far exceeds the supply. Just in the first four months of the current year the Office of School Construction has received petitions for five times as many classrooms than it can supply.

b. Many communities have difficulty transporting the donated materials to the building sites. Transportation costs have gone up due to recent increases in the price of gasoline. In areas where there are no roads, cement sacks, iron rods, and other items must be transported by mule or by backpack

c. Although all municipalities are required by law to spend a minimum of six percent of their annual budgets on local schools, many do not or cannot comply.

d. Many communities participating in the self-help program do not carry out preventive maintenance once the building is constructed. Buildings deteriorate more rapidly and the need is created for major repairs in a relatively short period of time.

e. The self-help program only covers basic needs for classroom space. Funds are not available for constructing workshop facilities for sewing, carpentry and other basic skills activities.

Other constraints related to physical facilities and equipment in general are:

a. Insufficient funds for maintenance on a larger scale. This year the Office of School Construction has allocated $250,000 for maintenance or an average of $22 per classroom.

b. Lack of chairs and desks, and the generally low quality of those in existence. In many rural schools students must either sit on the floor or crowd into existing desks and chairs. 7/

c. Poor building conditions; insufficient lighting and/or ventilation; inadequate partitions between classrooms; crowding.

In most rural areas of the country land is not a constraint, as most municipalities have ejido lands that can be donated for school construction purposes. As one of its obligations under the existing self-help school construction program, each community must donate at least two acres of land for the school.

7/ The MOE has a shop on Tegucigalpa that builds chairs and desks. Although the prices are low, the supply is limited and schools located in rural areas must pay high transportation costs to get them to the school site.

4. Instructional Materials

Ten years ago a system for nationwide production and distribution of primary texts did not exist. Students who were in a position to buy their own textbooks were considered very fortunate. More often, the teacher owned the only set of texts, and spent many of the daily classroom hours relaying the contents to the students so that they could copy them in notebooks.

The situation today is very different. The majority of Honduran primary schools have either a complete or nearly complete set of texts, accompanied by a teacher's guide. They are available for each grade in mathematics, science, social studies, and language, 8/ and are distributed without charge to public school students, and for the cost of production to all private students. To date, over 6,000,000 texts and teachers guides have been distributed to 4626 Honduran primary schools.

The organization responsible for the production and distribution of these texts is the Materials Product Center. 9/

Annually, the Center receives enrollment data from each primary school, processes them through a computerized information storage and retrieval system, and assigns the needed texts to each school. Depending on supply the indicated text titles and quantities are shipped to the distribution point nearest the school. At approximately the same time, the director of the school receives notification of the shipment and on instructions regarding the procedure to follow in order to pick it up.

In addition to its materials production and distribution function, the Materials Production Center also has the responsibility of writing new texts and other supplements. To date the technical staff has produced 22 titles and is currently in the process of working on 12 additional ones. Among these latter are cross-word puzzle books for fifth and sixth grades students in social studies, science, and mathematics, two booklets on Mayan culture for first and second grade students and mathematics supplements.

The materials produced by the Center and the textbook series are all affected by the following constraints:

a. The high demand for texts and guides exceeds the current supply. Last year, for example, 200,000 texts were produced and distributed, and

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8/ The majority of these texts and teachers guides were written in the early and mid sixties by a commission of Central American educators under the auspices of ODECA and ROCAP.

9/ From its initial organization in 1963 through 1975, the Materials Production Center was a unit of the Directorate of Primary Education. It has been upgraded and also serves pre-primary, secondary and non-formal education.

900,000 texts were needed. The main reason for this is low budget and increasing costs.10/

b. Although the contents are good, many teachers complain that the texts are not adapted to different rural areas of Honduras and that many of the illustrations are not realistic.

c. Many of the texts and guides have been distributed to rural teachers without providing them with adequate (or any) orientation on how to use them. Although the Materials Production Center has given over 144 courses to a total of 12,890 teachers explaining how they should use the texts, these orientation courses have varied in length and scope. Some courses have lasted a day; other 3 days; others a week or a month.

d. Neither the ODECA/ROCAP series nor the pamphlets and texts currently being produced by the Materials Production Center have been pretested.

e. The majority of the students are not allowed to take their texts home. Younger brothers and sisters therefore are deprived of the opportunity to leaf through them and become motivated to want to learn to read their contents. In addition, parents do not get an opportunity to become acquainted with what their children are doing in school.

A final constraint refers not to the textbooks themselves but to the lack of any other instructional materials distributed on a nationwide basis to primary school teachers. All other instructional materials available in each classroom depend on the ingenuity of each teacher and his or her pocketbook.11/

5. Teacher Training

Primary teacher training in Honduras is currently being carried out by three institutions: the Normal schools, the Superior Teachers Training College, and the Directorate of Primary Education. While the first two offer programs that lead to a formal title, the latter provides short refresher courses for primary teachers who already have a title. Since 1971 4873 primary teachers have graduated from the Normal School Program and 36 have received the primary teacher title through the professionalization program offered by the Superior

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10/ Through 1973 the Materials Production Center was receiving funding from 2 sources: the GOH and AID. When the GOH took over total responsibility for budget support in 1974 textbook production went down sharply. In 1972 and 73, for example, 981,496 texts were produced. In 1974 and 1975, only 365,936 texts were produced.

11/ Some teachers spend significant portions of their monthly salaries buying carboard, pencils, paints, and other paper supplies for tehmselves and for their students.

inservice program of the Directorate of Primary Education) make it questionable that the teachers are receiving sufficient information and that this information is being conveyed in its clearest possible form.

6. Curriculum Development

During the latter part of the 1960's the official primary school curriculum was reformed. This reform was carried out by a special commission,12/ named by the Minister of Education and was composed of one representative in each subject area from the Directorate of Primary Education, one from the Directorate of Secondary Education, and one from the Superior Teacher Training College. The products --a series of 8 pamphlets, each dealing with one of the subject areas being treated under the reform13/ -- were printed and distributed in 1969 to primary teachers in various areas of the country. The curricular reform and the resulting pamphlets are affected by the following constraints:

a. The curricular reform process stopped once the pamphlets were completed and the members (who were only assigned to the project on a part-time basis) returned to their full-time jobs with the MOE.

b. Very few teachers received the pamphlets and a limited number were given orientation on how to use them.

c. Although the introduction to each pamphlet suggest to the teachers that they should try to adapt the contents to the region where they are working, the activities outlined in the pamphlets provide very few practical guidelines on how to carry this out.

A Current Attempt to Develop a Capacity that will combine on Ongoing Process of Curriculum Development with an Inservice Teacher Training Capacity

One response to the need to continue the curriculum development process begun by the COREPLA commission has been the inservice teacher training program referred to in part 5 of this section. In addition to introducing the objectives of the curricular reform to teachers through refresher courses in the different subject areas, the teacher trainers offering these courses are using them as vehicles for progressively modifying the objectives and contents of the official programs so as to make them more practical. Two subject areas

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12/ This commission was composed of two groups, the Committee Proyectista and the Comisión para la revisión de Planes y Programa de Estudio. (Commission for the Revision and Reform of Plans and Programs (COREPLA).

13/ The subject areas treated are Spanish, mathematics, science, social studies, physical education, esthetic education, orientation, and technical education (the latter includes agriculture activities, industrial arts and home economics).

Teacher Training College.[14] In addition, approximately 15,500 teachers have participated on inservice courses of two to six weeks offered by the Directorate of Primary Education.[15]

All three of these programs have made a conscious effort in recent years to prepare teachers who will be better equipped to teach in a rural environment. Each program also places special emphasis on preparing teachers who can work with their students on agricultural and basic skills activities. These programs are discussed in more detail below.

Preservice Training in Normal Schools

In 1972, when primary teacher training was consolidated in four Normal schools, all run by the State[16], the Normal school curriculum was modified to provide each student with a subspecialty. Over the three year period each student spends two out of thirty-nine weekly class hours in adult education, industrial arts, home economics, agricultural practices, or health and nutrition. In addition, all students are prepared to teach multi-grade classes.

Inservice Training in the Superior Teachers Training College

The special program currently being offered at the Superior Teachers Training College is the most recent of several attempts over the past two and a half decades to provide unqualified teachers with the opportunity to fully qualify as a primary teacher. There are currently 1464 teachers enrolled in this program. During the five year training period, which began in 1974, these teachers are learning how to use agricultural and basic skills activities as a point of departure for introducing concepts related to the formal curricular subjects. In addition, all students are participating in special workshops and each student has the obligation of providing literacy training for 25 percent of the illiterate population of the community where he or she works.[17]

14/ Over 2400 primary teachers have received teaching titles through the "professionalization" program of the Superior Teacher Training College since its establishment.

15/ This figure is slightly misleading as it does not take into account the fact that some teachers have received more than one course and others have not received any. It is probabley safe to say that two-thirds to three quarters of the primary teaching force have received at least one inservice course over the last three years.

16/ Before 1973 there were 43 Normal schools in Honduras. Some were attached to existing secondary schools and others were run by church or other organizations.

17/ Each year students attend classes for 6 weeks during summer vacations and two weeks during the school year.

Inservice Teacher Training Program, Directorate of Primary Education

Of the three programs under consideration, the Inservice Teacher Training Program of the Directorate of Primary Education is the least expensive to carry out and the one with the widest outreach 18/. Since its creation in 1973, 465 two to six week courses have been offered in all sections of the country. Courses are offered in all five curricular subjects (mathematics, science, social studies, Spanish, physical education) and four technical areas (agricultural practices, home economics, Sewing and manual arts, and health and nutrition). Each is given by two primary school supervisors who have been through an intensive three month course in the field of specialty in which the course is being offered. 19/

Three special characteristics of these refresher courses are: their multiplier effect; 20/; the use of these courses as a vehicle for distributing instructional materials; 21/ and the promising starts made, especially in the mathematics and science courses, to show teachers how to make effective use of local materials in the teaching learning process.

Although all of the programs described above are off to a good start each has its problems:

a. There is a general lack of coordination among the three programs. Considering the efforts that each has made to tie the course contents to the realities of rural life it would be very useful to establish an interchange mechanism in which each could benefit from the other's experience.

b. Quality of training, especially in the agriculture and basic skills areas could be improved. The time limitations (2 out of 39 hours a week at the Normal Schools) and the lack of facilities for giving the courses (the

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18/ Each course is offered for teachers in the region where they work, thereby eliminating large travel expenses and per diems. In addition, no special building facilities are needed as the courses are carried out in available classrooms at local schools or in municipalities.

19/ The Directorate of Primary Education recognizes that this training is not sufficient. While 5 of the current group of 46 teacher trainers have been outside of the country for one year periods to specialize in different subject areas, the Directorate plans to make arrangements with the ESP to provide incountry training of one to two years for the rest of the teacher trainers in their respective teaching specialities.

20/ Each participant has the obligation, upon completing the course, to return to his or her school and convey the course contents to the other teachers at the school who have not participated in the course.

21/ Last year, for example, the Directorate acquired 1000 globes. Instead of sending them directly to primary schools, these globes were distributed through the Inservice courses in social studies.

in which extensive modifications have already been carried out toward making the official programs more functional are mathematics and physical education.

Another component of the inservice teacher training capacity that is providing input into this progressive curriculum modification process is its ad-hoc Investigation and Evaluation Unit. This unit is currently carrying out practical studies and writing pamphlets based on these studies that offer guidelines for teachers on how they can adapt the curricular contents of the courses offered by the inservice program to the characteristics and needs of the regions where they are working. In their most recent project, the members of this unit worked closely with teacher trainers in the inservice program and sixth grade students. The product -- a series of stories written and illustrated by children for children with an accompanying teachers guide -- is currently being pretested by Central and Satellite school teachers. The revised version will be printed and distributed to rural primary teachers attending the inservice teacher training courses.

As funds become available, the Directorate of Primary Education plans to unite the training capacity and the investigation materials development capacity of the inservice teacher training program under the national inservice training center. The latter will carry out the activities described above on a more formalized basis. Courses will be given to the teachers in the different subject areas giving special attention to agriculture, social promotion, sewing and manual arts, and health and nutrition. Supplementary pamphlets and materials will also be produced by the resident investigation/materials development staff in collaboration with the teacher trainers and the teachers attending the courses.

In preparation for this center, the research/materials development staff will be expanded and they will go through an intensive 12 month training course. In addition the teacher trainers will return to the Superior Teacher Training College to receive advanced training in their respective specialties.

7. Supervision

There are currently 157 teachers in the primary education system who carry out supervisory functions. Eighteen are departmental supervisors, 51 auxiliary supervisors, and 85 primary school directors with the function of supervisors. Of the above 29 percent have participated in a two year program of studies at the Superior Teachers Training College that leads to the title of "Primary School Teacher with a Specialty in Supervision". In the latest program, participants are receiving a more practical orientation which will enable them to orient teachers in Spanish and social studies in addition to carrying out their traditional supervisory roles. All 35 of the students currently in the program will also gain experience in carrying out community surveys to assess felt needs in rural areas for primary education.

The principal constraint of supervisors working in rural areas is that most cannot carry out their obligation of visiting each school under their supervision on a bimonthly basis. In many areas the schools are unaccessible by car (it is necessary to travel several hours, and in some cases days, by foot, mule, or canoe), and during the rainy season traveling becomes hazardous.

In addition, most supervisors have an excessive number of schools and teachers under their responsibility (the average supervisor/teacher ratio in rural areas is one to ninety). Finally, there is a shortage of money to cover travel expenses and per diems. This year supervisors will only be able to claim ten days per diem.

C. The Central/Satellite School Program

Of the recent educational innovations carried out by the Directorate of Primary Education, the Central/Satellite School Program has the greatest potential for direct impact on the rural population of Honduras. Created in December 1971,[22] this program currently includes 73 Central schools and 365 Satellite schools with a total teaching staff of 1,269. In 1975 these schools had an enrollment of 48,000, or roughly 19 percent of the total rural primary enrollment.[23]

During the 1976 school year, the General Directorate of Primary Education plans to expand the program to include a total of 123 Central Schools and 615 Satellite Schools. By the end of 1977 the Directorate projects that 250 Central schools and 1,250 Satellite schools will be designated, and that 137,250 students, or approximately 40 percent of the projected rural primary school enrollment, will be attending these schools.

The Central/Satellite School Program and its nuclear concept are strongly supported by the Honduran National Development Plan; the Plan treats this concept as the most feasible and effective way to restructure the rural education system, and to integrate it with the institutions responsible for carrying out the Agrarian Reform.[24]

Historical Antecedents of the Central/Satellite School Program

The concept of a nuclear school arrangement consisting of a Central school and a predetermined number of Satellite schools, each with an agricultural and technical orientation, is not entirely new to Honduras. In the early 1950's, the idea of a school closely tied to the peasant lifestyle was introduced on an experimental basis. The nuclear school concept, combined with an emphasis on the rural style of life, was not introduced in Honduras until more than a decade later. Patterned after existing models in Colombia and in other Latin American countries and adapted to the Honduran context, this concept was formally adopted by the GOH in the late 1960's. At that time, eight nuclear schools were established in seven Departments and the regulations governing their activities were outlined in the General Regulations for Primary Education (1968).

The main difference between the present Central/Satellite school program and the previous "Nuclear Schools" is that the guidelines for the Central/Satellite program are less ambitious and more realistic, given current budgetary constraints. While the guidelines for the Nuclear Schools provided for

22/ Acuerdo No. 2167, later modified by Acuerdo No.1143-E.P (June 1975).

23/ In 1973, there were 34 Central schools and 170 Satellite schools, with a total teaching force of 620 and a student enrollment of 19,701. Following Hurricane Fifi, 37 new Central schools with their respective Satellite schools were created in the North Coast Departments of Yoro, Cortés, Colón and Atlántida.

24/ National Development Plan, p.8.

three specialized teachers in each nucleus, the current regulations for the Central/Satellite Schools call for an undefined number of specialized teachers to be added to each Central/Satellite school, as the budget for Primary Education permits. In addition, in the C/S program, between five and seven satellite schools are contemplated for each central school while in the earlier nuclear program, as many as twelve schools were associated with each Central school.[25/]

Objectives of the C/S Program

Using a series of beliefs concerning what the primary education system can and should do, the philosophical premises underlying the Central Satellite school concept may be summarized as follows:

1. The formal education skills delivered through the primary education system (literacy, math skills, knowledge and understanding of concepts in social studies and science) are of prime importance in themselves and can be presented to rural students in a practical context using examples and situations taken from their daily lives.

2. The primary school can and should provide the rural child with the basic information regarding agricultural practices and fundamental technical skills that will help make him a productive citizen capable of using the technological, human, and material resources at his disposal.

3. The rural primary school can serve as a means for developing in the rural child sound health and nutritional practices.

4. In addition to imparting specific knowledge and skills, the rural primary school can and should serve as a focal point for developing in the students and the other members of the community leadership skills, a sense of national pride, and an appreciation of the values of campesino life.

5. The primary school system, in addition to serving children of primary-school age, can serve as a center for adult learning, whether through courses in literacy or courses in such other areas as sewing or carpentry.

6. The rural primary school has an obligation to project itself into its community, serving as the motivating force for and pivotal point of projects for community benefit.

7. Both the parents and students have a right to be informed of the purposes and potential benefits of the school's activities, and to be included

25/ The directors of the earlier nuclear schools felt that having responsibility for so many schools limited the effectiveness of their supervisory and orientation tasks.

in major decisions regarding the school's functioning.

Assuming that the schools in the Central/Satellite program meet the objectives implicit in the beliefs outlined above, the following products or outputs would be expected:

1. The students and their parents should have an understanding of the activities being carried out at the school and be in agreement with them.

2. Both the parents and students should see the school as a positive stimulus in their daily lives with something useful to offer them. Parents should make an effort to keep their children in school longer and the students themselves should be motivated to remain in school.

3. The information relating to the curricular subjects should be easy for the student to grasp and should be retained over a longer period of time once the student leaves school. As the students achieve adulthood, the incidence of functional literacy should go up in the community.

4. Both the students and their parents should receive information and skills that will help them to be more productive in their daily lives. New planting techniques should lead to productivity. New technical skills learned by students and parents should lead to the initiation of new cottage industries in the community.

5. Over the long run, individuals in the community will become convinced of the advantages of working in teams. A cooperative or patronato may be formed.

6. Health and nutrition conditions in the community should improve. Basic food elements grown in the community will be put to better nutritional use; efforts will be made by community members to build latrines and properly dispose of sewage.

7. Over the long run, community facilities should improve. A health center, a community well and water storage facility, a chapel; all might be built.

Necessary Inputs

If the above outputs are to be produced, and the beliefs upon which they are founded are to become realities, the rural schools in the C/S program must clearly define their activities. The schools must also identify the inputs or resources necessary to carry out these activities effectively. As described in the revised guidelines for the Central/Satellite school program, the following activities and resources establish parameters for an "ideal" Central or Satellite school. Schools in the early stages of organization are not expected to meet all these conditions, nor is it anticipated that established schools in different regions will meet them in the same ways. Given the differences in communities where the schools are located and in the availability of resources, it is expected that the activities carried out in each school will

vary. Indeed, this very flexibility, that built into the Central/Satellite school system, is considered by this assessment team to be one of its principal strengths.

Activities

Six major types of activities are contemplated in the General Regulations for the "ideal" Central or Satellite school. The first four relate specifically to what the students will do in school, and the others to what may or may not take place during school hours.

1. Activities related to the basic curricular subjects. In line with the objective of making formal learning more practical and functional, activities in math, social studies, and language should focus on the problems and experiences encountered by the rural child in his daily life. Where possible, the General Regulations suggest that the teacher should use the agricultural and cottage industry activities carried out by the school as laboratories for the acquisition of the content of the official curricula set out for each grade level.

2. Agricultural activities. The two principal types of agricultural activities contemplated for the Central and Satellite schools are those related to agronomy and to animal husbandry. According to the General Regulations, agricultural projects should include a vegetable garden, a fruit orchard and a demonstration plot for basic grains. In addition, each school should include one or more of the following animal husbandry activities: a chicken coop, a rabbit hutch, a pigpen, a beehive, or a fish pond.

3. Activities related to the acquisition of basic skills. The main activities recommended in the General Regulations for the C/S program related to small cottage industries are manual arts, sewing, cooking, carpentry, and masonry.

4. Activities related to health and nutrition. Presumably, each school will make use of the crops it grows to introduce new foods with nutritional value for the students. In addition, the staff of the school may solicit the collaboration of the students in campaigns to clean up both the school and the community. Where possible the school should make use of nearby health centers. If the school has adequate facilities, it may attempt to establish a lunch program for school-age children and their younger brothers and sisters.

5. Co-curricular activities. Depending on the interests of the community members, the school may offer adult education courses in literacy, sewing, carpentry, or masonry. In addition, the General Regulations encourage each school to include parents and other community members in the agricultural and basic skills activities being carried out with students.

6. Community development activities. These, of course, will vary from school to school, depending on the needs and interests of the community. An alert teaching staff will use these activities to identify community leaders and to organize a community patronato if one is not already in existence.

Resources

If the above activities are to be effectively carried out, each school will need to compile a variety of basic resources. Three categories of resources are noted in the General Regulations for the Central/Satellite school

program; physical resources, human resources, and those resources related to matching contributions and earned income.

1. Physical Resources

a. An adequate amount of well-situated land of decent quality.

b. A dependable water source which is nearby.

c. A fence enclosing the land being used for agricultural projects.

d. A set of basic agricultural implements, carpentry tools, sewing machine, and cooking utensils.

e. Workshop facilities for cooking classes, sewing classes, carpentry activities, and arts activities.

f. Necessary physical structures for animal husbandry activities.

g. Adequate classroom facilities and furniture.

h. A playing field.

i. One or more latrines.

2. Human Resources

a. A director who does not have teaching responsibilities.

b. A teaching staff equipped both to teach the basic formal subjects and to organize and guide the agricultural and basic skills activities.

c. Where possible within the limitations of the MOE budget, one or more specialized teachers, i.e., an agronomist, a carpenter, a seamstress.

d. A watchman.

e. An extension agent who visits the school on a regular basis from the National Agrarian Institute, Ministry of Natural Resources, or the Coffee Institute.

f. Occasional visits from the Departmental Supervisor and more frequent visits from the Auxiliary Supervisor.

g. Occasional visits from the personnel in charge of the Central/Satellite program located in the Office of Social Promotion of the General Directorate of Primary Education.

3. In-kind Contributions and Earned Income

One of the characteristics of the Central/Satellite school program, which is a source of pride to its originators, teachers, and school directors, is the limited financial input necessary on the part of the MOE to set up and operate a Central/Satellite school in an effective manner.

Each school on its own initiative can seek assistance from a variety of sources such as the following:

a. Material help, either monetary contributions or materials, from the General Directorate of Primary Education.

b. Help from public institutions and agencies, such as the National Social Welfare Council, the Ministry of Natural Resources, and the Coffee Institute.

c. Contributions from private sources, including stores, individuals, and organizations.

d. Aid from the community in which the school is located, either in the form of monetary contributions or through such activities as raffles and sales of agricultural and basic skills products to community members.

e. Proceeds from the sale of crops to large-scale buyers from the community or from outside of the community.

f. Short-term loans from a cooperative or a bank.

g. Assistance from international agencies, such as building materials and food supplements from CARE or UNICEF.

The Central/Satellite School Relationship

With the exception of the formal meetings that will take place on a regular basis between the directors of the Central and Satellite Schools, the details of the working relationship that is to occur between Central school and its Satellite schools are deliberately left out of the General Regulations for the Central/Satellite school program. The scope and nature of this working relationship is bound to vary from school to school depending on the dynamism of the director of the Central school, the availability of a special teacher, the interest of the Satellite school directors and teachers, and the realities of physical location, i.e., the distance between the Central school and the Satellite schools, available means of transportation, and climatic factors.[26]

[26] Although the General Regulations stipulate that all of the Satellite schools are to be located within a 10 kilometer radius of the Central school, rough terrain and lack of roads may make transportation between each Central and its Satellite very cumbersome.

The design of a Satellite school is basically that same as the outlined above for a Central School. However, the nature of the projects that each school carries out, the precise methods, and the time schedule will depend on a variety of additional factors.

First and foremost among these factors is the initial implementation of activities immediately following designation of the nucleus. Once operationalthe Central school is in a position to serve both as a model and as a resource center for the Satellite schools . The students and teacher from the latter may visit the Central school to see the agricultural and basic skills projects in progress. In addition, the director of the Central school and the special teacher, if available , can visit the Satellite schools where they will supervise projects and provide orientation. Satellite schools directors may receive additional orientation from the director of the Central school at monthly or bimonthly meetings. It the Satellite schools are incomplete and relatively close to the Central school, students from the Satellite may continue on to the Central school to finish their primary education.

1. The Gualan School

The assessment team visited one Central school reported to be functioning well, to see if the design outlined in the previous section is realistic. Chosen for the site was a school in Gualan, a small farming community of fifty-two houses located in the mountainous western region of Honduras. The principal agricultural crops are corn, coffee, and legumes, each farmed on small plots. The community is located in and around a small valley which is an hour's walk from Lepaera, a town which has communication facilities and is accessible by car.

The school is relatively small. It has an enrollment of 62 students distributed as follows: twenty four students in first grade; twelve in second grade; twelve in third grade; two in fourth grade; seven in fifth grade; and five in sixth grade. It is the Central school for four Satellite schools of varying size and number of grades, located in a ten-kilometer radius. [27/]

Like most rural primary schools in Honduras, the Gualan school uses the official curriculum and texts and operates according to a standard schedule. Students arrive at 7:30 a.m. and leave at 11:30 a.m. for lunch. Afternoon classes are held between 1:30 p.m. and 4:30 p.m. During the official school day, 45 minutes in the early morning, a half hour after lunch, and 45 minutes in the afternoon are devoted to agricultural and technical activities.

During the two-day visit, questionnaires were administered to the director of the school and to each of the teachers; parents and students in grades five and six were interviewed individually, and the director of the school and the teachers were interviewed in a group. Finally, the team observed teachers and students while in classes and in their respective projects for one complete school day.

The data obtained are very helpful in determining the feasibility of the Central/Satellite school program. This school is carrying out all recommended activities and has added some additional projects. It has acquired most of the necessary physical resources. The human resources component is being put to excellent use. In addition, the director and the teaching staff have used a great deal of ingenuity working with the financial resources at hand. Several of the strategies used by the Gualan school in carrying out activities and using the resources at their disposal can serve as models for other schools in the C/S program.

Activities

The activities being carried out at the Gualan school at the time of the assessment team's visit and those conducted in previous years include the following:

27/ Two of the Satellites are complete schools, with 110 and 68 students, respectively. One has three grades and an enrollment of 51; the other, five grades and an enrollment of 80.

1. Agricultural activities: a rose garden, corn, coffee, plantains, citrus trees, a vegetable garden, wheat, soybeans and rice; beekeeping; raising chickens, rabbits, and pigs; building a fish pond.

2. Basic skills activities: sewing, cooking, carpentry, masonry and bookbinding.

3. Curricular activities: math, social studies, science, language, manual arts, and physical education.

4. Activities in health and nutrition: a daily milk program; use of agricultural crops to introduce new and nutritious foods; lectures on health and hygiene delivered to parents and other community members during patronato sessions; an attempt to establish a school lunch program.

5. Co-curricular activities: sewing courses offered to adults in the community after school hours; courses in carpentry and masonry given by the special teacher to parents and other community members.

6. Community projection activities: participation of the school in the construction of the community chapel; a close working relationship with the community patronato (each patronato official chooses a teacher as his or her advisor); participation of the special teacher in supervising the construction of a house in the community; loaning agricultural and carpentry implements to community members; making the pigs at the school available to the community for cross-breeding.

Not all of the activities that appear in this list have been successful to an equal degree. Accordingly, some have been discontinued. On the whole, however, most have been successful, and several have been expanded.

It is interesting to note how the director and teachers at the Gualan school have gone about choosing these activities, and how they have carried them out. Summarized below are the key strategies used by the director and teachers, which comply with the basic philosophical premises of the Central/Satellite school program and contribute to the success of each activity.

The director and the teachers have made an effort to interrelate the different activities of the students at the school.

The agricultural activities serve as a laboratory which demonstrates the concepts imparted in the formal curriculum. Agricultural knowledge and skills in carpentry and masonry have been acquired and better nutritional practices have been introduced. For example, on the day the assessment team observed classes, the school building emptied when the science period began. The first and second graders spent the period at the chicken coop discussing parts of chickens and their respective uses. The third and fourth graders collected leaves from the school's plants, which the teachers used for a discussion of the nutritional value of leaves. The fifth and sixth graders were at the garden plot beginning an experiment in germination.

Since it was organized as a Central school in 1972, Gualan has continued

to add new projects in animal husbandry. These in turn have led to the need for activities in carpentry and masonry. During the first year, the students built a chicken coop under supervision by the special teacher. In later years, the students collaborated with the special teacher in fencing one yard for pigs and one for rabbits, and in building a rabbit hutch. This year the special teacher and the older boys will repair the school's floor and walls.

The school has also introduced new nutritional practices to the community through its agricultural projects. Last year, soybeans were grown and a rabbit-raising operation was carried out. The older girls used both products to prepare special dishes for all the students.

This year, the school ran out of the UNICEF notebooks that had been donated in previous years. Because of the poverty of the community members and the lack of access to stores, the director of the school was authorized by the student council to buy three reams of paper and pencils and pens with the profits from the student council's agricultural plot. With an improvised bookbinder, each student made a notebook which was covered in newspaper for additional protection. With the assistance of the sewing teacher, each student made his or her own shoulder bag to carry the pencil, a pen, and the notebook to and from school. Scraps of left-over material from the previous year's sewing class were used for this activity.

The director and teachers at the school have made a special effort to develop a close relationship with the community.

The primary strategy of the school in its attempt to establish a good relationship with the community has been a concerted effort to keep both students and parents constantly informed of all the school's activities, i.e., their purposes, the profits gained from each, and the use to which the profits are put. In addition, both students and parents have been involved in decisions relating to the activities of the school. The chief vehicle of communication for the students is the student council. The director delivers a biweekly report to the students informing them of activities and expenditures, and asks the students' permission to make future expenditures. Similar information is transmitted to parents and other community members through the patronato.

Another strategy has been to make products of agricultural basic skills activities available to the community. One of the school's current policies is that one-half of all harvests go home with the students. In addition, the school donates clothing made by students in sewing class to especially needy children in the community. Tables and beds made by the older boys in collaboration with the special teacher have been sold at reduced prices to community members, as have dresses, shirts, and pants made by the older girls in sewing class.

A third strategy for gaining community acceptance has been to make all agriculture and carpentry implements available to individual community members for personal use on a short-term basis. As new agricultural projects have been started, students and parents who help at school have been encouraged to take their own seedlings home and plant them.

In addition to the strategies outlined above the school has made a concerted effort to support projects of community interest. When the school began to function as part of the C/S program, one of the first things it did was to support the community effort to build a chapel. In order to do this, the school made two acres of land available to the community patronato so that it could grow corn. The proceeds from the corn crop were used to buy the cement necessary to lay the foundations of the chapel.

Finally, since the school became a member of the C/S program, both the director and the teachers have attempted to depart from traditional methods in agricultural projects. The first two agricultural projects carried out by the school in 1972 involved plantain and corn, both predominant crops in the community. Since then, as new crops such as citrus trees and soybeans, and new strains have been introduced, efforts have been made to simultaneously plant agricultural crops known to the community.

The director and the teachers at the school in Gualan have also attempted to promote teamwork, leadership, and decision-making capabilities on the part of the students and their parents.

Considering that one of the main objectives of the C/S school program is to develop leadership skills and inculcate in both the students and their parents the value of teamwork, it is of particular interest that the teachers and the director at Gualan have made a conscious effort to use the activities carried out by the school as vehicles to achieve this objective.

For example, each student at the school has a specific set of responsibilities in regard to the agricultural activities. The first and second graders are responsible for the chickens, and the third and fourth graders, for the pigs and rabbits. The fifth and sixth graders work with the "intensive care" crops such as coffee and vegetables. It was observed that responsibilities were carried out in teams of three and four.

Another example is the way in which the student council functions. In the biweekly session, the council members, composed of the entire student body, gather in one of the classrooms where the president, a sixth-grader, calls the meeting to order promptly at 2:00 p.m. In the meeting observed by the assessment team, two principal items were on the agenda. A new treasurer was to be elected and student council fund-raising activities were to be selected. Both were carried out with strict adherence to parliamentary rules; the decisions taken represented the vote of each student member.

The third example relates to the community patronato. Organized by the school when it began to function as a member of the C/S system, the patronato is currently semi-autonomous. In addition to carrying out its own activities, the patronato also serves as a forum for the director and the teachers of the school. The latter use the meetings to deliver informative talks to community members and to keep the community constantly informed of the projects being carried out at the school.

While not specifically tied to any of the above, the following examples are considered important, as they show how the director and teachers at the

Gualan school have also tried to establish incentives for the sixth-grade students to continue to secondary school.

1. Every year the Gualan school offers a scholarship so that one outstanding sixth-grade graduate may attend the secondary school in Lepaera. The scholarship, for $3.50 per month to cover tuition, comes from the profits obtained from the agricultural activities. Due in large part to this incentive, one student who graduated from the Gualan school three years ago is now entering his first year at the Normal school in Comayagua. When he graduates he will be the first inhabitant of Gualan to become a primary school teacher.

2. Last year, at the invitation of the director of the Gualan school, students from the secondary school at Lepaera came to Gualan to dissect rabbits as part of their biology class. The experience was very profitable for both the secondary students and the students at the Gualan school. For the latter, in particular, it was an opportunity to gain some exposure to the types of activities students carry out in secondary school.

Resources

The activities outlined could not have taken place at the Gualan school if a certain set of resources had not been at the school's disposal and if the director and teachers had not made effective use of them. The Gualan school has tapped the majority of the physical, human, and financial resources contemplated in the General Regulations for the C/S program. The resources the school currently has at its disposal and those used in the past are as follows:

Physical resources: six and a quarter acres of land; a creek running through the school's property that delivers a constant and dependable water supply; a barbed wire fence that encircles the school property; a basic set of agricultural, masonry, and carpentry tools and three sewing machines; a chicken coop, a rabbit yard, an enclosure for pigs, and seven beehives; a lean-to storage facility; a small and inadequate school building; two latrines; and a recreation field.

With a set of agricultural implements ; carpentry and masonry tools and three sewing machines, crops can be planted and harvested; needed physical facilities for animal husbandry activities can be constructed; and saleable items such as chairs, beds, and clothing can be made. In addition, the carpentry tools and the masonry tools have served for such projects as repairing to the school building and furniture and making new furniture; building latrines; and adding a lean-to shack.

Human resources: an active and dynamic director without teaching responsibility, who has received a special intensive agricultural course; three teachers, each of whom have participated in one or more inservice training courses in agricultural practices; a special teacher, who is a carpenter; several active community members; and a full-time watchman.

All of these human resources stand out as being critical to the success of the school's activities. One of the great strengths of the Gualan school is the initiative and managerial capability of the director, and the fact that

he does not have responsibility for teaching a grade. While the other teachers are in classes, the director spends his time planning new agricultural and basic skills activities; making visits to public and private institutions to get help; and consulting with the agricultural extension agent in Lepaera concerning correct procedures for planting. He also has charge over specific agricultural projects in progress, on which he and the students work together. In addition, he spends a good portion of his time visiting the Satellite schools under his responsibility and visiting community members in Gualan.

The three teachers also play a critical role in the ongoing activities of the school. In addition to their classroom responsibilities, each teacher has charge of certain agricultural projects that he or she works on in collaboration with his or her students. One teacher is responsible for the sewing and cooking activities.

Four special characteristics of these teachers stand out. All of the teachers plus the director have been at the school since it was incorporated into the C/S program in 1972, and two have been teachers at this school for the past ten years; all three teachers are from the department of Lempira and have been raised in rural areas similar to that of Gualan. The teachers have a close working relationship, which is reflected in the attitudes of the students; there is a spirit of cooperation among students and between teachers and students. When one teacher was asked what the school would do if one of the teachers were to be transferred, his answer was that he shuddered at the thought.

The fourth and perhaps most critical characteristic relating to the teachers, as well as to the director, is that all of the members of the staff at the school in Gualan have participated in at least one inservice course in agricultural practices. The first to do so was the director, who took an intensive one-month course in agricultural practices in 1974 at the Pan American Agricultural School at Zamorano. Six months later, he gave a one-month course in agricultural practices to the rest of the teachers at the school. Other recipients of the course were the teachers in the neighboring Satellite schools, and other rural teachers in the vicinity. When asked what he thought of the course at Zamorano, the director replied that it was his salvation.

Other human resources that stand out are the special teacher, the watchman, and community members. The special teacher, a carpenter by trade, has played a key role in guiding and supervising the construction of the fence, the animal facilities, the latrines, and a lean-to storage shack. In addition, he has begun repairs on the school building and has spent extended periods of time at the Satellite schools working with teachers, students, and parents, to repair buildings, erect fences, and construct furniture. At the time of the assessment team's visit, the special teacher was at a Satellite school working with students and teachers, repairing the walls and the roof of the school building and constructing furniture.

The watchman at the Gualan school is a community member who receives a fixed salary from the General Directorate of Primary Education. In addition to keeping stray animals out of the school grounds and guarding the agricultural produce, the watchman helps with the agricultural projects. At the

time of the assessment team's visit he was digging irrigation ditches. One of the key roles of the watchman is taking care of the agricultural projects over weekends and holidays.

The members of the community also represent a resource for the school. When Gualan first was incorporated into the program in 1972, community members helped with the agricultural projects on a volunteer basis. However, since the school has acquired a steady source of income through its respective activities, all community members who work at the school have been paid on a daily basis. In addition to the money they receive, they are given plants and produce to take home.

In-kind contributions and earned income: donations of barbed wire and mesh wire, beehives and beekeeping equipment, and sewing machines, from the General Directorate of Primary Education; donations of coffee seedlings, cement, and $50.00 from the Coffee Institute, the National Social Welfare Council and the mayor of Lepaera, respectively; donation of wood for the fence from a private source; proceeds from raffles and sales of carpentry, sewing, and agricultural products; earnings of $256.00 from the sale of last year's corn crop; a loan of $175.00 from a local cooperative; and a donation of agricultural and carpentry tools, notebooks, pencils, and chalk, from UNICEF.

Although a variety of in-kind contributions are received, a rough calculation reveals that the total value of these contributions is quite low. What stands out is the ingenuity of the director and the teachers in soliciting donations and contributions. Also notable is the policy of the teaching staff to always maintain an agricultural activity whose produce will serve as a steady source of income. The proceeds need not be large; it is only necessary to permit investment in other agricultural crops on an experimental basis, and purchase of needed materials for basics skills projects.

The school made $256.00 from a corn crop last year. In addition, unspecified profits were made from raffles and from the sale of products produced by the school to community members at a reduced price. With the profits this year, combined with a loan of $175.00 from a local cooperative, and other donations, the school plans to complete a fish pond and a pig pen; repair the fence surrounding the rabbit enclosure; buy seeds, fertilizers, insecticides, and plastic bags for agricultural activities; purchase additional rabbits and hens; and buy materials for repairs to the school building.

One of the key elements contributing to the continued and successful functioning of the majority of the agricultural activities at Gualan has been sound planning by the director and teachers. The first cash project at the school was hen raising. With the proceeds from the hens and eggs, the school was able to clear off major areas of land and plant corn which replaced the hens as a major cash crop. Currently, the school is involved in growing coffee. With a donation from the Coffee Institute last year, the school raised 800 coffee seedlings which have just been planted in rows between the corn plants. While the corn is temporarily providing shade for the coffee seedlings, Guano seedlings, a good source of shade that grows rapidly, have been planted next to them. When the coffee plants mature and the Guano trees are big enough to offer shade, coffee will take over as the principal cash crop

of the school. The coffee being grown is a new and more productive strain; it is successful, community members should be persuaded to plant this strain in addition to the one they now grow.

Relationship Between the Gualan School and Its Satellites

Due to the amount of time needed to get from the Gualan school to each of its Satellites (a walk of up to two hours), the assessment team was able to visit only one Satellite school during its two day stay at Gualan. The teaching staff and students at the Gualan school provided information on other schools and the working relationship with the Gualan school. The Gualan school has taken its obligation of serving as a model and resource center for the Satellite schools quite seriously.

The director of the Gualan school holds bimonthly meetings with the directors and teachers of the Satellite schools, and visits each Satellite school three times a year. In the meetings he helps the Satellite schools develop their workplans and he offers suggestions of how to improve their agricultural activities. The thrice-yearly visits are designed to get a first hand view of how the schools are doing in terms of carrying out their workplans, and to offer practical suggestions. In addition, in January of 1975 the director offered a one-month course in agricultural practices to all the teachers of the Satellite schools and Central school. As indicated to the assessment team members, he sees these activities as a basic part of his role of guide and supervisor.

All of the students and teachers at the Gualan school visit at least one Satellite school each year, and all of the students and teachers make at least one yearly visit to Gualan.

Perhaps most interesting of all is the unique relationship that the special teacher at the Gualan school has established with the Satellite school teachers, the students at the schools, and the community members. This year the special teacher will continue his pattern of previous years of spending up to two months per year at each Satellite school. As most of the Satellite schools have buildings and furniture badly in need of repair, the special teacher has used the repair activities as a means of relaying specific skills in carpentry and masonry to students, parents, and teachers. Not only do students and parents participate in the projects, but the carpenter takes advantage of his additional skills as a primary teacher to temporarily take over the classroom duties of the teachers at the Satellite schools so that they can practice their newly gained skills under his supervision. By the time the special teacher leaves each school, the teacher and students have both gained the basic skills necessary and are sufficiently motivated to complete the repair project on their own. 28/

28/ At the Satellite school visited, the carpenter was involved with the students and teachers in building new chairs and tables and plastering the walls. A donation of cement from CARE was being used for the latter.

As far as agricultural activities are concerned, the Satellite schools are not at the same level as the Gualan school. The Satellite school visited was just getting its land ready for planting, and had recently built a fence. The unavailability of water is a problem, and until this is resolved, efforts will continue to be focused on basic skills activities.[29]

Observations

In terms of activities and resources, the school in Gualan has accomplished a great deal in a relatively short period of time. Nevertheless there is room for improvement. The school has not yet offered classes in adult literacy, although one nearby Satellite school holds literacy classes in the evenings. In addition, although the school has expanded its current program to provide orientation in health and nutrition to both students and their parents, it could be doing more.

In terms of resources, certain elements contemplated in the General Regulations are missing at the Gualan school, or are not available as originally conceived. For one, the school building is small and inadequate; the only partitions are made of wood and cardboard, the light source is poor, the building is in disrepair, and there are no workshop facilities. The director and teachers have also expressed a need for housing facilities for themselves, as there are no housing facilities in Gualan. The director and teachers are forced to commute from Lepaera every day.

Also lacking are instructional materials that would help the teachers further adapt the contents of the formal curriculum to the agricultural and technical skills activities being carried out at the school. The director and the teachers have indicated that pamphlets and other supplementary materials would be most welcome.

Certain human resources contemplated in the General Regulations are also lacking. The auxiliary supervisor seldom visits the school; one visit was made in 1972, one in 1973, and one in March of 1976. The last and only visit the Gualan school received from officials at the Directorate was in 1973. Contacts with extension agents have been few and far between.

Despite the difficulties encountered since 1972, the director at the Gualan school and the teachers are very proud of what they had done with a minimum of help. Their desires at the moment are for an expanded classroom building including workshop and kitchen facilities, and for staff housing. Although they would certainly welcome outside help, the feeling is very strong that this is their project, successfully developed in conjunction with the community. This personal identification with the school's efforts and their pride in its accomplishments have been, in the assessment team's opinion, the principal motivating forces contributing to the school's success.

29/ Although this example is representative of several Satellite schools currently in operation, there are others, among them a few visited by the assessment team on other occasions, that have a variety of agricultural activities in progress. Indeed, at one school visited the Satellite school was far more advanced in its agricultural projects than the Central school.

The observation at the Gualan school provided a series of insights into how a school can use available resources in a creative and effective manner to carry out the activities designed for it. The elements which have made the Gualan school "work" include the following:

1. A director who does not have responsibility for teaching a class.

2. A teaching staff that has received inservice training courses in agricultural practices, leadership, and community projection skills.

3. A special teacher who works both with the students and with the community.

4. A watchman.

5. An adequate amount of land and a dependable water supply.

6. A set of basic agricultural implements, carpentry tools, sewing machines, and cooking utensils.

7. A teaching staff that: (a) is dedicated, hard working, and has a strong sense of unity; (b) has the capacity to do long-term planning; (c) is able to interrelate the various curricular and extra-curricular activities carried out by the school in a relevant way; (d) has the capacity for developing strategies that encourage decision-making and leadership skills among students and their parents; (e) develops effective strategies for working with the community; and (f) uses ingenuity in soliciting contributions and in managing financial resources.

Four more elements could be added to this list that, while not present at the Gualan school, would have helped the school be even more effective:

8. An adequate physical plant with workshop facilities and housing facilities for teachers.

9. Closer relations with agricultural extension agents.

10. Closer coordination with agencies such as the General Directorate for Adult Education and the National Social Welfare Council, in order to provide courses for adults in the community in literacy and other co-curricular activities.

11. Supplementary materials offering specific suggestions of how to interrelate the formal curricular activities with the agricultural and basic skills activities.

2. Other Schools in the C/S System

Information is available concerning other schools which have been functioning for the past four years as members of the Central/Satellite program, although it is not as detailed as that given above on the Gualan school. This information comes from a series of short visits made by members of the assessment team to seven other Central/Satellite schools. All appeared to be functioning effectively. Five are located in the northern departments of Cortés, Atlántida, and Colón, and two are in the southeastern departments of El Paraiso and Valle.

Although the time spent at each of these schools was limited to less than three hours, there were opportunities to observe the activities being carried out at each and compare the resources used with those used at Gualan.

Activities Being Carried Out by the Seven Schools Visited

All of the schools were actively involved in carrying out agricultural activities at the time of the assessment team's visit. All had a vegetable garden; several had fruit trees; and most were raising animals. In addition, all were using one or more of these activities to generate the income needed to keep other projects going and to experiment with new ones.

The nature and scope of activities conducted by each school varied a great deal. Some concentrated on community development activities; the school and teachers at the Jutiapa school, for example, were helping the community build latrines, while the school in Ilanga was assisting in the organization of a cooperative. Others concentrated their efforts on co-curricular activities. In Taulabé and Calpules y Arenales, sewing and carpentry classes were offered to adults. All of the schools were directly or indirectly involved in basic skills activities.

Basic Resources Available to Each School

All seven schools visited had a basic set of resources at their disposal. All had an adequate amount of land; each had a water source; and all had a complete set of basic agricultural and carpentry tools.[30] In addition, all of the schools except one had a director without teaching responsibilities; all had special teachers; and all but two had watchmen. In five of the seven schools, at least two teachers had participated in short courses in agricultural practices. Indeed, in all but one school, at least one staff member had attended a special course in agricultural practices offered in 1974 at the Pan American School in El Zamorano.

In practice, then, the Gualan school is <u>not</u> a special case. At least seven of the other schools in the program appear to be functioning effectively.

30/ As was the case with the Gualan school, each of these schools had been recipients of a donation from UNICEF.

3. Extent to which the Schools Currently in the C/S Program Are Accomplishing the Objectives Set Out for Them.

A list was presented earlier in this section of seven basic products or outputs that could be expected if the schools in the Central/Satellite program are in fact accomplishing the objectives set out for them. Ideally, an assessment of whether the Central/Satellite program is accomplishing its objectives would include data for all the items contained in the list. Again from an ideal point of view, this data would be drawn from the total population of schools in the C/S program, or from a sample, and it would be compared with data for schools in similar communities that are not members of the program. There are, however, several constraints that make an ideal approach such as this impossible.

1. Certain indications necessary for judging some of the products listed above do not exist. For example, there is no nationwide achievement testing program that would permit a comparison of knowledge attained by children in Central/Satellite schools and children in regular rural schools.

2. The data currently available for the Central/Satellite program are incomplete. At the time this document was written, 1976 enrollment data was available for only 16 of the 73 Central/Satellite schools; the corresponding data for 1975 was available only for 24 schools; and information regarding enrollment by grade for 1974 and 1973 was no longer in existence.

3. It is too early to look at indicators related to some of the products listed above. Several will not really begin to be seen on an overall basis until each school in the Central/Satellite program has been operating for at least ten years.

4. As the members of the assessment team have repeatedly been informed by MOE officials closely connected with the program, and by directors and teachers of the schools, each school is an individual case. While one school is actively involved in certain agricultural projects, another is concentrating on certain basic skills activities. Some schools are highly successful, others are having a difficult time getting started. By the time all are combined in an overall numerical analysis, the strengths of several run the risk of being cancelled out by others.

Even with these constraints, there is currently some data available that reflect the ability of the schools in existence to meet the objectives set out for them. Included are the results of interviews with students, parents, and teachers at the Gualan school concerning their understanding of and agreement with the school's objectives; and specific examples of ways in which several schools have affected parents and other community members. In addition there are limited amounts of numerical data available comparing grade enrollments between schools that are members of the Central/Satellite program and schools in similar communities that are not part of the program.

The quantitative and qualitative data summarized below are far from complete, but they do suggest that these schools are off to a good start and headed in the right direction in terms of accomplishing the objectives set out for them.

Parental and Student Agreement with the School's Objectives

During the two days spent in Gualan, informal interviews were carried out with five community members. In addition, seven students in the fifth and sixth grades were asked several questions regarding their opinions of the school. In the adult interviews, parents and community members were asked whether the school in Gualan differed in any way from the school they had attended as children and how. They were also asked to give their opinion of what the children learned at school, and if they agreed that their children or the children in the community should carry out agricultural projects as part of the school curriculum.

1. Parental replies to interview questions: Although the sample is admittedly very small, the general outcome of the interviews was that the parents had a very positive view of the school, and they were conscious of the fact that agricultural and basic skills activities were an important component of the school's curriculum.

Four of the five adults interviewed has attended school. When asked how the school in Gualan differed from the school they had attended, the answers were as follows:

"Here they teach a bit of everything."

"Better. There are more studies and more work."

"It didn't have the projects the school now has."

"Before it was only on the blackboard. Now learning is both theoretical and practical."

All of the adults interviewed felt that what the children were learning was useful. One adult mentioned spontaneously that he felt what the students learned at school was particularly useful because it served also to teach the adults how to improve their farming practices.

The above is particularly interesting because of the contrast it offers with a series of interviews carried out in a community where the Central school apparently has not established an effective system of communication, with either the students or the parents.

During the latter interviews, all of the parents said that the teachers did not allow the students to take any of the agricultural products home. In addition, they indicated that they had not been informed of what was being done with the agricultural products. Some parents speculated that the teachers ate the products; others suggested that they gave them to their friends; still others claimed the teachers sold them for personal profit.

This lack of communication with the parents and other community members concerning what was being done with the agricultural products and the lack of orientation as to what the purposes of the Central school were, gave rise to a series of strong negative attitudes, both on the part of the parents interviewed and their children. One parent objected to having his children do

"slave labor" for the teachers' benefit. Another parent did not find it at all objectionable that community members deliberately put their animals into the agricultural plot to graze after school hours. (The latter was a source of serious objection on the part of the teachers.)

2. Student responses As a way of exploring how important the agricultural and basic skills activities were to them, the fifth and sixth grade students at Gualan were asked what they most liked about going to school. The spontaneous answers speak for themselves:

"Water the plants and feed the animals."

"Water the plants and sew."

"Plant cabbage."

"Beekeeping."

"The vegetable garden."

"Growing corn."

"Everything."

Obviously the agricultural activities are on the top of the students' list. This special interest was further corroborated by an observation of the students as they carried out their responsibilities early in the morning. Not only was the atmosphere one of enthusiasm and interest, but there was also a great deal of personal pride on the part of the children about the agricultural activities they were carrying out. One fifth grade girl, for example, made a point of showing an assessment team member an orange tree that she had planted when she was in first grade. In addition, she proudly informed us that it had produced its first orange crop at the end of the previous school year.

When asked as a group whether they knew what was being done with the profits from the agricultural projects, one sixth grader at Gualan replied in a very astonished fashion, as if surprised that this question should even be asked: "Of course we know what's done with the profits. The director lets us know at the student council meetings and we give him permission to make further purchases."

Ways in which the community members have accepted information and skills related to agricultural productivity imparted by the school.

Although there are no available numerical data which summarize the ways in which the schools have affected community practices, there is a variety of specific examples from the Gualan school and other schools visited by the assessment team.

1. While visiting the Gualan school, members of the assessment team were informed by the president of the patronato that since the school was incorporated into the Central/Satellite program, several community members had been convinced of the disadvantages of burning the stubble left after harvesting the ears of corn. In addition, several students and parents offered

examples of students relaying information to their parents on how to improve agricultural practices. To take one example, a student was given wheat to take home and plant. When he tried to show his father how to plant in rows, his father disregarded his instructions and scattered the wheat. When the resulting crop failed, the father decided to take his son's advice and plant the wheat in rows; that crop was successful.

2. At a school in the department of El Paraiso the community members had tried to discourage the director of the school, at the time it became a Central school, from digging a well, as they claimed such an effort would be useless. When the director went ahead, with the collaboration of the older students, and dug a well that functioned, the community members were so impressed that several dug their own wells with the techniques used by the school. At the time of the assessment team's visit there were over a dozen private wells in the community.

3. At a school visited by MOE officials, they were introduced to a sewing project in progress. In this school, there had been a sewing teacher but no sewing machines. Given the parent's interest in having their daughters learn to sew, several parents lent their sewing machines to the school so that the school could offer a course in sewing.

A comparison of enrollment data between 14 Central schools and 14 regular primary schools.

In order to assess whether the schools in the C/S program are having any effect on retention, 1975 enrollment figures for fourteen Central schools that are functioning well and that have been members of the C/S program since its inception in 1972 were compared with 1975 enrollment figures for fourteen regular rural schools. The latter were chosen from a list of complete schools located in the same municipalities as each of the Central schools. An attempt was made to find schools of a similar size as the Central school with which each was being matched.

In order to facilitate a comparison between the two groups, Figure V-1 shows enrollment figures for grades two to six within each group as a percentage of the first grade enrollment for that group.

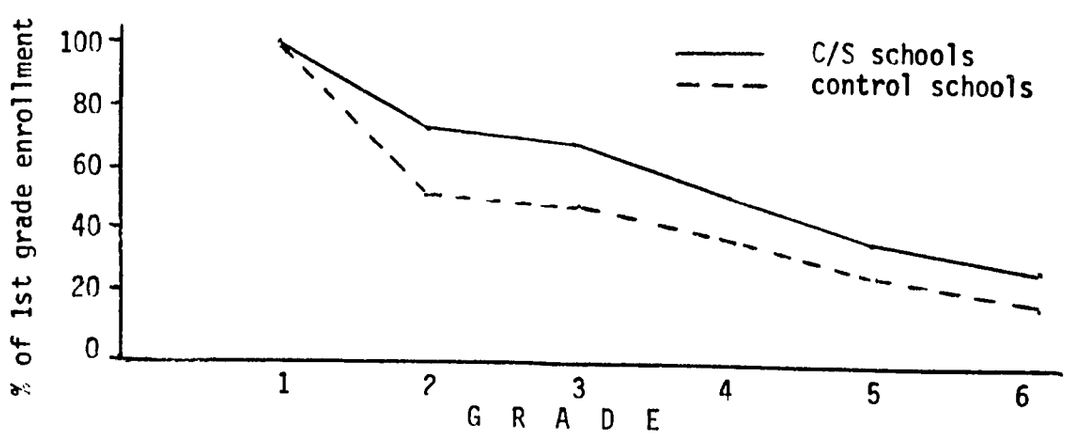


FIGURE V-1: A comparison of student enrollments in 14 Central schools and 14 control schools.

As can be seen, the percentage of students in grades two to six in the Central schools is considerably higher than the corresponding percentage for the control schools. This is true especially in grades two and three. While the control schools tend to follow the national percentage (about half as many students are enrolled in grade two as in grade one and 42 percent in grade three), the second and third grade enrollments in the Central schools were 70 percent and 65 percent, respectively, of the enrollments in grade one.

Because enrollments in the upper grades are determined by retention in lower grades over several years, the comparison of upper grades with grade one in any given year will not fully reflect improvements in retention achieved in the last year or two. To get a better view of the current performance of the Central schools as compared with the control schools, a comparative study was made of the 1974-1975 retention, promotion, and dropout rates of eight of each. The results of this comparison, which are reported in Chapter VIII indicate a dramatic improvement in retention.

4. Options for the Expansion of the Central/Satellite Program

A review of existing quantitative and qualitative data for a small sample of schools in the Central/Satellite program indicates that these schools are functioning well and progressing toward the achievement of their objectives. The issue discussed in this section is how the planned expansion of the C/S program might be carried out.

The following table presents eight priority activities which should be considered in planning the anticipated expansion. These priorities have been identified based on observations of existing C/S schools and the assessment team's analysis of the major factors contributing to their effective functioning. Each is examined in terms of actions taken to the present time, further actions required over the next five years, and options for carrying them out. The options are presented and compared in terms of possible advantages and disadvantages.

Recommendations regarding the most desirable combination of options for expanding the C/S program are not within the assessment team's scope of work. Rather, the discussion is intended to provide a useful guide for examining educational and administrative implications which may be taken into account in the decision-making process. It is recommended that as funding becomes available, the relevant options be examined in further detail.

PRIORITY ACTIVITY	ACTIONS TAKEN AS OF APRIL, 1976	FURTHER ACTIONS REQUIRED	OPTIONS FOR CARRYING OUT FURTHER ACTIONS	POSSIBLE ADVANTAGES AND DISADVANTAGES
I. DESIGNATE 250 CENTRAL AND 1,250 SATELLITE SCHOOLS BY 1978.	73 Central schools and 365 Satellite schools designated since 1973.	Evaluate petitions for Central school status, based on field visits to schools. Following a trial period for each school, designate 177 Central schools and 885 Satellite schools.	1. Office of Social Promotion personnel make field visit.	Advantages: More uniform criteria applied to evaluations. Disadvantages: More costly. Additional staff required.
			2. Regional Supervisors make field visits.	Advantages: Lower cost. Disadvantages: Supervisors are already overloaded.
II. PROVIDE ABOVE CENTRAL AND SATELLITE SCHOOLS WITH BASIC TOOL SETS AND START UP MATERIALS BY 1981.	UNICEF has donated basic tool sets to approximately 50 Central and 250 Satellite schools in the Salvador-Honduras frontier area and the north coast region. Office of Primary Education has donated limited quantities of tools and startup materials to schools in other areas. Some schools have received donations from commerce and community.	UNICEF plans additional donations of basic tools to 39 Central and 195 Satellite schools in the Salvador-Honduras frontier area through 1978. Basic tools must be acquired for approximately 160 Central and 805 Satellite schools. Startup materials for schools to be designated during 1976-78 period must be obtained.	1. Office of Primary Education purchases and distributes tools and materials using MOE and/or external resources.	Advantages: Minimal administrative cost and effort. Enables schools to start projects immediately. Disadvantages: Requires annual input of government finances for expansion.
			2. Office of Primary Education creates sublending (or rotating fund) to enable schools to purchase tools and materials.	Advantages: Has the potential of teaching children how to obtain production credit. Encourages a sense of self-reliance. Requires only one initial input of government finances. Disadvantages: Higher administrative cost. Risk of default. Possible slower execution.

PRIORITY ACTIVITY	ACTIONS TAKEN AS OF APRIL, 1976	FURTHER ACTIONS REQUIRED	OPTIONS FOR CARRYING OUT FURTHER ACTIONS	POSSIBLE ADVANTAGES AND DISADVANTAGES
III. PROVIDE ADDITIONAL PERSONNEL NEEDED BY C/S SCHOOLS TO ENABLE ACHIEVEMENTS OF C/S SCHOOL OBJECTIVE BY 1981.	Approximately 36 Directors freed from classroom responsibilities. 22 Special teachers and 5 Watchmen added to Central school staffs. Slots for 10 additional special teachers and 5 more watchmen created in 1976 budget.	Provide one additional teacher to each of approximately 214 Central school to free Director from classroom responsibilities. Name 218 additional special teachers and 240 watchmen to Central school staff.	1. Free all Central school directors from classroom responsibilities by 1981 and provide additional personnel at the same rate as in 1976.	1. Advantages: Less costly, provides a full-time Director, a critical element to the success of the C/S system. Disadvantages: Unless new slots are created, teachers must be transferred from other areas leaving those areas inadequately covered.
			2. Provide one special teacher and one watchman for each Central school and free all Central school directors from classroom responsibilities by 1981.	Advantages: Ideal for maximizing effective function of C/S system. Disadvantages: More costly $5.60 per student vs. $2.80 per student in Option No. 1.
IV. BY 1981 PROVIDE INSERVICE TEACHER TRAINING FOR A MINIMUM OF ONE TEACHER PER SCHOOL IN EACH OF 9 SUBJECT AREAS. THESE ARE: MATH, SCIENCE, SOCIAL STUDIES, SPANISH, AGRICULTURAL PRACTICES, SEWING AND MANUAL ARTS, AND HEALTH AND NUTRITION, AND PHILOSOPHY OF THE C/S PROGRAM.	C/S teachers trained in following through two to six week inservice courses. Approximately: 400 in math 300 in science 100 in social studies 0 in Spanish 150 in agriculture 100 in sewing and manual arts 30 in health and nutrition 300 in social promotion 90 in philosophy C/S program.	Train teachers as follows: 1,100 in math 1,200 in science 1,400 in social studies 1,500 in Spanish 1,350 in agriculture 1,400 in sewing and manual arts 1,470 in health & nutrition 1,410 in philosophy C/S program Train 183 C/S teachers at the Pan American Agricultural school to meet goal of 1 Zamorano trained teacher at each Central school.	Options are considered below for the first action required. There are no options for the second other than means of financing. 1. Institutionalize current inservice teacher training program being offered on a local basis, and expand capacity in technical areas.	Advantages: Lowest cost. Permits better relation of teachers' environment to course content. Disadvantages: Makes development of supplementary curriculum materials difficult. Makes continuity of instruction difficult.
			2. Create centralized inservice teacher training/curriculum development capacity, with 24 teacher trainers and 8 researchers	Advantages: Maximizes teacher input to development of supplementary materials. Fosters interdisciplinary coordination

PRIORITY ACTIVITY	ACTIONS TAKEN AS OF APRIL, 1976	FURTHER ACTIONS REQUIRED	OPTIONS FOR CARRYING OUT FURTHER ACTIONS	POSSIBLE ADVANTAGES AND DISADVANTAGES
PART IV. (Cont.)	67 C/S teachers trained in one month course in agriculture at Pan American Agricultural School at Zamorano.			in development of materials. Takes maximum advantage of highly trained specialized staff. Provides needed facilities for agricultural and technical courses. Permits interchange of experience among C/S teachers from different regions. Disadvantages: Higher cost
			3. Carry out inservice training on a regional basis at 3 existing Normal schools during school vacations.	Advantages: Increases possibility for continuity between preservice and inservice training. Disadvantages: Limited number of teachers can be trained. Dispersion of highly specialized staff.
V. DEVELOP SUPPLEMENTARY MATERIALS RELATING FORMAL COURSE CONTENTS TO AGRICULTURAL AND BASIC SKILLS ACTIVITIES.	Two materials production specialists in training in the Office of Primary Education. Two pamphlets produced.	Expand staff to 8 specialists. Establish office. Train all staff members. Produce additional materials.	Establish materials productions unit staffed by teachers specializing in investigation and materials production techniques: 1. At inservice teacher training center.	Advantages: Permits contact with teachers and teacher trainers in development of materials. Close contact with teachers provides better opportunities for pretesting materials. Disadvantages: Logistical problems caused by coordinating studies at Escuela Superior del Profesorado

PRIORITY ACTIVITY	ACTIONS TAKEN AS OF APRIL, 1976	FURTHER ACTIONS REQUIRED	OPTIONS FOR CARRYING OUT FURTHER ACTIONS	POSSIBLE ADVANTAGES AND DISADVANTAGES
PART V. (Cont.)				with job responsibilities. Possible duplication of efforts.
			2. In the Office of Primary Education.	Advantages: Closer supervision by Director General of Primary Education. Access to specialists in other GOH agencies. Disadvantages: Reduced possibilities of input from teachers and teacher trainers. Possible duplication of efforts.
			3. In Materials Production Center.	Advantages: Availability of production facilities. Disadvantages: Lessened contact of specialists in investigation and materials production techniques, with teacher trainers and C/S program in general.
VI. UPGRADE AND MAINTAIN PHYSICAL FACILITIES OF ALL ABOVE SCHOOLS TO MAKE THEM ADEQUATE FOR TECHNICAL SKILLS ACTIVITIES BY 1981.	Materials for self-help improvement donated upon request by the Office of School Construction and CARE to a limited number of schools. Projections made showing an average of 3 additional classrooms and $1,100 in repairs needed in Central schools.	Determine mechanism for upgrading schools and carrying out improvement program.	1. Expand existing self-help school construction program.	Advantages: Low cost, consistent with C/S school philosophy. Provides learning possibilities for students and parents. Unites community. Disadvantages: Depends on interest and support of community. Slower.

PRIORITY ACTIVITY	ACTIONS TAKEN AS OF APRIL, 1976	FURTHER ACTIONS REQUIRED	OPTIONS FOR CARRYING OUT FURTHER ACTIONS	POSSIBLE ADVANTAGES AND DISADVANTAGES
PART VI. (Cont.)			2. Contract for construction and repair services with construction firm.	Advantages: Faster. Perhaps better quality. Disadvantages: More expensive. Goes against C/S school philosophy. Creates dependency and increased expectations.
VII. UPGRADE ADMINISTRATIVE PERSONNEL AT THE OFFICE OF SOCIAL PROMOTION BY INCREASING STAFF SIZE AND PROVIDING EXISTING STAFF WITH TRAINING IN DEVELOPING AND MAINTAINING INFORMATION SYSTEMS, PLANNING AND PROGRAM EVALUATION.	1 full-time professional and 2 part-time professionals in the Office of Social Promotion. All three are social workers with limited background in administration and evaluation.	Increase administrative staff to 6 full-time personnel. Provide training for staff in administration and evaluation techniques.	This is considered a priority need; there is no option beyond expansion staff and training as recommended in previous column. Options may exist with regard to how this component is developed.	Not Applicable.

D. Recommendations

The recommendations listed in this section reflect a variety of observations and comments raised in previous sections of this chapter; each set is summarized according to the aspects of the rural primary education system described in Section B. Options related to the C/S program may be found at the end of Section C.

1. Teachers

The MOE has had difficulties keeping qualified primary teachers in rural areas. Although there are currently some incentives for working in rural zones, those for teaching in urban areas appear to be stronger. In addition, the teaching situation in rural areas is more difficult: teaching materials are scarce and the majority of the teachers have multigrade teaching responsibilities.

Recommendations

a. Explore additional ways of providing incentives for teachers in rural areas. Among possible alternatives to consider would be low cost teacher housing.

b. Expand current efforts through the in-service teacher training courses to prepare teachers for the realities of working with multigrade situations.

c. Explore means of alleviating the materials shortages. Considering current budget limitations, one feasible alternative would be to show teachers how to use materials in the environment to maximum advantage as aids in the teaching/learning process.

2. Physical Facilities

In the past five years nearly 20 percent of the existing classrooms have been built under self-help programs. Although these programs are quite successful they are affected by certain constraints: demand far exceeds supply; there are problems with transporting supplies to the schools; a number of municipalities don't provide the help they are required to by law; preventive maintenance is not always carried out. In addition the Office of School Construction does not have enough funds for the large scale maintenance needed for many schools, and no funds are available for construction of workshop facilities.

Recommendations

a. Efforts should be made at the community/school level to carry out preventive maintenance on school facilities.

b. GOH allocations should be increased to support the self-help school construction program. This increase in allocations should also make available materials for the construction of multipurpose classroom facilities that can also be used as workshops.

c. Where feasible, municipalities should be required to carry out their obligation under law of supporting local schools in general and construction projects in particular.

3. Instructional Materials

Although the majority of rural schools have texts, there are currently schools in isolated rural areas that do not have complete sets. The limited present capacity of the Materials Production Center to produce the number of texts needed adds to this problem. In addition, contents of several of the texts are not adapted to regional variations; many teachers have not received orientation in their use; new textbooks being published are not going through a pretest period; and most students are not allowed to take the texts home.

Recommendations

a. Increase the MOE budget allotment for production of needed texts or explore less expensive means of producing them. One alternative for the latter would be to establish a printing facility within the Materials Production Center.

b. Develop and produce inexpensive curricular supplements for existing texts that would give teachers specific guidelines on how to adapt the text contents to regional characteristics and needs.

c. Expand efforts to provide teachers with orientation on how to use the texts. One alternative worth exploring is the in-service teacher training course currently being offered by the Office of Primary Education.

d. Establish a means for pretesting all future texts and other instructional materials before publishing them. For the rural area the C/S program may be a viable mechanism for this purpose.

e. Explore possible arrangements that would permit students to take the textbooks home. Possible alternatives include: making existing texts available on a low-cost basis to students and/or the schools (the latter could raise funds for this purpose through profits from agricultural and basic skills activities); produce inexpensive materials (stories, games) that students or school can buy at a minimal cost.

4. Teacher Training

In recent years the teacher training process has undergone some promising innovations. At present, however, there is a lack of needed coordination between teacher training mechanisms. In addition, the quality of training in agriculture and basic skills activities needs upgrading: course hours per week in these activities are limited at the Normal Schools, and the inservice courses offered by the Directorate of Primary Education have no workshop, or experimental agricultural plots.

Recommendations

a. Explore means for establishing an effective coordination mechanism between Normal Schools, the professionalization program of the Escuela Superior del Profesorado, and the in-service teacher training program of the Office of Primary Education, especially regarding efforts to adapt curricular contents to rural needs.

b. Improve quality of training in agricultural and basic skills activities by expanding number of hours per week devoted to these activities at the Normal Schools, and by establishing an in-service teacher training center with agricultural plots and workshop facilities.

5. Curriculum Development

Efforts to modify the primary curriculum have been sporadic. The last overall attempt was between 1967 and 1970, and it was done by a part-time staff. In 1973, the in-service teacher training program began a continuation of this effort on a long-term basis. In this program attempts are being made to combine teacher training with curriculum modification and materials development. The materials produced offer guidelines for teachers regarding the adaptation of the contents of the existing curriculum to regional characteristics and needs. The program is currently operating on an ad-hoc basis and the personnel in it have had limited training. In addition, contact between the materials development staff, the teacher trainers and the course recipients is limited, as the teacher trainers are dispersed in a variety of areas.

Recommendations

a. Support the institutionalization of curriculum development and its centralization in a national in-service teacher training center.

b. Provide the training staff with opportunities for further study in content areas in which they give courses.

c. Upgrade and expand the currently operating investigation/materials development staff attached to this program.

6. Supervision

The current system of supervision in Honduras is highly centralized. One of the main problems at present is the work overload of supervisors in rural areas (too many schools under their responsibility) and difficulties in visiting the schools (rough terrain, limited funds for per diem, lack of transportation facilities). One promising training program specializing in supervision is currently taking place at the Escuela Superior del Profesorado. This program is designed to make the supervisor a more constructive input into the teaching/learning process by making him more aware of the realities of the learning needs of the rural population.

Recommendations

a. Increase the number of positions for supervisors in the MOE budget. Trained replacements are currently needed for supervisors on loan to the in-service teacher training program. In addition, more supervisors are needed in rural areas where the supervisor/school ratio is very low or where geographical constraints make travel to more than a few schools difficult.

b. Increase MOE budget allocations for transportation and per diem of departmental and auxiliary supervisors. One possibility worth exploring would be providing auxiliary supervisors with trail bikes.

c. Support current efforts at the Escuela Superior del Profesorado to train supervisors who are better prepared to work in rural areas and who are equipped to play a more constructive role in the teaching/learning process.

VI. NON-FORMAL EDUCATION ACTIVITIES AND PROSPECTS

A. Introduction

The purposes of this chapter are to provide information and assess the current activities in the area of non-formal education (NFE) in Honduras, and to examine the current thinking and proposed policies of the GOH, including the roles to be played by international agencies, in the near-term development of NFE as an integral part of the GOH's development strategy.

Along with many Latin American countries, the GOH has expressed its intention to proceed along an educational development model that emphasizes the fulfillment of the social equity and cost efficiency aspects of education. The announced objectives include: (a) extending educational opportunities to hitherto marginal groups which include the bulk of the rural population, both adults and out-of-school youths; (b) making these educational opportunities relevant for meeting the learning needs of diverse groups of users; and (c) achieving (a) and (b) in such a way that the education system's resources are efficiently deployed to increase its productivity and keep the strategy costs within the country's financial capabilities and the financing constraints imposed by outside lending agencies.

These policy objectives are not new, but they have gained current prominence in part as a response to the new models of educational development being embraced throughout the continent, which in turn constitute a response to policies and objectives articulated by lending agencies in the late sixties and early seventies.

Despite the fact that the announced intention of the GOH is to adopt a model which gives special emphasis to NFE, one of the important bases for policy action is not available; namely, a thorough knowledge of currently ongoing NFE activities, their content, approaches, and incidence with regard to different user groups.

It should be noted that an inventory survey is about to get underway in Honduras to learn what exists in this area. However, the following two caveats should be raised regarding the effect of the current status of information on the analysis in this assessment.

First, as this is an "assessment" and not an "analysis", recourse must be taken to whatever information is available. The scope and depth of the analysis, therefore, is predicated not only on how current the information is but also on its quantity, quality and relevance. A reading of the available literature shows that the information available is generally not satisfactory; it is often incomplete and obsolete.

Second, and as a corollary to the previous observation, this situation limits the study, in terms of "doing justice" to the wealth of NFE experiences that exist in this country, as shown in the literature. Therefore, a careful analysis of these experiences could provide important insights, valuable for

this country and with interesting lessons for other countries.

The scope of this investigation, however, is limited to providing an overview of a number of NFE activities, focusing on the most interesting aspects of each activity, and stressing the variety of approaches and organization systems utilized by the programs. A comparative analysis is carried out in a later section to contrast the different characteristics of activities. The final section dwells on current GOH policies and proposed strategies.

B. Survey of NFE Activities

No attempt is made here to offer analytically pure definitions of NFE activities; however, the degree of "formality" of these activities is not the critical criterion for including them in the area of non-formal education. The range of activities examined here runs from the quasi-formal programs of primary equivalency for adults to the less structured radio education programs of ACPH, to the quasi-informal housewives' clubs. Taking a fundamentally operational approach, the notion of NFE may be stated as including those activities organized to meet the learning needs of specific groups outside the hierarchical structure of the formal education system. These activities are distinguished from those carried out through informal education which, generally stated, means the degree of access that individuals have to learning stimuli from all sources, exclusive of formal and non-formal education, as part of their daily cognitive existence.

Non-formal education offers a multitude of methods to deliver its services. Herein lies the difficulty of either describing analytically what NFE really is, or explaining the richness of NFE experiences. The activities may be community-based, or they may originate through initiative from the public and private sectors of society. They may range from the provision of job-related skills in the organized market sectors of the economy to the promotion of attitudinal change and individual motivation. The delivery systems may utilize the mass media, or strictly individualized approaches. NFE programs may have such disparate purposes as adult education and youth programs, teacher and vocational education, health, nutrition and family planning, or cooperative development.

It should also be said that the term "rural" is used with some degree of freedom in this assessment. The GOH definition of "urban" as a community with a population of 2,000 where basic public services are provided has limited value for clearly distinguishing between urban and rural. However well the legal and administrative needs of the country may be met by this criterion, most "urban" areas are in fact based on a predominantly agricultural economy; or, more generally, one where economic activity originates in the primary sector and economic functions are geared to meeting the production needs of this sector. The market may be somewhat organized but the subsistence component predominates. Socially, these communities also exhibit traditional organization and mobility patterns, with equally traditional cultural traits shaping the behavior patterns of the population. Since educationally these factors translate into learning needs that are but a variant of those found in the more "rural" locations, activities located in these areas will be included in the analysis.

1. Public Sector Activities

a. Activities of the Ministry of Education

The most significant NFE activities carried out by the MOE are those conducted by the General Directorate for Adult Education and Literacy. The programs, first proposed in 1952, were set up in 1954 in the Section of basic Education which was placed under the overall organization of the General Directorate of Primary Education. At the time, eight teaching posts were organized to cover the areas of health, home management, basic education, and use of leisure time. In 1959, the section gained some autonomy when it became an integral part of the larger MOE structure. An attempt was made to define objectives in terms of the fulfillment of strategies which included decreasing illiteracy in the adult population; extending educational opportunities; providing training in crafts and certain occupations; and promoting attitudinal change by the campesino. To meet these objectives, the section set up a number of literacy centers throughout the country, and started the Popular Cultural Center at Comayaguela and the integrated development project at Gracias a Dios.

In 1966, the name of the section was changed to Department of Adult Education and Literacy, and finally to General Directorate of Literacy and Adult Education. This hierarchical upgrading of the original Section of Basic Education reflects the increasing importance attached to adult education by the Government. The current legal instrument regulating all adult education and literacy activities is Decree No. 135 of March 17, 1972. Relevant portions of this decree state that:

a. the education of adults and literacy will be mandatory for all illiterates included in the age brackets 14 to 50 and optional for the older ones (Art. 2)

b. the National Literacy and Adult Education Program will be carried out through the integration and systematic coordination of the efforts and resources of autonomous public entities, semi-autonomous and private agencies (Art. 4)

c. the Literacy and Education Centers will be the specific institutions where these programs will be carried out (Art. 5)

d. all Honduran and foreign, natural and juridical persons residing in the country are obliged to participate in the literacy program whether through a favorable disposition to participate as students or teachers, or by providing materials and/or making financial contributions to the program (Art. 13)

e. to intensify the spread of the program, the mass media (radio, television, and newspapers) will have to provide their collaboration free of charge as part of their regular programming (Art. 17)

f. all active teachers in possession of teaching certificates will have to teach literacy to five adults each. Participation in the program will be considered factors for promotion in the national escalafón (teacher's salary scale) (Art. 18)

Organization and Scope

The General Directorate is organized along the lines of a typical education bureaucracy. The 1975 annual report states that the unit has the following sections: directorate, accelerated primary education for adults, functional education, programming, supervision, Popular Cultural Center, administration and statistics. There are fourteen central office staff and twenty-four field personnel. The hierarchical structure is organized to reach the basic or community level of operation through a supervision system with relatively clear functions assigned at each level. At the national level, responsibilities include setting policy guidelines, designing program strategies, and defining program content. At the regional level and below, functions include executing policies, mobilizing personnel and organizing user groups, arranging site use and organizing and carrying out literacy courses. In 1975, fourteen of the eighteen departments were covered by the program; eighty-five schools were organized (of which thirty-three were located in the Department of Francisco Morazan), with 328 instructors. Initial enrollment was 15,428, final enrollment 10,334, and the number of "passed" (aprobados) was 8,764. Available statistics show that from 1965 to 1973 the accumulated number of aprobados from the schools was 51,780. From 1967 to 1973, desertion rates ranged from 44.2 percent in 1967 to a high of 52.6 percent in 1969, to stabilize at approximately 39 percent by the end of the period. In terms of coverage of potential clientele, the cumulative figures on aprobados represent approximately 5 percent of the adult illiterate population.

Coordination with other Activities

Since 1974, a sustained effort has been made to coordinate the activities of the Directorate with those of other public and non-public agencies involved in similar undertakings. No information is available on how successful these efforts have been. 1/ A proposal was presented in 1974 by MOE to coordinate programs with INA (the National Agrarian Institute), the Ministry of Public Health, and other institutions. For the INA project it was proposed that the functional education program for adults should cover twenty-two INA cooperatives with a total of 1,000 members and an estimated 5,000 family members. Further, it was suggested that twelve project components be developed jointly in community development, including training forty field supervisors, undertaking forty evaluation projects, and organizing seventy-five training groups in INA campesino sites and twenty additional groups in the Department of Lempira. It was not specified over what period of time the convenio would be carried out.

1/ A measure of success in this case may be the promotion of concerted action which, through division of labor, results in greater efficiency and wider coverage.

In 1974, a functional education program for adults was undertaken, with headquarters at Puerto Lempira in the Department of Gracias a Dios, in cooperation with the Ministry of Public Health, the Directorate of Primary Education, and the Sixth Military Zone. Eight communities were covered, and a total of three training centers and seven literacy centers were established. Training activities included courses in carpentry, nursing, tailoring and cooking. Sessions were conducted six hours a day for a period of three months, and a total of forty-seven persons participated. In addition, courses in six other communities were planned. In the literacy project, forty-five adults participated in the courses that were offered, for a total of 240 hours over a period of six months.

More recently the Directorate has established relationships with Acción Cultural Popular Hondureña (ACPH) and with ALFALIT, an evangelical educational group operating in a number of Latin American countries. These relationships, however, appear to be stronger on paper than in practice. ACPH and Adult Education maintain some rivalry in a number of areas of the country and there is hardly any exchange of information. It is possible to term the program relations as cool rather than cordial.

Activity Content

In the early phases of the program the primary equivalency courses for adults did not differ from those offered to school-age youngsters. Since 1972, however, an effort has been made to tailor the program content and methodologies to the needs, experiences, and intellectual capacities of adults. The original six grades have been compressed into four levels (niveles); a total of fifteen hours per week are spent teaching adults Spanish, natural science, social studies, mathematics, and formación humana, which is a blend of civics, morals, resource conservation, hygiene, and self-improvement practices. The following is the distribution by hours in the five different subjects for the four levels.

SUBJECTS	LEVELS I	II	III	IV
Formación Humana	5	3	2	2
Spanish	5	4	4	4
Mathematics	5	4	4	4
Natural Science	-	2	3	3
Social Studies	-	2	2	2

The stated objectives of the program are to decrease the levels of illiteracy in the country; to help the Honduran adult improve his physical and mental health; to enhance the adult's economic efficiency by making him a better producer, consumer, and resource administrator; to increase the adult's capacity to reflect on the cultural elements that affect his

attitudes towards democracy; and to prepare the adult for participation in the solution of his own and the community's problems.

The programs and teaching guides for the first and fourth levels, while accelerated, are quite conventional in nature. They proceed through a series of topics which are often completely unrelated to the surrounding environment and are treated in descriptive rather than analytical way. Thus, in fourth-level sex education, considerable attention is paid to the sexual mores and customs of ancient China, Rome, and Greece. The topic on regional and world organizations seeks to impart knowledge of the function and organization of such entities as NATO and the United Nations, while no mention is made of the Central American regional organizations. Moreover, the arrangement of topics within given subjects is not logical. During the first level, participants are expected to learn such basic things as mathematical symbols, or the Honduran currency system, but they are also introduced to decimal and fraction operations which involve relatively complex numerical relationships.

The Popular Cultural Center, another branch of the program, specializes in vocational training and general education. While its activities take place within what is known in Honduras as the "urban" areas, the sites are actually located in transitional urban-rural areas, where much of the activity content is also relevant to rural learning needs. According to the Center's report on its current activities, there are two commissions at work: art and education. The art commission has activities geared to promoting literacy, arts and crafts, and folklore, while the education commission offers a series of lectures in topics such as unionism, cooperativism, politics, economics, and family budgeting.

For the vocational component, the Center has organized workshops in sewing, flower arrangement, tailoring, wood carving, carpentry, and radio and television repair. A total of 275 fee-paying individuals participated in these activities in 1975.

Financing and Efficiency

Although no specific details on sources of financing are available, the bulk of funds for the Directorate's programs are from the MOE budget (See Table VI-1). The 1972 law decreed that public and private entities ensure the participation of illiterate employees in the program, that funds be obtained through contributions at large, and postage stamp sales.

Since the law did not provide details on implementation, compliance with its provisions seems to have been erratic. The general strategy followed by the Directorate, however, is one of resource mobilization on a voluntary basis, although the extent to which this mobilization has been accomplished is by no means clear. Indicators, however, are the use that is made of already available facilities, i.e., formal schools or community centers; the fact that in 1973 the program had 352 teachers not included under the General Directorate's payroll; and the fact that instructors working with the training groups were paid only L.30 per month, nominal by any account.

Table VI-1 provides financial data for the adult education programs, based on budget figures of the General Directorate of Literacy and Adult Education. Worthy of note are the breakdown of the budget and the rate of growth of the budget for the years listed. As with most educational activities, personnel service payments make up the major portion of expenditures. Capital outlays are essentially non-existent; they constitute a fraction of a percent in some of the years. The dominance of the personal service component implies that the growth of the budget is essentially determined by the costs of personnel. The last two rows of the table show the rate of growth of the budget and its personal services component during the years in the series, demonstrating a close correlation in the trends of the two items. After the 1970 growth explosion, the more recent years appear to be a period of consolidation at higher levels of financing, except when resources were again increased substantially in 1975, resulting in a major expansion of the office.

The available information does not allow a measurement of efficiency, in terms of learning outcomes, cost efficiency, or even apparent outcomes. It may be worthwhile, however, to look at a number of simpler indicators on enrollment for a number of years and to examine the enrollment distribution by grades. Tables VI-2 and VI-3 present this information.

Table VI-2 shows that in a time series from 1960 to 1975, the annual rate of growth for the initial enrollment of all groups has been 6 percent, while the growth of final enrollment has been 3.6 percent, that of aprobados 2.7 percent. When the groups are divided by sex, the increase in male initial enrollment, retention, and promotion is significantly higher than for females. In relative terms, within each group, the differences in retention and promotion are not nearly as significant, although males score higher. As there may be some problems of comparability between the early and late periods due to financial considerations (the Directorate is most certainly better endowed than it was during the sixties), and, more importantly, to program considerations (program content and methodologies have undergone substantial changes throughout this period), observations are presented for both the sixties and the seventies. Program performance, as indicated by growth and retention, has improved considerably. Male initial enrollment has grown at the rate of 8.9 percent per year. Female enrollment, on the other hand, has only grown at the rate of 1.18 percent per year, which is lower than in the sixties. However, while female retention declined during the sixties at the rate of -3.02 percent for final enrollment and -3.8 percent for promotion, this trend has been reversed in the last five years to 6.25 percent and 5.91 percent, respectively. The performance of the male group has also improved, and for the latter period the growth of retention and promotion has actually been higher (11.47 percent and 9.82 percent) than that of initial enrollment (8.93 percent).

Table VI-3 shows a cross-section of enrollment for 1971 and 1972, when the program still had six grades. It should be pointed out that the figures used for the cross-section presentation do not agree with the figures on enrollment and aprobación shown in Table VI-1, although the levels of enrollment reported

TABLE VI-1

THE BUDGET OF THE ADULT EDUCATION PROGRAM - COST BREAKDOWN, AND ASSOCIATED RATES OF GROWTH OF COSTS 1/

BUDGET ITEM	1964	1966	1968	1970	1971	1972	1973	1974	1975
Personal Services	165,480	186,600	254,160	252,521	353,440	377,980	383,860	387,520	529,006
Administration	8,980	24,935	35,922	28,892	36,000	27,472	29,700	29,700	-
Materials and Supplies	1,040	9,090	12,383	12,850	14,900	2,372	11,550	11,550	26,550
Other, Non-Personal Services	7,240	15,845	23,539	16,049	21,100	18,100	18,150	18,150	37,600
Machinery and Transp. Equipment	-	3,863	2,694	-	1,500				7,100
TOTAL	183,440	236,470	328,698	310,319	426,940	432,924	443,260	446,920	600,256
Rate of Growth of Budget		13.5	17.9	-2.84	37.6	1.4	3.8	3.8	34.3
Rate of Growth of Personal Service Payments		6.2	16.7	-.32	40.0	6.9	1.6	2.5	36.5

1/ All cost figures given in current Lempiras.

SOURCE: Information provided by the Directorate General of Literacy and Adult Education.

TABLE VI-2 Enrollment and Promotion Trends in the Adult Education Program, by Sex

Year/	Initial Enrollment		Final Enrollment		Promotion	
Participant Groups	Male	Female	Male	Female	Male	Female
1960	3000	3900	2900	3000	2800	2950
1962	4125	5620	3900	5200	3755	5253
1964	5400	6320	5300	6200	5650	5250
1966	4406	2933	2943	1847	1968	1507
1968	6168	3766	3363	2347	3029	2151
1970	6568	4881	3794	2808	3390	2513
1971	8097	5034	5094	3177	4571	2868
1972	8645	5065	5566	3540	5038	3225
1973	8780	5717	5829	3829	4818	3452
1975	10071	5177	6531	3803	5415	3349

Growth Trends (%)

·For all groups 1960-1975	6.00		3.60			
· By Sex 1960-1975	7.89	3.47	5.20	1.49	4.20	.8
· By Sex 1960-1968	9.43	2.88	1.87	-3.02	.99	-3.87
· By Sex 1970-1975	8.93	1.18	11.47	6.25	9.82	5.91

Source: Data provided by Directorate of Literacy and Adult Education

TABLE VI-3 Cross-Section View of Grade-Specific Enrollment, by Sex.

GRADES		1	2	3	4	5	6
Years							
1971	MALES	1986 (100)	1316 (66.3)	1246 (62.7)	1127 (56.7)	1037 (52.2)	1191 (60.0)
1972	MALES	1830 (100)	1382 (75.5)	1220 (66.7)	1238 (67.7)	1241 (67.8)	1436 (78.5)
1971	FEMALES	1115 (100)	799 (71.7)	763 (68.4)	712 (63.9)	689 (61.8)	728 (65.3)
1972	FEMALES	1122 (100)	731 (65.2)	739 (65.9)	808 (72.0)	765 (68.2)	843 (75.1)

Source: Data provided by General Directorate for Literacy and Adult Education.

are very close to the initial enrollment levels shown in Table VI-1.

In all four groups presented, the levels of enrollment decline from grades 1 to 3, or 1 to 4, and then rise significantly, particularly in the sixth grade. By taking the longitudinal perspective from one year to the other, it is found that the probable or prevailing promotion rates do not account for the observed enrollment in the next higher grade. This implies repetition and recycling. This implication must be accepted in view of the fact that enrollment had been steadily increasing during the previous five or four years.

One last observation is that the grade enrollment breakdown by age groups demonstrates that three out of four (73.3 percent) of enrollees are in the 14 to 25 age group; 47.8 percent are in the 14 to 19 age group. This distribution is expected, due to the age structure of the population, and the possibly lower opportunity costs involved in participation at this age. The dominance of this group, given the life expectancy of the Honduran population and the economic potential of the group, may be considered a positive, although inconclusive, finding regarding the potential impact of the program.

Constraints and Prospects

The Directorate admits quite readily that it operates under serious constraints. Some of the most binding problem areas which they have detected are mentioned below.

First, the limited financial resources with which to provide coverage of the potential user population.

Second, the low salaries paid to field personnel, which do not allow the selection of the most qualified individuals. Often field workers simply refuse to be assigned to areas where living conditions are adverse, or the cost of living is too high.

Third, the lack of materials, which conspires against the quality of instruction as recourse is made to traditional, i.e., rote and memorization, teaching/learning approaches.

Fourth, the lack of mobilization equipment, which also conspires against the orderly flow of information within the system. Supervision activities by definition require a high degree of mobilization to be effective.

Fifth, while greater importance is being assigned to the coordination of activities originating in different agencies, effective integration of efforts is not yet a reality.

Sixth, the training component of personnel in the adult education programs is not carried out on a regular basis. This results in poor quality ratings for a number of the people involved in field activities. To this may be added the possible additional constraints that arise because the training component itself does not take into account the diversity and complexity of specific situations which result from the heterogeneous nature of different rural areas.

These are undoubtedly very important constraints with major implications for future program development. The fact that they have been detected by the Hondurans themselves, however, is a credit to the people in charge. It may be expected that they will adopt the measures necessary to improve the situation, particularly as these are related to changes which can be made within the system.

Exogenous constraints, such as the scarcity of funds, usually exceed the capacity of "internal" policies to deal with them. However, an argument may be made in favor of accommodating the scope of the operations to general resource availability; that is, a choice of program "depth" in favor of "width." Such a choice need not be politically impossible in a program of this nature and may actually result in greater future resource availability.

This observation is highly relevant to the Directorate's program of adult education. The early phase of operations was characterized by a sustained horizontal expansion of activities with little regard to activity content. As a result, apparent absorption increased steadily but output, in terms of promotion rates, remained low. In the more recent period, this approach has given way to a more intensive one which is characterized by a relatively lower intake but much higher performance. The decreased duration of the program, from six to four years, is a positive step. The tailoring of programs to fit the needs of adults, still far from complete, is also necessary for increasing program performance.

b. The Cooperative Promotion Program of the National Agrarian Institute, (INA) 2/

One of the main thrusts of the Government's Agrarian Reform is the formation of asentamientos campesinos, defined as farm businesses operated on land rented by the GOH under provisions of Decree Law No. 8 of December 26, 1972, to previously unemployed or under-employed farm laborers or small farm operations associated into groups as protegés of INA. The overall objective of the asentamientos is to promote the cooperative movement through massive participation by campesinos in commercially-oriented production associations. The cooperatives are eventually given corporate ownership of the land. The minifundio problem is dealt with by giving the cooperative land extension commensurate with the number of members, at a rate of approximately five hectares per member. The commercial orientation of the asentamientos also serves the purpose of introducing the campesinos to the money economy. In the localities visited, cooperative members receive an advance of L.3.00 to L.6.00 per day worked which is applied against the overall line of credit alloted to the cooperatives. This is not necessarily applicable to the whole country. The spirit of cooperation and organization is to be strengthened through regulations which stipulate that 10 percent of the profit is to be put into a reserve fund to ward against price fluctuations. Five percent is allocated for educational activities, and an additional 10 percent, for social assistance services.

As of January 1975, a total of 23,627 families had been located on 108,946 manzanas of land in different areas of the country. The northern region had

2/ The observations made in this Section were obtained during a field trip to the Bajo Aguán Valley in the Isleta, Tocoa, and Sinaloa localities.

at that time 95 asentamientos with 3,342 families assigned over an area of 29,990 manzanas, located for the most part in the lower Aguán Valley.

Organization and Coordination

The asentamientos are managed by INA through its regional offices. At the project implementation level the structure is simple, with a chief-of-project in charge of overall management. On the technical side are the promoters who provide cooperative education and liaison with the communities and the agronomists responsible for agricultural education. The administration and service components consist of a number of secretaries and clerks, plus an accounting office which keeps track of the financial records of the asentamientos.

Coordination is maintained with a number of public institutions. The National Development Bank (BANAFOM) disburses loans to cooperatives against INA approval, and also, in theory, facilitates marketing of the produce. The Housing Institute provides credit for certain types of construction, and the State Banana Corporation (COHBANA) provides logistical support by making its facilities available for meetings and office space.

Coordination for educational activities is maintained with institutions such as INFOP for courses on machinery maintenance and repair. To date, however, this coordination has been on a sporadic, special-need basis; there are no formal convenios between the institutions. The Directorate of Adult Education of the MOE had not yet implemented programs in the area that was visited during the assessment, but it has established its accelerated primary program in other areas in response to community requests.

Activity Content

One of the critical constrainsts to the development of the cooperative movement is the very high illiteracy rates which prevail in the area; they average about 75 percent. This makes communication between INA and the communities very cumbersome. The key actors in the strategy are the promoters and agronomists, who convey the learning messages to the individuals and groups.

As there are no educational activities specifically geared to the delivery of basic education or literacy, the communication between promoters and agronomists on one hand, and participants on the other, determines the performance of the activity. This performance may be measured by the growth in membership, the improvement of the economic position of the cooperative, or the increases in production and productivity.

What is clear is that the educational message is quite partial, since it covers the specific areas of cooperative development and organization, and agricultural practices. The clientele consists of male adults who average 27 years of age. Females are specifically excluded, as their roles in the community are geared to domestic chores and child-rearing. Children attend the local school, if there is one, so their educational needs are essentially assumed away.

Considering the harsh conditions and poverty in these areas, 3/ the stringent requirements of everyday work, and the fact that most of the people have considerable experience in agricultural activities, a few questions must be raised about the content that NFE activities might have. There appears to be a trade-off between the achievement of the ideal level of fulfillment of learning needs, and the advisability of attempting to reach that level, given the constraints imposed by the economic, social, and cultural status of the community. A "constrained optimization" level may be achieved if the level of fulfillment of learning needs is lowered to concentrate on those areas in which some needs must be fulfilled in order to carry out one specific set of activities.

Viewed in this light, concentration on cooperative development and agricultural practices may be more realistic, given the resources and the needs, than an approach which seeks to provide a wider range of educational options, however needed they may be.

Promoters in the program develop an intense personal relationship with cooperative members. Each promoter is assigned an average of three cooperatives, each of which he visits daily, five days a week. His entire working day is spent with cooperative members. The level of personal rapport between promoter and campesinos in the asentamientos visited during the assessment is very high; this appears to be an important factor in developing mutual trust, which is essential for maintaining communication.

The campesinos are continuously exposed to animación techniques, which are a kind of sensitivity training. A high level of motivation is viewed as essential for developing the cooperative spirit and a strong sense of group identification in people who are, by nature, strong individualists. This approach is taken at both the group and the individual levels; new members are given special attention.

The cooperatives are in a constant state of flux, particularly in regard to the size and composition of the membership. Planning, therefore, is carried out on a weekly basis, and the message imparted at any given time is viewed as the required response to an immediate need. As a result, the promoters do not follow a predetermined pattern of activities, even though topics on organization and management are presented in an orderly sequence. Participants are first motivated in terms of the benefits of the cooperatives as opposed to the alternative of being landless laborers, or minifundistas. They are informed about the objectives and the juridical structure of the Agrarian Reform and the cooperative movement. The cooperatives are organized and representatives are elected; elections are held every year. Thereafter, as the need arises, the participants have access to other topic areas, including financial and credit management, equipment maintenance (courses have been conducted by INFOP in this area), record keeping, etc.

3/ Campesinos are in the field at 6 a.m. They have a short break for lunch and return from the field at 5 p.m., six days per week.

The promoters perform an important "monitoring" activity. They are the embodiment of the program and their continuous presence in the field is a signal to participants that their needs are being considered. Moreover, their continuous contact with participants provides feedback to the program. The respect that the campesinos have for the promoter also facilitates his role as trouble shooter and arbitrator when disputes arise.

The agricultural education component of the INA program is oriented to teach practices to improve yields and productivity, and to the production of different crops, such as grains, African palm, and citrus plants. Practices most often taught include seed spacing, row planting, weeding, irrigation, harvesting, and crop rotation. Records from the Isleta locality show that production of corn per hectare has increased from approximately 30 to 60 quintals with the adoption of systematic planting practices.

The relationship between the agronomist and the participants does not seem to be as close as the one between the promoter and the community. This is in part because the number of agronomists is much lower, and each one of them is responsible for a considerable number of cooperatives. In Isleta, for example, there is only one resident agronomist to cover fourteen cooperatives. In addition, the role of the agronomist is essentially technical, and his activities are conducted in the field, where he supervises the work of individual participants. His relationship with the group is therefore limited to discussions preceding the initiation of individual practices.

Constraints and Prospects

The growth of the cooperative movement indicates a sustained effort by INA to carry out its strategy. Individualized attention to participant groups through the work of promoters appears to have created a good climate for communication. The respect that participants have for the promoters is a positive factor in the development of the movement. At the same time, the promoters who were interviewed appeared alert, articulate about their work and role, and quite concientizados about the types of relationships they were expected to develop with participants.

The observed constraints are largely exogenous. At the level of the relationship between the promoter and the community, the lack of literacy limits the efficiency and scope of communications. The promoters, therefore, become the source of all information concerning the cooperative. An umbilical cord of dependence is created and strengthened. Aside from this issue, questions must be raised concerning how generalizable or transferable the experience is, as it depends on the subtle chemistry of the human relationships between a promoter and his groups.

One of the crucial motivations for campesinos to join in the cooperative movement is that the perceived utility of the association is very high. The membership fee of L.2.00 provides entry into an association with other people who are usually known by the individual in question. The benefits are the cash advances of L.3.00 received per day worked, the long-term prospect of owning land, the access to credit and technical assistance, and the protection of the group, which may be perceived as a risk inhibiting factor. The alternative, of course, is to not join the group, and thus continue to work as

a day laborer or minifundista, which does have a certain intuitive appeal, given the individualistic nature of the campesino.

The success of the cooperatives, therefore, depends on how fully the expected benefits are finally realized. The anticipated increases in living standards including higher income, better housing conditions, and better health and nutrition, motivate participation. Currently, no clear trend showing a sustained economic uplift of the cooperatives has been demonstrated. This may be attributed to the gestation period of the learning and adaptation processes, or to external ecological factors, such as Hurricane Fifi, which cannot be foreseen and which disrupt the most carefully tuned planning mechanism.

However, as the cooperatives are essentially economic activities, they require some degree of economic planning. There is an almost total lack of marketing mechanisms to ensure that supply is brought to the market when demand conditions are optimum. Middlemen or coyotes, as they are called locally, appear to be reaping the bulk of the economic benefits of the cooperatives, as they are able to buy low and sell high. If the cooperatives want to bypass the middleman, they have to rent trucks to transport the produce to San Pedro Sula or La Ceiba over bad roads which are frequently impassable during the rainy season. The rental charges on trucks for up to five days, plus the produce that is usually lost on the way, lower significantly the return on the investment. The cooperatives also run the risk that the excess produce will "soften" the market to such an extent that their income would be equal or lower if output is increased.

c. Community Development Activities of the National Social Welfare Board 4/

The National Social Welfare Board is a semi-autonomous public agency which is charged with the planning, coordination, and implementation of programs in the field of social welfare assistance. The Board is linked directly to the Presidency of the Republic; the First Lady of Honduras is the president.

The Board was set up in 1958 to "aid the government in its welfare campaign in favor of the socially destitute." Initially, it provided loans to small vendors in Tegucigalpa and set up "popular" dining halls and dormitory facilities, day-care centers, and residential houses (guarderías) for orphan children. Activities were limited to the Central district. By 1968 the Board was reaching areas in the North, South, and East, with the establishment of thirty dining halls for children, eight community centers, and seven kindergartens.

The activities of the Board have now evolved into a more aggressive, development-oriented, community promotion strategy. Attention here is focused on the training activities for community promotion, the most important NFE component, which is based on the theory that motivation for achievement can be fostered and utilized.

4/ This descritpion is based on a 1975 INCAE case study on training for motivation achievement for rural development.

Philosophy and Purposes of the Training Component

The stated objectives of the community action program are: 5/

a. To ensure participation of the population in the process of socio-economic development of the rural communities.

b. To promote community organization to increase production and productivity.

c. To complement and reenforce the development of specific priority projects to improve health, education, and housing conditions in the rural communities.

d. To participate in efforts to reduce the infant malnutrition indices in the rural zones.

Since the role of individuals is essential for the attainment of these objectives, services must be provided in such a way that communities perceive an immediate benefit from participation and are motivated to achieve the goals which they identify as the embodiment of tangible benefits.

Following McClelland's theories, "Achievement motivation is demonstrated in the need to improve oneself, to improve one's behavior, and to fulfill, or better, surpass self-imposed goals, to achieve something new or unique and thereby gain a place of distinction." 6/ The variation of McClelland's theme adopted by the Board is illustrated by the emphasis placed on community cooperation, as opposed to unbridled individualism, as the basis for group achievement.

To accomplish the stated purpose of achievement motivation in the communities, the promoters as well as the community leaders have to be sensitized about the importance of proper message communication. The training is based on the presentation of experiences which introduce motivational techniques for leadership promotion, organizational development within the communities, and coordination between institutions and communities. As the activities in the course are organized, participants are expected to prepare short stories on selected topics. These stories are later analyzed by the group, in an effort to detect achievement networks. Other exercises follow, including one in which individual and group relations are discussed, with emphasis on how the behavior of the individual influences group behavior and vice versa; and another which deals with two-way communication techniques. A final phase of the training incorporates a role-playing exercise; participants are located in opposing groups which debate their positions on specific group interests. The bargaining takes place until a satisfactory working arrangement is decided upon.

5/ Junta Nacional de Bienestar Social, Objetivos de la División de Desarrollo Social de la Comunidad, Boletín No. 1, junio 1975

6/ INCAE, p. 16

Activity Scope and Incidence

Some of the Board's activities, like the training, are essentially educational in nature. Yet, much effort is directed to small-infrastructure development projects. A number of projects have been carried out at the community level, including water pipeline construction, market construction, and well digging. The Board is also actively involved in the improvement of school buildings and the initiation of small-community activities geared to production, including the construction of vivariums, chicken coops, and rabbit hutches. It also promotes the establishment of small family orchards to improve family diets. The extent of emphasis placed on the educational component of these activities is not known. The communities are usually the project initiators, and they contribute labor and facilities while the Board concentrates on the provision of materials. The bulk of financing for the Board's activities originates in the communities; their contribution amounted to 69 percent in 1970 and 71, and increased to 72 percent in 1973.

As with most of the organized NFE programs, records keeping at the Board is one of the weakest areas. The criteria utilized for measuring objective achievement are purely descriptive rather than operational. Abundant information exists on projects in all the areas in which the Board operates. For 1975, for instance, it is stated that 32,125 manzanas under cultivation were covered, as were 187 asentamientos, 101 individual groups, and 10,509 families. No details, however, are given about whether these projects consisted of provision of inputs, leadership training, or agricultural training. The generalized practice of using the largest recorded number of contacts with families only serves to cloud the achievements of the programs. Since the activities undertaken are so diverse, a concerted effort must be made to develop a consistent set of indicators to gauge more accurately the scope and impact of the program.

d. The National Apprenticeship Training Institute - Rural Area Activities

The Instituto Nacional de Formación Profesional (INFOP) was established on December 28, 1972 by Law Decree No. 10, as an autonomous public institution linked to the Ministry of Labor and Social Welfare. As stated in its bylaws, the overall objective of the Institute is to contribute to "the improvement of national productivity and socioeconomic development through the establishment of a rational system of professional training for all sectors in the economy and levels of employment..." INFOP began operations in May 1972 and during its first two years operated on a very small scale, providing coverage to 359 participants in twenty-six different courses. During this early period, INFOP's activities were primarily directed to creating its own institutional capability, since 200 of the participants were either INFOP personnel or instructors who would eventually work for INFOP.

Field work began in 1975, when a total of 587 courses were conducted with 7,545 participants. Of these, 147 courses were offered in the primary sector of the economy (agricultural techniques, livestock raising, forestry and farm management) with 2,413 participants.

Organization and Programs

One of the important considerations in an analysis of INFOP is how that institution's activities are organized and programmed. The INFOP model is not applicable to all of Honduras as it places heavy emphasis on structured program management, quality, and selective coverage. At the same time, the structured and analytical approach offers some important lessons in the areas of activity control, project evaluation, feedback, and followup. The fact that efficiency is stressed offers some important clues as to how resources must be allocated, and activities monitored, to gauge program performance.

INFOP is governed by a Board of Directors which is made up by the Ministers of Labor, Education, and Finance, and the Executive Secretary of CONSUPLANE. Additional members are two workers' representatives, and two delegates from private industry. The Board is charged with setting the institution's policies. Managerial authority, however, is vested in an Executive Director, who is also a non-voting member of the Board.

Organizationally, INFOP's activities are channeled through programs assigned to its various departments. These include administration and finance, personnel recruitment and assignment, investigation and planning, and professional training, as well as the Northern Regional Office, the Department of Construction of Training Centers, and the Director's Office. Professional training, which is managed by the Technical Department, makes up the major portion of INFOP's activities. Most of the personnel attached to the technical office are field workers such as agronomists and instructors who are coordinated by central office staff.

Field activities are organized every year in advance. A detailed work plan is drawn up during January, listing the courses to be offered. Course offerings are classified by types, such as FINO courses, offered in coordination with other public sector institutions; courses offered in conjunction with private enterprise; courses offered at the training centers; and courses offered in the rural areas. Information is provided for each offering, including the name of the instructor, the activity content, the dates when the course will begin and end, the location, the schedule, and the estimated cost. At year's end, a performance evaluation report is presented, which compares objectives and goal attainment according to individual activity. The 1975 report, which is the only one currently available, shows that INFOP follows its program guidelines very closely and measures attainment in terms of the quantitative targets achieved. In addition, a five-year work plan has been drawn up for the period from 1976 through 1980. This revision of the 1975-1979 plan is based on a national assessment of training needs by sectors and provides five different alternatives for coverage. Cognizant of the fact that the Institute's resources are able to provide only minimal coverage of these training needs, the plan calculates what these targets will accomplish by the end of the period and what the associated costs are.

Coverage, Content and Approaches

INFOP is currently operating in fourteen departments. For 1975, 203 courses are programmed to be offered in the agricultural sector to 3,195 par-

ticipants. Most of them will be offered at the Training Centers, in the area of complementación. According to INFOP's typology of occupational training, three types of training are offered at the centers: complementación, abilitación and aprendizaje. Complementación is essentially upgrading of skills in short courses for workers who are currently employed. They last an average of sixty hours over a period of six weeks and participants receive a small amount of financial aid to pay for materials or transportation costs. Habilitación is on-the-job training for new workers for periods ranging from 300 to 600 hours. Participants are paid $1 for each session attended, and they are expected to emerge from the program as semi qualified workers. Aprendizaje is apprenticeship training. It is intended to train young adults to be qualified workers, and it lasts for approximately three years. Apprentices are required to have a contract with an employer, stipulating salary level, placement and the commitment of the enterprise to provide time for training during the apprenticeship phase.

Four out of five rural area participants are in the complementación programs. This is forced by the training needs of the sector as much as by the economic conditions of most participants. The INFOP programs are not geared to the subsistence sector of agriculture. Participants are currently employed foremen and skilled or semi-skilled farm workers. To qualify for the program, they must be literate and between 18 and 53 years of age; in addition, they must pass the entrance examination and demonstrate that they are currently employed. Participants are grouped so that they have a basically homogeneous level of school achievement and experience.

At the present time, twenty-one courses are offered in cattly raising, including breeding, nutrition, meat processing, prevention and cure of diseases, construction of pens and stables, administration, and management. There are thirteen offerings in agriculture, including soil preparation, seeding, cultivation, fertilization, pest and weed control, irrigation and drainage, crop storage, construction, administration, and marketing.

The courses are designed as packages broken down into detailed activity components. This technique represents a variation of occupational analysis, in which the components of a particular job are identified and their interrelationship examined to see how each component fits into the whole. For example, the components of a repair and maintenance activity are identified. Attention is focused on each one in turn, and they are related to the integrated network of components. There are several advantages to this technique. It requires detailed study and comprehension of the subject; it integrates the components into the whole and traces their relationship, roles, and relative importance; it allows the measurement of each component's function as part of the whole; and it facilitates the evaluation of the activity in terms of the utilization of the skills learned in actual work situations.

Financing and Efficiency

According to the bylaws of INFOP, the sources of income include allocations from the national budget, transfers from other public institutions, payments made by private enterprise and funds obtained from international loans, plus funds collected from voluntary contributions, proceeds from the institution's investment portfolio and from sales of services, and fines levied against

delinquent enterprises.

All organized private concerns with at least five employees and working capital of L.20,000 are required to pay an amount equal to 1 percent of their payrolls to INFOP. In practice this is the biggest source of revenue for the Institute. INFOP derived 35 percent of its total income from this source in 1974 and 38 percent in 1975. However, for the period from 1976 to 1980 it is anticipated that fully 66 percent of revenue will come from the payroll tax. INFOP's budget is not only balanced every year, but a surplus is generated which is applied to the subsequent year's budget. In 1975, the accumulated surplus was expected to finance 48 percent of that year's projected budget. During the period from 1976 to 1980, however, it is anticipated that the surplus will decline and will finance only 11 percent of anticipated outlays.

From 1974 to 1975, the overall budget increased from L.8.36 million to L.8.51 million. Total income for the 1976-1980 period is projected to be L.25,083,550, or L.5,016,710 per year. Lower expenditures are anticipated due to the decline of capital investments as the initial phase of construction and purchase of equipment and machinery is passed. These outlays can undoubtedly have a significant weight in the overall determination of expenditures. In 1976, for example, capital investment constitutes 46 percent of all programmed expenditures. During the period from 1976 to 1980, it is anticipated that personnel costs will make up the bulk of INFOP's expenditures.

The delivery system utilized for these programs is the mobile training units. They consist of one agronomist and his teaching and demonstration materials moving from town to town according to a predetermined schedule. Their utilization has the advantage of "bringing the classroom to the students," which serves to motivate their continuing participation in the course.

The efficiency aspects of the program should not be judged in terms of course or unit costs, as there are no available yardsticks with which to compare them. The INFOP courses are designed for groups with only sixteen to eighteen participants, and they last for limited periods of time. Participants must submit themselves to screening procedures before they may enroll; their main source of motivation is their perception of advancement in the workplace, from which they can derive pecuniary benefits. Desertion therefore is not a problem; retention is promoted by the relatively short duration of the courses.

Efficiency, consequently, should be considered with regard to activity planning and followup. INFOP plans its operations in response to demand, which is gauged by field surveys. It is not known to this assessment how these surveys are carried out; but they appear to be "secondary" surveys. In other words, they are opinion-and-need surveys applied to decision-makers of institutions such as INA operating in specific areas, rather than structural surveys of the economic and labor market characteristics of those areas. The secondary survey method is a good planning tool if one assumes that decision-makers in these areas are well informed.

INFOP utilizes tracer techniques. As of now there are no available reports from the rural area programs. One report available from a tractor maintenance course reports the following results:

TABLE VI-4: Activities Programmed for the Mobile Training Units in the Rural Programs of INFOP during 1976

Nº of Courses Offered	Course Category	Nº of Instructors	Estimated Cost	Estimated Number 1/ of Participants
69	Agricultural Practices	14	210,660	1,173
4	Habilitación in Agricultural Practice	2	60,000	68
62	Livestock Raising and Veterinary Practice*	10	136,500	1,054
15	Poultry Raising	(1)-	23,000	255
11	Forestry	3	21,500	187
14	Machinery Maintenance	3	58,000	238
1	Habilitación in Machinery Maintenance*	(1)-	6,000	17
1	Vocational Training	(1)-	3,000	17
8	Carpentry and Home Construction	2	41,000	136
12	Farm Management	2	23,000	204
Total 197		36	582,660	3,349

Source, INFOP Course Programs for 1976

*The Habilitación course in agriculture lasts 5 months, full time; the one in machinery maintenance 13 weeks, also full time.

-Figures in parenthesis indicate that instructors also teaches a different course

1/ A ratio of 17 participants per course has been used to make these estimates.

TABLE VI-5: INFOP's Income and Projections for the Period 1976-1980

Sources of Income	1974	1975	1976-1980 Projected
1% Payroll Tax	2,891,172.00	3,208,555.00	16,530,192.00
Central Government Transfers	452,000.00	425,000.00	2,125,000.00
Surplus from Previous Year	2,189,460.00	4,061,132.00	245,258.00
Interest Earned on Investments	103,978.00	132,533.00	2,790,203.00
Loan IBRD/IDA	2,750,700.00	677,916.00	3,392,900.00

Source, INFOP 1975 budget report and Plan 1976-1980

a) in only two out of fourteen observations could any significant improvement in the participants' hierarchical position be detected.

b) the salary level for the group as a whole increased significantly, however, from L.90 to L.107 per month; the survey was taken five months after the termination of the course.

c) employers generally feel that worker productivity has increased as a result of participation in the course.

d) participants are satisfied with the quality of the training they received; they rate the teacher as "very good," and would all be willing to take another INFOP course in the future.

e) employers feel that participants received from the course what the employers expected them to learn.

f) the principal motivation for advancement is self-improvement.

g) participants had specific recommendations to make about such aspects of the course as duration, selection, practices, and additional coverage of certain areas.

It is not known how generalizable these findings are. However, a very useful evaluation technique has been put to work to gauge the impact of the program on both participants and their employers, and to elicit their feedback on the course. The information base built with these data can provide useful guidelines for future planning, if models which correlate course characteristics with user response and background are developed.

3. Private Sector Activities

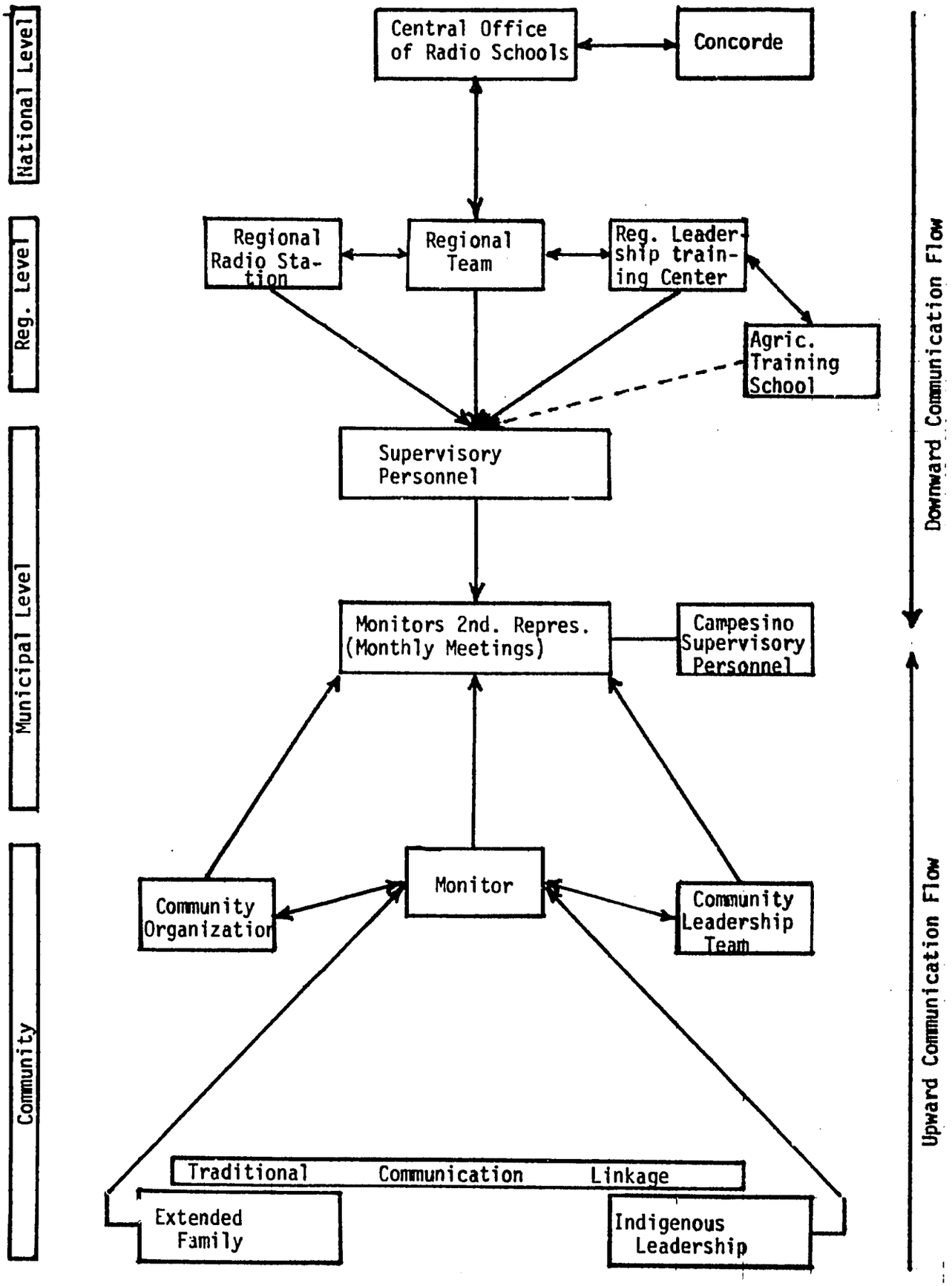
a. Acción Cultural Popular Hondureña

This section deals specifically with the organization and delivery of ACPH's activities in the areas of literacy and agricultural education. Other aspects relevant to impact, coverage and content are examined in Chapter IX.

ACPH's approach to the delivery of educational services may be described as an attempt to utilize indigenous communication patterns for the conveyance of specific educational messages. Figure VI-1 shows the different layers of the communication system. In theory the messages are expected to originate at the community level and are intended to respond to learning needs as well as to concrete economic and social needs. The needs are communicated within the family cells and are eventually channeled upwards through the community leaders.

The first communication exchange between the program and the community is effected at this level. Communities have their own organizational mechanisms which essentially bind together the community leadership teams. The teams establish contact with the monitor, who is a local individual who has already been trained by ACPH to perform his liaison functions. Because of his "native" status, the monitor is expected to communicate effectively with the community.

FIGURE VI-1 Apparent Communication Flows in the ACPH Organizational Model*



At the municipal level, the communication flow is maintained through monthly meetings of monitors and community representatives. These exchanges are reinforced by the presence of campesino supervisory personnel, and supervisory personnel from the program. The first "official" link in the chain, therefore, is established at this level.

Municipalities are organized by regions. Program execution is located at this level through the regional teams, the regional leadership training center, and the regional radio station. In some regions there are agricultural training schools also. In theory, this level receives continuous feedback from the communities in order to tailor both program design and content. In practice, it is not known to this assessment whether program actions accurately reflect community initiatives, or whether these actions are undertaken independently by the program and transmitted downwards in a one-way communication flow.

At the national level there is CONCORDE (The Development Coordination Council), the coordinating agency for a number of autonomous rural development programs. Representatives of ACPH, the Federation of Saving and Credit Cooperatives, CARITAS, and the Honduran Development Foundation meet periodically as members of CONCORDE to exchange information and coordinate their action. ACPH's central staff, however, actually administers its programs.

ACPH argues that conventional approaches to communication with campesinos fail because of their physical isolation, and the low economic returns obtained from individualized attention in conditions where environmental and social factors are overwhelmingly adverse. The implantation of capital intensive technologies cannot be effected successfully if the farmer does not know how to apply this technology. Campesinos have a small margin of error when living at subsistence levels; therefore, they are risk-averters rather than profit-maximizers. Moreover, the social cleavage that exists between the program representative and the campesino makes communication difficult because of in-bred attitudes of paternalism and mistrust on each side.

To overcome these constraints, ACPH organizes agricultural study groups at the neighborhood level. Groups elect leaders who receive training at the leadership school; they return to the groups to conduct the exchange of information among group members and to create problem-solving situations for them. The groups develop demonstration plots which serve as teaching instruments. "Learning by doing" is stressed as the optimal methodological approach, and experimentation is also emphasized.

The messages are reinforced by monthly meetings, half-hour daily radio spots which are geared to the crop cycle in the region, and printed materials, although these are not yet utilized. In some cases a training component conducted by agronomist-supervisors is added to the reinforcement package.

While the orientation of the agricultural program is essentially technical, that of the literacy program is activist, in the sense that the campesinos, through their participation in the program, are expected to become aware of their own capabilities and, it is also argued, of the essentially irrational, contradictory, and oppresive social and economic environment which surrounds them. This philosophy is taken directly from Paulo Freire's thinking; it

determines the conscientización approach utilized in the literacy courses. Literacy is a conduit to power, as it increases the potential for communication among members of the campesino groups. The kind of activism that ACPH encourages is communally oriented, and this point is heavily stressed in order to thwart individualistic tendencies. At the same time, the externalization of this communal approach is the adoption of a political philosophy which propounds the existence of the corporate state as a means to alleviate the problems of development.

Chapter IX presents some of the findings of Robert White in his evaluation of ACPH's literacy programs, 7/ which suggests that the results of the literacy program are meager "both in therms of the total number of rural adults made literate over a period of nine years and the impact on a given community." 8 / In White's sample, only 17 percent felt they had learned, 34 percent did not attend classes regularly, and 18 percent expreesed lack of interest. An additional 15 percent expressed lack of intellectual capability, and an assorted number gave other reasons such as bad eyesight, old age, etc. ACPH rarely reaches more than 30 percent of its potential clienteles in those communities where it is most effective.

The points of these observations are several. First, from the point of view of logistical implementation the problems of educational delivery in the rural areas are formidable, and they affect all kinds of programs, no matter what their philosophy. When these problems are coupled with low resource availability, limited technical expertise, and an unbounded desire to expand, the result is faulty implementation as all three constraints can not be overcome at the same time. Second, the lack of success in garnering significant community support in some areas indicates that there are other motivations besides activism at work in the determination of community involvement. Third, there is a trade-off between the degree of informality and the grassroots approach , and the organization characteristics of the management apparatus necessary to effectively mobilize and control the flow of resources. Less rigid management, which may be desireable, may also result in decreased ability to control the performance of project activities,which is not desireable.

b. Integración de la Paternidad Responsable en Educación Funcional de Adultos IPREFA

IPREFA was founded in early 1975 as a pilot project designed to incorporate a family planning component into adult basic education. The program operates in the Guanchias area in the northern banana-growing region. The intended user groups are adult members of cooperatives who are enrolled in adult education programs. The purpose of the project is to explore what mixes of

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7/ Robert A. White, The Adult Education Program of Acción Cultural Popular Hondureña, St. Louis University and Centro Loyola.

8/ ibid., p. 220.

family planning techniques can be most effectively communicated to rural adults in the context of functional education. An ancillary purpose is to test patterns of inter-institutional coordination for project implementation; IPREFA has brought together the Honduran Family Planning Association, the Directorate of Adult Education of the MOE, and the six participating banana cooperatives. Financial support and technical assistance are provided by World Education and the International Planned Parenthood Association.

Rationale and Activity Content

IPREFA provides information about family planning to rural adults. The annual growth rate of Honduras is estimated to be 3.4 percent, with a crude birth rate of 49 per thousand, one of the highest in the world. The growth of the population is held in check partly by the very high crude death rate (15 per thousand) which, because of the very young age structure of the population, implies an extremely high infant mortality ratio which in certain areas surpasses 150 per thousand. Before starting its operation, IPREFA applied a 28-item questionnaire to 322 cooperative members of both sexes, out of a total of 750. One out of four of those interviewed reported having ten or more children, but little more than one in twenty reported having that many still living. While those interviewed felt that it was possible to avoid having children, 95 percent were ignorant or gave incorrect answers to questions about the menstrual cycle and female fertility periods. Less than one in ten reported using any kind of birth control method although three out of four reported knowing one or more such methods. Two out of four reported that the doctor was the person to go to in case of pregnancy,one out of ten mentioned a nurse, and one out of six mentioned a pharmacy. The area, with a population of 15,000, has two doctors, one nurse, one pharmacist and two nurses.

IPREFA has combined its work with the MOE's Adult Education program. Its current staff includes two project directors, specialists in material development and family planning, and two full-time instructors from Adult Education.

Following the methodology applied by Adult Education in its basic education program, extensive use is made of the "generative" word and the "generative theme." A total of twenty-seven generative words have been adopted, including crops, machine, sex, family, clinic, pregnancy, cooperative , shoe, and rain. The generative themes are built around the word. Thus, the following themes are used for the word family: what is the family? who constitutes the family? how are parents best able to attend to the needs of the family? is it possible to avoid having too many children? in what ways? etc.

The reading manuals are developed in an elementary fashion to communicate simple, straightforward ideas. The initial emphasis is on information regarding fertilization and reproduction processes. In a later phase the ideas of family planning are introduced; it is associated with individual and family welfare as if to say, "just as responsible parents care about their children's education, they also assess their own economic situation before having children."

Actual techniques of family planning are introduced. Birth control practices for males and females, introducing all known types of contraceptives as well as the rhythm method, are taught. In the last phase, the concept of responsible parenthood is introduced and developed. Topics include preparation for the responsibilities of parenthood and the economic and emotional implications parenthood. Parental behavior and attitudes are also discussed.

The learning messages are reinforced by advice and contraceptive services. The Honduran Family Planning Association, which is in charge of dispensing these services, has trained thirty promotors who visit interested families every other week. A family planning clinic is planned for the future.

Constraints and Prospects

Constraints are present at several levels. Difficult working conditions have affected personnel turnover. The program has to contend with the challenges imposed by the physical environment; poverty and ignorance, isolation and the lack of communications are seriously limiting factors. Although it is reported that volunteers are being effectively deployed, it is not reported under what conditions a higher number of volunteers could be recruited.

At another level, it is also reported that community cooperation has been readily forthcoming after an initial period of resistence. The main argument IPREFA makes is that its activities cover much more than just family planning, and much of the information conveyed is essential for upgrading the health and nutrition standards of the communities.

The program's prospects, however, are inherently quite limited by religious and political considerations. The Catholic Church's position is one of opposition to birth control techniques. The population density argument, however unwarranted its scientific basis may be, is a very strong political argument particularly as it has overtones of national sovereignty. Finally, the lack of technical expertise, facilities, and materials places serious limitations on the prospects for program expansion once the pilot phase is over.

C. Comparative Analysis

The currently available information base identifies particular characteristics of the different NFE program activities. They are varied with regard to functions, organization, approaches, and resource mobilization; it is difficult to compare them with any other activity or among themselves. This analysis, therefore, delineates the NFE profile in terms of the offerings made to relevant groups within the Honduran population.

Location and Functions

All of the programs described do not operate exclusively in the rural areas of Honduras. INFOP, the Welfare Board, and the Directorate are active in urban and urban-transitional areas, for the most part. The programs of INA, IPREFA, and ACPH, on the hand, are almost totally limited to rural areas characterized by subsistence activities. Except perhaps for INFOP, the activities of these groups are directed to deprived sectors of the rural population characterized by illiteracy or the lack of earlier schooling subsistence level living conditions, or low-end poverty status in the urban-transitional areas.

The activities of INFOP and INA are currently aimed exclusively at male adults. The Adult Education Programs enroll predominantly male groups but there is no evidence of discrimination; participation by sex may be determined by the economic and social roles of males and females in the communities. The family planning programs of ACPH are, by their very nature, aimed at both sexes. ACPH also has housewives' clubs; and its literacy programs are coeducational.

Given the magnitude of the problems of human resource development and of social welfare, the impact of these activities is limited. Program scope ought not to be measured solely in terms of participation, just as the scope of the formal school system should not be assessed on the basis of crude enrollment rates. In these terms, the scope of the school system would be seen as reaching four out of five children in the country.

No single yardstick should be used to measure program impact, as different activities have different purposes and objectives. Therefore, each activity should be examined in the context of its stated purposes and the extent to which those purposes are chieved. On another level, the purposes themselves may be subjected to critical analysis with regard to their contribution to social welfare or development. This exercise, however, requires evaluation of different judments and perceptions.

A review of program objectives demonstrates a variety of program purposes. Adult education is intended to give motivated adults the opportunity to acquire basic, academic knowledge. The fundamental assumption behind the activities of the Directorate is that literacy is a desirable result of the social welfare function of the state. ACPH's essential motivation is that the potential of the community for social action, political activism, and economic improvement can be awakened through concientización. Only when people internalize and understand their problems, and relate them to the surrounding environment, are they ready to take potentially effective action to solve them by influencing

or even changing the power structure.

The Board's objectives also relate to the promotion of social welfare, but approach is a mixture of bricks-and-mortar aid and community motivation. IPREFA's activities, while geared to the specific area of family planning, also have as an underlying purpose the improvement of human welfare through functional education.

INFOP and INA, while they work with different user groups, address their activities to the generation of specific skills related to particular production and organizational needs. The quality that distinguishes these activities from the others is their operational orientation to produce short-term payoffs, in the case of INFOP, or medium-term payoffs, in the case of INA.

Activity Organization

Each of the institutions and activities identified above has a unit at the top of the organization which regulates program execution at the field level. However, the emphasis here is not on the bureaucratic tendencies of the parent organization but on the way in which field-level activities are conducted.

Approaches differ among the programs. INFOP is at one end of the scale, with its structured management approach and detailed forward planning. INA also carefully monitors and closely supervises its activities. The Board, on the other hand, plans its programs on a more extemporaneous basis in response to community petitions. ACPH does not seem to depend on detailed forward planning, partly because it already has a sizable user group; it has been in existence for some time, and is primarily concerned with the content of its radio messages.

Delivery systems are equally varied; they are defined by the functions and purposes of the activities. Adult Education and IPREFA utilize the classroom approach. ACPH relies on the radio and the monitor, on the promoter, and on community leaders for the more informal activities. The Board also uses promoters and village leaders. INFOP and INA bring the educational message to the participants by means of their mobile teams, who cater to small groups under controlled conditions.

Another way of viewing these different approaches is in terms of the communication links which the programs seek to establish with their users. INFOP stresses the minute aspects of the tasks that are subjects of study, and follows a highly structured approach to message conveyance. INA uses similar techniques on its agricultural education activities, but follows a less formalized arrangement in the cooperative promotion activities. The Board stresses empathy and seeks to motivate users by emphasizing the intrinsic worth and human potential of individuals and communities. The functional education programs, including IPREFA and Adult Education, utilize adaptations of Freire's psycho-social method through the generative word and themes techniques.

Activity Content

Purposes and objectives determine activity content. Content, in turn, determines the duration of the activity, as well as the range of delivery options. Thus the programs of Adult Education are of long duration, while those of INFOP are very short. The INA activities are open-ended, while those of the Board are not.

ACPH and Adult Education both operate in the areas of literacy and functional education. The content of their programs is geared to teaching how to read and write as well as to providing elementary knowledge of useful information on health and nutrition.

INA, ACPH, and INFOP are all involved in agricultural education, but their target audiences are different; this determines the approach chosen to communicate knowledge and skills. ACPH operates with entire communities who live in the subsistence sector, largely within a self-contained economic setting. INA operates with smaller community groups having an outward economic projection to the commercial and modern sector. The activities are designed to maintain the level of motivation of individuals and groups, to shepherd the groups through the vagaries and uncertainties of their outward economic projection, and to foster the entrepreneurial spirit of the community. INFOP focuses on the individual who is engaged in a specific task. If he is to understand the task and thereby increase his knowledge and skills, he must be taught the minute technical details of the task so that his newly gained knowledge and skills may be reinforced, they must be utilized in his place of work on a continuous basis.

Financing and Resource Mobilization

The public institutions examined in this study finance their NFE activities through their own budgets. These funds, in turn, derive in large part from the national budget and also from international loans earmarked for specific activities. Thus, INA's cooperative development program is financed through IDB and AID loans. INFOP receives funds from an IBRD loan. The IPREFA pilot project is financed by World Education and the International Planned Parenthood Association. A large portion of ACPH funds derive from international foundations and charitable agencies. Adult Education, by contrast, is entirely supported by funds from the MOE budget.

The participation of the international agencies reflects their own preferences and loan strategies. Honduras is a net recipient of income transfers effected through subsidized loans and outright grants. The redistributive effect is passed on to the recipient groups, as they have access to the educational services without incurring direct costs.

But what is interesting to examine is not so much whether funds come from this or that source, but how financial resources are utilized to produce educational services. Clearly one of the concerns of the GOH, the international agencies, and the institutions themselves is how to maximize the scope and impact of their NFE activities, given the available resources. Often it is alleged that NFE has a comparative advantage over the schools with regard to

costs. This comparison has neither been proved in practice, or disproved. Some NFE modes are capable of mobilizing resource inputs, particularly labor, or delivering their services in ways that, by definition, are not available to the schools. Thus, volunteers, inter-institutional coordination, delivery modes which make utilization of the mass media, and mobile training units all represent potential resources. In general, the less "formal" the activity, the greater the range of options; it must be taken into account, however, that the degree of "formality" required is dependent upon the purposes and objectives of the activity.

The Adult Education program presents a good example of the advantages and drawbacks of the volunteer system. The literacy instructors are volunteers to the Directorate, but in fact most of them are paid by other cooperating agencies, such as the Lion's Club or the Bar Association. The campesino instructors may be identified as volunteers, as they are not paid by ANACH, the cooperating agency. Although deployment of volunteers does take place, their performance is not totally satisfactory, even when they are paid by other agencies. This is partly due to inadequate training and supervision, but the problem is more complex. White casts doubt on the actual performance of the ACPH literacy programs which are manned by volunteers. This analysis of the problems faced by ACPH, as reported in the surveys, sounds quite similar to an analysis made of teacher quality and performance in the formal system.

Voluntarism is subject to the following constraints:

a) volunteers, by definition, are scarce
b) volunteers are often enthusiasts whose technical background is limited
c) as a result of b), training becomes an important component of volunteer mobilization schemes, and usually a costly one
d) the continuing presence of volunteers cannot always be counted on
e) the success of the volunteer system is crucially dependent on the motivational and leadership traits of those who train and oversee volunteers.

Constraints on Implementation

The preceding program descriptions reveal the following series of constraints on implementation:

First, the overall resource base available to NFE is quite limited. Within the MOE, for instance, the allocations to Adult Education constitute less than 1 percent of the budget. Most institutions and programs, except INFOP and INA, have a precarious financial base, with no endowment, and with limited or nonexistent financial management expertise.

Second, as a result of the limited resource base, the scope of activities is restricted, with regard to both potential user coverage and the possible offerings of educational opportunities that can be made.

Third, activity planning and management capabilities vary among programs. Technical expertise is not an abundant commodity, and this situation is

clearly reflected in the quality of the plans that are developed. There is no widespread utilization of information systems for program planning and management, save in the case of INFOP and INA. Again with the exception of these two programs, no objective measurements of program achievement are utilized. For instance, goals are defined which have little operational value, for example, in terms of numbers of recipients or areas of land covered by the projects.

Fourth, the desire to provide increasing coverage during each and every period results in a quantity/quality trade-off, which is not recognized by most programs. This lack of awareness results from a planning approach which accepts the implicit assumption that whatever the program is doing is "good". Alternatively, the INFOP approach stresses qualitative aspects and sets its coverage limits with precise and demanding criteria. The drawback of this approach is that those who qualify as participants have already been the recipients of earlier social and economic benefits. This tends to reinforce the existing conditions of social welfare distribution.

D. Current GOH Policies Regarding Non-Formal Education

1. Background and Proposed Strategies

The support given by the GOH to work carried out by the Adult Education Department and to ACPH during the late fifties and sixties indicates the early commitment of the Government to the development of alternative modes for delivering educational services. Since 1970, this commitment has become increasingly clear, although the strategy options are not yet sharply defined.

One of the earliest documents in which an NFE component is clearly identified, and included in the proposed projects, is the UNESCO report entitled Honduras: Education in Development (1971). 9/ Of the six projects proposed, one was specifically related to rural development. 10/ The project element most relevant to the determination of an NFE strategy was to be the establishment of six Training Centers for Rural Development.

The following activities were to be carried out:

a) farmer's training
b) training of rural women
c) rural youth clubs
d) functional literacy
e) vocational training and other social welfare activities for self-help community development projects
f) instructional practice for participants in the Adult Education Instructor Training Program.

The project was designed to depend on the coordinated efforts of a number of education and development agencies. Thus, at the Center level, programs (a), (b), and (f) would be carried out as residential courses; for programs (c) and (d), the Centers would become regional headquarters. The Ministry of Natural Resources, through its extension service, would be responsible for the management of the Centers and for providing the technical support for programs (a), (b), and (c). The Ministry of Education was to be in charge of programs (d) and (f), and INFOP would provide the technical backstopping for program (e). At the national level, an inter-institutional committee was to be set up with participation by the Ministries of Natural Resources, Education, Government, and Health; the National Social Welfare Board; the Center for Technical Industrial Cooperation (CCTI); and the National Agrarian Institute (INA). The committee would be organized under the Social Department of the Higher Council for Economic Planning (CONSUPLANE).

The precise reasons why these projects were not carried out are unknown

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9/ Verbal authorization to cite this document was given by the UNESCO representative in Honduras on April 20, 1976.

10/ The six projects included: (a) strengthening planning, administration and supervision; (b) consolidating primary teacher training and training instructors for adult education; (c) strengthening and improving secondary teacher training; (d) improving and strengthening industrial education and employment services; (e) providing qualified personnel for agriculture, forestry, and veterinary services; and (f) promoting rural development.

to this Assessment,11/ although financial and political considerations appear to have played a role; also, the institutional coordination required for the projects has yet to be achieved. In addition, the MOE has had four different ministers since 1970, and each has had particular views about educational development policy.

It may be said that the UNESCO report helped to condition the strategies currently proposed by the Government. The policy options perceived in rural education by the GOH were articulated in the National Development Plan for 1974-1978:

a) changing the structure and improving the quality and relevance of education so that this sector's output is linked to the general requirements of national development and the specific requirements of Agrarian Reform, as stated in the Plan;

b) ensuring a minimum "basic education" and opening up opportunities for upward mobility in the system through the promotion of a "nuclear" school concept. Essential ingredients for the success of this strategy are:

   1) integrating formal and non-formal education modes and offering educational services to the community at large,

   2) developing innovative methodologies for transmitting the educational message in the classroom, and

   3) promoting the diversification of delivery modes by taking instruction out of the classroom into the places of work, utilizing the media, and promoting self-teaching techniques;

c) gearing the content of education, the NFE activities, to the skill-generating needs imposed by the labor market;

d) coordinating, at the national as well as at the regional and local levels of operation, the work of the Agrarian Reform, economic and social rural development, and educational agencies.

Early AID Support

In response to the intended policy of the GOH, AID began first to explore alternatives for the development of its NFE strategy in Honduras in mid-1974; a feasibility study was conducted to formulate some tentative guidelines for project design.

Aspects of content and methodology for a pilot project were emphasized, but no guidelines were spelled out for a strategy, i.e., the structural

11/ The alternative, "have not yet been carried out", might be used to the extent that, as will be seen below, the currently proposed strategies are variations of the same theme. At the same time, it is highly unlikely that the projects would be carried out in exactly the same way as the ones envisioned in the UNESCO document.

approach to be followed in project implementation. Generally stated, the project outputs were expected to be the production of innovative NFE materials, inter-program coordination for message planning and delivery, a raised consciousness of campesino participants, and their increased participation in decision-making for community action. As will be seen below, some of these elements are incorporated into AID's current thinking, as expressed in the grant project.

National Program for Out-of-School Education: Initial Proposals

On the part of the GOH, and following the guidelines laid down in the Plan, a number of position papers and proposals have appeared during the last year. First among these is the proposal for a National Program for Out-of-School Education released in February of 1975.12/ After an introduction about what education should do, the document concludes that what is needed for rural education development is nothing less than a full-fledged parallel system of education going all the way from basic to higher education. Four implementation steps and levels of education, are considered; the first three are to be carried out over approximately six years.

The proposed strategy is to last for ten years, encompassing the periods of both the current and the incoming Plans. Emphasis is to be given to those areas of agricultural production where INA is concentrating its action; to the areas where crafts and industries have been established under the umbrella of COHDEFOR and INFOP; and to the areas where no coordinated institutional work is currently being carried out and where community service organizations are working in formal education, housing, and health. According to the projections made, the program would provide coverage to a total of 500,000 people, ranging from 45,000 participants during the first year of implementation (1975) to 160,200 in the last year (1984).

Few details are offered regarding the implementation of the strategy, although two alternatives are offered. The first one, utilizing the INA infrastructure, organizes the programs according to geographical considerations based on political and administrative factors; the second, relying on the different institutions engaged in rural development and education, implements the programs through areas of concentration delineated by socioeconomic, demographic, and ecological characteristics. The management models implied in both approaches are "pyramidal" in nature. Thus, an inter-institutional Council is set at the top with a number of agency representatives responsible for formulating policy, and an executive secretary in charge of carrying out those policies. A regional group is in charge of coordination and feedback with the lower levels containing municipal coordinators and volunteers. As with any pyramid model, the lines of authority are clearly laid out; and there is an inverse correlation between the degree of responsibility in the day-to-day operations and the power to make important, as opposed to routine, decisions.

12/ Anteproyecto - Programa Nacional de Educación Extraescolar, Tegucigalpa, February 1975.

Honduran Program of Popular Education 13/

The proposal outlined above, with slight modifications, formed the basis for what will be called the IHDEPO plan, which is one of the two options considered to be available to the GOH for the execution of its NFE strategy.14/

The IHDEPO plan uses a four-cycle format; in the first cycle, the learning objectives are geared to training in basic occupational skills, promoting social participation, and providing "basic knowledge". Although literacy is not explicitly mentioned, it is implied. Up to 900 hours of instruction during nine months are planned, the actual duration being left as a function of the "specific requirements of the regions".

The second cycle consists of two phases, one of up to nine months and a second of up to eighteen months. It will be designed to reinforce the results of the first cycle and prepare semi-qualified workers. Mention is also made of strengthening the active participation of the learners in the social and economic spheres. No details are provided on how this phase will reinforce the previous one; what types of training will be offered; or the criteria for gauging objective levels of achievement.

The third cycle is oriented to the training of skilled labor and of middle-level managers; the activities programmed are planned to last for up to eighteen months.

The fourth cycle, of variable duration, is designed to train high-level technicians and professionals. Civic and social orientation is given priority at this level.

The implementation of the IHDEPO strategy is based on an organizational model essentially similar to the one outlined in the proposal. At the central government level, the Ministries of Education, Natural Resources, Health, and Labor, INA, COHDEFOR, INFOP, BANAFOM, the National Housing Institute (INVA), and the National Social Welfare Board are to be coordinated under a National Council for Popular Education presided over by the Minister of Education. A semi-autonomous Executive Directorate is empowered with administration of the Council.

The National Council is envisioned as a multi-agency, policy-making body, while the day-to-day administrative functions are assigned to the Executive Secretary, who is backstopped by Technical and Administrative departments. At the departmental level a similar structure is planned. There is a Departmental Council of Out-of-School Education which is made up by department-level delegates of the institutions included in the National Council, plus other institutions which are locally prominent in the department. The Departmental Council is directed by the Departmental Coordinator of the Program.

13/ Instituto Hondureño de Educación Popular (IHDEPO), Programa Hondureño de Educación Popular, Tegucigalpa, April 1975.

14/ This is the official CONSUPLANE position, although current thinking favors the second alternative, which is examined below.

The functions assigned to each level are a reflection of those assigned at the National level, emphasizing adaptation and coordination with each department. Each unit develops its own program strategies, depending on the particular situation, and is responsible for overseeing the development of activities at the levels below.

At the local level, the program is administered by the Local Commission for Popular Education and executed by the local promotores. Localities are defined by reference to the jurisdictional typology developed by INA. The promotores are in charge of "operations"; they organize activities, teach courses, coordinate with other promotores, motivate participation and set program goals, provide liaison between the local commission and the community, and train monitors who will become their auxiliaries.

Three priority areas are incorporated in the IHDEPO plan, with those rural areas affected by Hurricane Fifi and those predominantly agricultural areas not affected by the hurricane having the highest priority. Both areas are centers of agricultural reform activities. Of second priority are those rural areas not affected by Fifi where community development organizations are currently at work, and areas with substantial marginal populations. The third priority is given to non-marginal urban areas.

The IHDEPO plan provides cost estimates developed from linear projections of the base-year costs. The following assumptions are made:

a) personnel costs make up 85 percent of total costs.

b) the teaching corps is made up by promotores assisted by monitors. The promotores are paid an average of L.300 per month for full-time positions, and the monitors work part-time as volunteers.

c) each promotor/monitor combination is expected to provide coverage to 100 participants.

d) the promotores are backstopped by técnicos, who are experts in planning, curriculum programming, delivery systems, supervision, evaluation, accounting, etc.

e) the técnicos are paid L.600 per month. Each técnico provides support to 15 promotores.

The goal of the program is to teach literacy to a total of 500,000 people over a period of eight years. Four financial projections have been computed. All costs are built up identically; the projections, which are not included here, vary in coverage, the promotor/enrollment ratio, and the duration of the program. Alternative A is the most expensive, providing coverage to over 500,000 participants (1,037,600 if counted on a participant/year basis), for eight years, at a total cost of L.50.9 million. Alternative B-1 scales down the coverage to 425,000 participants, for eight years, at a cost of L.48.2 million. Alternative B-2 aims at the same coverage but increases the enrollment/promotor ratio to 1:120, which lowers the cost by 20 percent, to L.40.7 million. Alternative C, finally, projects the program for five years, providing coverage to over 300,000 individuals, with a participant/promotor ratio of 1:132, at a cost of L.23.9 million.

Rural Development Education Centers: CEDER 15/

The CEDER plan 16/constitutes the second option currently presented by the GOH for a non-formal education strategy. The preliminary CEDER proposal has been officially presented to the Inter-American Development Bank by the MOE for financing. The CEDER plan is not strictly comparable to the IHDEPO plan, since CEDER does not constitute a strategy where goals are identified, a management model is specified, and methodologies for program delivery are clearly laid out. Only recently has an aggregate information base for project implementation been obtained, through technical assistance provided by UNESCO. 17/

The CEDER plan proposes the creation of rural centers where technicians, promotores, and monitors will carry out educational tasks for campesino groups. The target group is made up by those youths 18/ and adults who have not been covered by the formal schools. To fulfill the objectives of the program, the following project elements are contemplated:

a) construction and equipment of ten CEDER basic center
b) construction and equipment of thirty CEDER special centers
c) construction and equipment for five CEDER special centers for the training of promotores and monitors who will be responsible for teaching functions
d) scholarships and technical assistance

The CEDER centers would be multi-purpose educational institutions where the following education and training activities would be conducted:

a) agriculture skill training
b) health education and sanitation practices
d) literacy and functional education
d) apprenticeship training in carpentry, home building and other occupations which are in demand in particular areas
e) community development and cooperative training
f) home economics and management

15/ Programas de Centros Educativos para el Desarrollo Rural, MOE, November, 1975.

16/ The name may be changed to CREE-Centros Rurales de Educación Extra-Escolar.

17/ It is called "aggregate" because the data provided are on population (age structure, sex and geographic location), labor market structure, and program implementation as regards coverage variables ("who will be reached when"); information is similarly provided on costs, both operating and capital (for the latter, equipment of the national coordination of the Centers). A survey of current NFE activities is also planned for application within the next thirty days.

18/ Age not specified but presumably included in the 10 to 14 group.

It is estimated that program implementation will require the training of 600 promotores and 1,800 monitors. Technical assistance is required in community development, adult education and literacy, cooperative and agricultural development, and educational materials design and production. The total package costs are estimated at $14.9 million. Of this amount, $12.7 million would come from the IDB special operations funds, and $2.2 million would be GOH counterpart funds. The bulk of the funds would be for construction of the centers, which on a per unit basis will cost $130,000 and $90,000 for the special and basic centers, respectively. The cost of the training component per center is estimated at $140,000.

2. Implications and Recommendations

The current situation regarding future development of NFE in Honduras. is characterized by preliminary options between the IHDEPO and CEDER models, The first one spells out a strategy, the second one does not. The models of implementation, even if one allows for a similar organizational structure at the top, are also different; at any rate, they emphasize different aspects of implementation. The models and policies will be assessed with regard to the management implications derived from the organizational plan, and the implications derived from the proposed implementation of the strategy. Recommendations will be spelled out as alternatives, or new courses of action, as the analysis develops.

Management Implications of the Organizational Models

The main features of both options appear similar to proposals made in other countries. The inter-institutional committee, the regional level commissions, and the volunteers are familiar features of this type of strategy.

The efficiency characteristics of the pyramid model of organization embodied in the IHDEPO Plan were discussed earlier, and will not be dealt with here. Questions can be raised about the advisability of creating parallel systems to already existing structure of educational organization. Moreover the "formalization" of NFE by creating cumulative cycles and levels not only conspires against the operational relevance of NFE, i.e. , the knowledge and skill generation which is specific to a given situation, but also has critical financial and efficiency-related consequences which cannot be overlooked.

As one MOE official stated during an interview for this assessment, "Coordination is something everyone wants to do, but nobody knows how to do it." The working of any commission will meet with the kinds of problems that delay even routine decision-making. However, this should not be construed as a blanket rejection of all such arrangements. By their nature NFE activities overlap several areas which are presently separated by jurisdictional boundaries assigned to particular institutions. This requires coordination, but it should be initiated and implemented in accordance with technical, rather than jurisdictional needs. Thus, if an integrated development scheme is a goal of the GOH, coordination and active cooperation will be required among INA (cooperative management), the Development Bank (credit and marketing), the Housing Institute (housing and credit), the Ministry of Natural Resources (agricultural extension services), the Ministry of Public Works (roads and transportation), and the Ministry of Education (schools, functional education and literacy). The requirements for effective coordination should be agreed upon and the corresponding convenios signed.

Implications Derived from the Proposed Strategy Implementation

In both strategy options, the approach that has been adopted for implementation will result in program management defining what the delivery and content of the program will be. The policies are dictated from the top and

conveyed to the lower levels. However, there is a lack of knowledge about the micro-aspects of project implementations, including the groups to be served, their location, their socioeconomic profile, and their specific learning needs. For project implementation purposes, additional observation is required of the small groups of participants who are engaged in specific program activities.

This observation points to an alternative implementation approach which proceeds in the opposite direction from that spelled out by the GOH. It involves the design of survey instruments which are applied at the individual level. Individuals are ordered by groups, groups into communities, and groups of communities into zones. By using this approach, the baseline surveys can provide useful guidelines for the determination of the most appropriate delivery modes, and the planning of content and methodologies. This is another way of saying that the user characteristics ultimately determine the management model that should be applied.

The design of strategies for NFE activities should include the identification of the factors that condition community participation and motivate individual demand and retention. There have been numerous experiments throughout the world which demonstrate that program success is contingent upon the perception that communities or participant groups have of the utility of given activities. Since these groups have, as a rule, a short-term planning horizon, this situation adds the proviso of short-term utility.

Moreover, the answers provided to the set of questions relating to community participation help define the other project elements, including the location and functions of project activities; the activity set-up at the project level; and the activity content. The profile obtained in each of these areas can also provide guidelines for financing and, in a more general way, resource mobilization.

The main point of these observations is that planning for NFE development should focus on more basic concerns: given a teaching/learning situation where an instructor stands in front of a participating group, what should be taught, why should it be taught, how should it be communicated, and by what means should it be delivered.

Recommendations for Strategy Design

It has been argued that the crucial area for strategy design, is what may be termed the teaching/learning situation at the classroom or groups level. It is around this theme that the strategy components are developed. Thus, project elements are identified and their interrelationships traced. The critical assumptions which condition or determine project performance are specified. The details of implementation are laid out, and the external implications, i.e., social incidence, of the project are analyzed.

The information component should form the basis for the design of any strategy that builds from the bottom up. The systematic appraisal needs and the development of technical expertise to address these learning needs are

therefore, the primary elements for subsequent decision-making. Micro-analyses at the individual and community levels are needed not only to have a robust and reliable set of data, but also to couple individual and community perceptions with sets of social and economic indicators in order to facilitate planning at later stages when the scale of operations does not permit the application of periodic surveys. At the present time, decisions tend to be based on rough measures of structural variables, e.g., socioeconomic and demographic indicators, with little or no knowledge of the key behavioral variables, e.g., how family behavioral patterns affect the demand for schooling. The thrust of the baseline survey should be to correlate the performance of selected behavioral or attitudinal characteristics of communities with selected structural characteristics. This correlation is not to be taken solely as a quantitative exercise, since measurement problems would give the results only relative value. It should be a fundamentally qualitative effort to help define criteria for subsequent strategy planning and project evaluation.

An example may help clarify some of the issues considered. The degree of community involvement is a critical variable in the determination of program success, through participation and retention levels. Yet specific factors that condition individual and community motivation and participation, are not known. It may be that the role of the community leader as the liaison between the program and the group is all-important. By applying an attitudinal survey, some leadership traits may emerge which are associated with specific social, economic, and locational variables. Careful qualitative analysis could reveal that these traits may be extrapolated to other communities of similar structural characteristics where the role of the leaders is equally important. The coupling of behavioral and structural characteristics could, therefore, facilitate subsequent program planning. Another example may be cited for the area of learning needs, where "clusters" of learning needs could be coupled with structural characteristics and some projections on their relative rankings, given the structural characteristics, could be made without undertaking exhausting and complex information building exercises each and every time.

A second critical expert of strategy design has to do with the identification of the assumptions made for the planning and implementation elements. The assumptions in question are those made with regard to the expected performance of components critical to the overall performance of the activities. The identification of assumptions serves to point out areas in which the criteria for strategy choice and decision-making have to be refined before action is taken.

Given a strategy which seeks to develop institutional and program capability in the design of NFE activities, a number of critical areas which condition performance can be identified. These areas include community participation, the development of technical expertise, the production of materials, and the implementation of activities.

Community participation may be viewed both from the perspective of the intended scope and impact of the activity, and from the response the activity

elicits from the intended users, which in turn determines activity performance. Necessary steps for implementation in this phase include community selection, community motivation to participate, and actual community participation. The design, therefore, includes the following sets of assumptions; appropriate criteria determination for community selection, where such criteria may be based on measures of need and feasibility; community motivation, which is based on the user's perception of short-term utility, i.e., tangible benefits, for them; and community participation, which is based on the adequacy of program delivery vis-a-vis the absorptive capacity of the community.

The objective of the training component is the development of the technical expertise necessary to carry out the strategy. The following aspects are critical in the determination of the success of this component: the assurance of appropriate participant selection, based on such criteria as individual capability, motivation, committment, and experience; the suitability of the executing agency or program, when a choice of this nature is to be made; the qualifications of the individual or individuals in charge of training; the criteria being knowledge, experience, and effectiveness at skill communication; the duration and sequential presentation of contents, as well as the mix between theory and practice; and the assurance that the training component produces the intended results and generates the required knowledge and skills.

The production of materials is at the heart of any delivery system. Ideally, this phase of the strategy proceeds from the results obtained through the information-building exercise, and makes full utilization of the knowledge and skills generated. There is little experience in developing the optimal contents of learning packages or in the optimal utilization of technologies for delivery. Moreover, as this is a context-specific strategy, no reliance can be placed on "already proven methods." The assumptions made in this regard are that the necessary knowledge and skills can be generated in situations where subsistence -level activities predominate; that it is possible to determine what these knowledge and skills are; that the most effective technologies for delivering the knowledge and skills are acessible; and that it is possible to design materials to fulfill the requirements for generating these knowledge and skills.

For implementation purposes, the necessary considerations are more operational in nature. In the proposed strategy, particular attention is paid to whether the qualitative aspects can be fulfilled and the extent to which the experiences can be generalized or replicated. The assumptions become: that the actual implementators (promoters and instructors) have been trained in such a way that they know what to teach, how to teach it, and why they are teaching it; that the monitoring of instructors will ensure that the control of the project can be carried out effectively; that the duration of the implementation phase is adequate and therefore can provide the necessary feedback for defining evaluation criteria; and that after some period of time, the conditions for replicability and generalization have been identified with a reasonable degree of confidence.

Finally, the external implications of the strategy should be considered. As used here, these external implications refer specifically to the kinds of learning outcomes generated and why they are termed appropriate. The investigation techniques utilized for such an appraisal may consist of tracer studies which measure the validity of the assumption concerning the "rightness" of what is being taught. This depends not only on the learning situation that has been created or the quality of the learning results, but on these and the utilization that is made of the knowledge and skills that have been generated.

The baseline survey undoubtedly helps define what the criteria ought to be for setting up optimal learning situations and maximizing the quality of the learning outcomes to be generated. At the same time, it orients the activity content to certain priority, high demand areas, but it does this extante. The tracer surveys, on the other hand, provide the results of the actual project. Therein lies their value for evaluation and consequent project evolution.

CHAPTER VII. INFORMAL RURAL EDUCATION

There are two principal modes of informal education: socialization practices and cultural diffusion. Socialization practices are those mechanisms by which any society or social group transmits attitudes, beliefs, knowledge, and skills to its members. Cultural diffusion differs from socialization in that the transmission of information occurs between societies or social groups, rather than within them. In peasant societies, the family and the local community are the principal agents of socialization.

A. Socialization

The principal characteristics of socialization in rural Honduras are that it is participatory and functional. It is participatory because children learn through the performance of tasks. For example, a boy learns traditional agricultural techniques by actually going out into the fields with his father. All of the adult male peasants interviewed for the assessment describe this as the way in which they learned to work the fields. Similarly, girls are introduced to their domestic and agricultural chores by participation. The first tasks are simple, but they increase in difficulty as the capability of the child increases.

Socialization practices are functional because all are related to the subsistence activities of the family. In this sense, young children engage in necessary tasks and learn while producing practical results. Learning is not viewed as a separate activity; it is inextricably interwined with doing. In fact, the linguistic categories used by the peasantry equate learning with what goes on in schools. They do not conceptualize the transference of traditions as learning.

The family is, as in most peasant societies, the primary unit of socialization. This reflects its preeminent role in production and consumption. The type of family organization has important implications for socialization. It is not possible, from available census data, to indicate the distribution of extended and nuclear family units among Honduran peasants. In extended families, the senior generation plays an important role in socializing their grandchildren. As they reside in the same household, and as the grandparents are often freed from continual involvement in productive labor, they spend great amounts of time in interaction with the young grandchildren. In the nuclear family unit, the degree and content of interactions between grandparent and grandchild are influenced by such factors as distance between households. Similarly, the role of the parents changes from extended to nuclear families. In the nuclear fimily, the bulk of parental generation time is taken up with productive activities, and there is a consequent decrease in the amount of time that can be spent with small children. Studies in peasant societies demonstrate the importance of this variable for early socialization.

The role of nutrition in early socialization is well documented. Nutrition in the first two years of life plays a critical role in brain development, which sets the biological limits of ability. The stimuli which surround the child have an important developmental effect, especially in the

preschool years. Poor early nutrition and lack of stimuli in the environment combine to produce a state of apathy in the child. The lack of stimuli can be characterized as a deficiency in informal education, which has a consequent effect on early performance in formal education.

Quantitative data from nutrition studies indicate the serious nutritional deficiencies in rural Honduras. Its limiting effects on the possibilities of child development have not been precisely specified for the Honduran child. There is qualitative data concerning the stimuli in the Honduran peasant household, and its role in the early childhood socialization. The peasant household is virtually bereft of visual and tactile stimuli. Its interior usually consists of no more than the bare necessities--beds, cooking utensils, hearth, and perhaps an icon or other wall decoration. Before they can crawl, children are carried on the backs of their mothers or left to sleep in the bed or the hammock. As soon as the child can crawl he is allowed some freedom of movement around the interior of the house and the patio. A limiting factor in this freedom is the availability of an older sibling who can watch the child while the mother works. Before the child is weaned, he is fondled and played with by mother, older siblings, and other family members. This process is called "to chinear." This investigator noted one incident during a household interview in which a mother requested the eight-year-old to stop "chineando" the two-year-old, who was too old for that. The transition from permissive care to confrontation with harsh realities is well documented in White's study of the southern peasantry.

The spacing of children and their ordinal position among their siblings has important consequences for socialization. The younger children tend to get considerable care and attention from older siblings. This is significant for both siblings, as the older one is learning child care while actually caring for the younger sibling, and the younger sibling benefits from the attention he receives. This aspect of informal education also has consequences for the transition into the formal system. Observation of children at school in Gualan showed that some older girls often bring their young preschool siblings. According to the teachers, this has a positive effect on the younger child, who becomes interested in and more easily makes the transition to formal education.

The socialization of peasant children continues into early maturity. The life cycle and its crises -- birth, puberty, marriage -- shape the content of socialization. Honduran traditional peasant society does not have elaborate ceremonies to mark these crises. Socialization is gradual, as is the shift from role to role--from child, to youth, to adult.

Socialization continues on through adult life. Just as the scope of socialization expands from early childhood exposure to the family environment to later childhood exposure to the school environment, so the scope of adult socialization broadens to include the rural community and all the societal means of information transmission. In rural Honduras, the importance of the rural community as a socializing agent is conditioned by its degree of isolation from society-wide mechanisms of informal education. These mechanisms, which constitute the category of cultural diffusion activities assume increasing importance as the isolation of the Honduran peasant villages increases.

B. Cultural Diffusion

There are three principal means of transmission which impinge on peasant life: radio, newspapers, and commercial advertisements. The radio as a mechanism of organized educational activities is treated in Chapter IX of this assessment.

Radio also plays a significant role in cultural diffusion. 1/ It is widely diffused throughout the rural areas of Honduras. White's survey of southern peasantry shows that 70 percent of peasant families own a radio. Soap operas, music, news and advertisements make up the bulk of program time in radio stations that serve the rural areas. Soap operas have a manifest entertainment function, yet their content conveys important educational messages.

For example, there are important themes in one soap opera that are intended to reflect real rural and urban life, and which have an important effect on the attitudes of the listeners. The basic dramatic device is to introduce a peasant girl who starts as a maid in the city and ends up marrying a wealthy man. This makes such social mobility seem realistic to the listeners; in fact, examples of such mobility are extremely rare. The theme of a wealthy man squadering a family fortune is also introduced and provides dramatic counterpoint to the upward mobility of the maid.

A complete analysis of the effects of radio soap opera programming would require extensive research. This example is illustrative of the function of the soap opera in reflecting and inculcating themes that are important in society and contribute to maintaining the stability of the national system.

The most popular type of music in the peasant areas are rancheras, a genre analogous to country music in the southern United States. Originating in Mexico, the songs incorporate themes of love, passion, jealousy, and the whole range of human emotions. They are usually constructed in ballad form, telling stories that come to form part of the mythology of popular culture. It is important to note that one of the aims of ACPH programming is to wean the peasants away from this type of music to more "elevating" forms of light classical or popular music. There is a moral purpose in this effort, which is to rid the peasantry of the allegedly false values introduced by ranchera music.

News programming and advertisements have some influence in shaping attitudes towards events and commercial products in rural Honduras. For example, the radio stations with high proportions of rural listeners have sponsors with products that are likely to be sold to peasants. Agricultural, veterinary, medical, and nutritional items are heavily advertised. New programs for these

1/ The difference between these two roles of radio is one manifest vs. latent function. For example, the manifest function of Sesame Street is to educate; the manifest function of Popeye is to entertain. However, the latent function of Popeye is to educate. While the exact nature of this educative role is hotly debated, it unquestionably exists.

stations include The Campesino Hour (La Hora del Campesino), or some similar segment with coverage of events that are of particular interest to the rural person.

One very interesting component of informal education is the traveling sales vehicle. Loudspeaker systems are mounted on a vehicle, usually a light pickup truck. As a rule, medicines are marketed by this means. The truck pulls into the village and broadcasts a recorded or live message. The driver and the salesman then sell their wares to those villagers whose interest is aroused by the loudspeaker.

This is an illustrative, not exhaustive, discussion of modes of cultural diffusion and socialization in rural Honduras. The characteristics of socialization are participation and functionality. The characteristics of cultural diffusion are encouragement by non-peasant agencies of peasant participation, vicarious or otherwise, and the attempt to include peasants in goals that are functional for these agencies, whether they are radio stations, commercial distributors, or news programmers.

VIII. INTERNAL AND EXTERNAL EFFICIENCY OF THE RURAL PRIMARY EDUCATION SYSTEM

A. Internal Efficiency

The internal efficiency of an educational system may be defined as the relationship that exists between the system's useful output and the cost of the resources utilized to produce that output. A high level of efficiency is desirable, since an increase in output per unit of resource inputs permits either higher levels of output for a given budget, or a lower utilization of resource inputs for the production of a given total output. Increasing educational efficiency thus permits either more children to receive an education or a given number of children to be provided an education at a lower cost. Since education budgets are not in practice subject to cuts, increasing efficiency normally results in an expansion or qualitative improvement in educational outputs.

The internal efficiency of an educational system can be summarized in terms of the cost incurred to produce a unit of useful output, i.e., one student graduated from the system, or a student who has otherwise attained a specified level of achievement. This calculation of the internal efficiency of the system can provide a first approximation of the potential for reducing the cost per unit of useful output through improvements in the educational system. If the desired output is defined as entrants successfully completing a given educational program, then "wastage," or inefficiency in the system, would be indicated by students dropping out of school or repeating grades.

The extent to which wastage can be reduced depends on its underlying causes. Some of the causes are internal to the system, i.e., lack of relevance of curriculum, insufficient numbers of teachers and classrooms, the utilization of teaching techniques which are not interesting and challenging to the student, etc. These internal factors can be influenced by changes in educational policy. Other factors, such as the alternative employment or opportunity cost of the student's time, or health and nutrition levels, may be external to the educational system. Some of these external factors may be influenced over the long run by the government's tax structure, investment plans, and other policies, but the organization and distribution of educational resources will have little effect on them.

The measurement of internal efficiency frequently requires the assumption that learning achievement will be approximately the same throughout the system for every student successfully completing a given grade level. Such as assumption permits the utilization of grade level attainment as a proxy for learning achievement. In the absence of any nationwide standardized achievement testing in Honduras, grade level attainment is the most practical means of measuring the output of the educational system.

The use of this proxy, however, presents certain difficulties. The Honduran Ministry of Education is developing a practical primary curriculum

for use in rural areas. Those schools which will use the new curriculum are expected to produce a qualitatively different educational output. Grade level attainment alone will not indicate the degree to which the quality of the output varies between the Central/Satellite schools and the traditional system. Measures of internal efficiency will be affected by the new program to the extent that C/S schools utilize a greater quantity of resources, causing the cost per enrolled pupil to be higher, and to the extent that the C/S schools have fewer dropouts and repeaters. In determining the allocation of educational resources it will be important to consider whether at a given grade level learning achievement varies between schools and whether the additional knowledge imparted at C/S schools will be of more use to the students when they leave school than is the standard educational material alone.

In the following pages the number of pupil-years actually required to produce a graduate will be compared with the theoretical minimum number of years to produce a graduate. Similarly, the monetary value of the resources actually used to produce a graduate will be compared with minimum cost which is theoretically possible. Regular primary schools will also be compared with Central schools. Since there is evidence that a four-year primary education is sufficient to achieve a minimal level of literacy and other basic skills, the analysis of the rural primary system will divide the primary cycle into two sub-cycles; grades 1 through 4 and grades 5 through 6.

Repetition Rates

Although there are no tabulated data on repetition in Honduras, schools are being asked to supply data on repeating and some data exist in school questionnaires. In order to obtain estimates of rates to be used in internal efficiency calculations, a sample of these questionnaires was drawn and the data tabulated. Schools were selected on the basis of the number of grades offered, the number selected being proportional to the percentage of schools of each size in rural Honduras. 1/ The number of repeaters and number enrolled were obtained for the same schools and then converted into repeating rates, defined here as the percentage of repeaters within the total enrollment in each grade.

1/ The sample was drawn in the following manner. For schools with six grades, which are comparable to central schools, a 5 percent sample of schools was drawn. The number of schools with six grades in each department was divided by 20 and rounded to the nearest whole number to give the needed sample size at a departmental level. This was done separately for urban and rural schools. Then one school from each municipio which had the proper characteristics was selected until the number of schools needed for each department was met. For urban areas a conscious effort was made to select the most "urban" areas in each department. Data were available only for twelve of the eighteen departments. A similar procedure was applied only to rural schools, to compare repeating rates for schools with different numbers of grades taught. The sample size for this test was reduced to 2.5 percent of the universe because of a time constraint. The sample was stratified by school size to reflect the profile of the population.

Once repeater rates are known, promotion rates and dropout rates can be calculated. These rates are shown in the following table for public urban and rural schools.

TABLE VIII-1

Promotion, Repetition, and Dropout Rates for Urban and Rural Schools
(1974-1975)

Grade	Urban Schools			Rural Schools		
	Repeating	Promotion	Dropout	Repeating	Promotion	Dropout
1	.243	.609	.148	.254	.424	.322
2	.182	.759	.059	.186	.601	.213
3	.143	.732	.125	.145	.591	.264
4	.127	.796	.077	.132	.654	.214
5	.094	.855	.051	.077	.704	.219
6	.032	.968*	-*	.028	.972*	-*

Source: AID calculations based Ministry of Education data.

* It was not possible to calculate promotion and dropout rates at sixth grade. Since very few students reach (enroll in) sixth grade and then drop out before successfully completing the grade, it was assumed dropout were zero.

There is very little difference between repeating rates of urban and rural schools. The data indicate that the difference in the performance of the two systems is the result of large variations in promotion rates and dropout rates. Simply stated, the percentage of rural students that drop out of school is much higher at every grade level than the corresponding percentage of urban dropouts.

Before looking at the implication of these rates as indicators of the overall efficiency of the systems, it should be noted that a distortion is introduced by not taking into account transfers between rural and urban education. An unknown, but probably significant, number of rural students transfer to urban schools to complete their education. Failure to separate out transferring students depresses the efficiency indicators of the rural system while improving the rating of the urban system. The size of the distortion is not known, but it is not likely to be higher than 5 percent.

Estimation of Student Flows

The purpose of this section is to indicate how many students entering rural primary schools are able to complete four or six grades, how many students repeat or drop out at each grade level, and the resulting implications for costs and benefits.

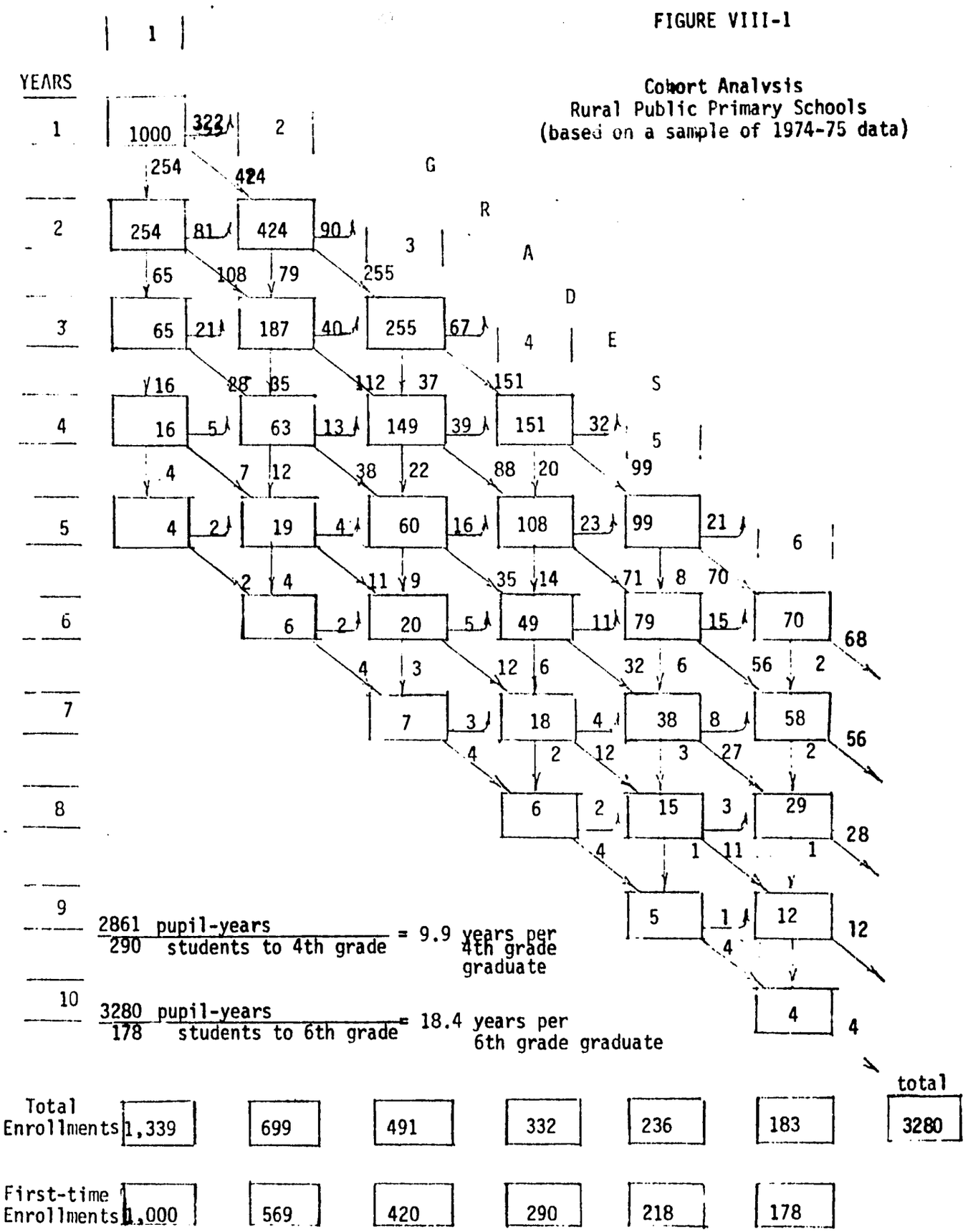
The following diagrams show student flows through the primary school system. The numbers in the boxes represent the number of students enrolled in each grade, and the diagonal lines indicate the number of students who continue from one grade to the next. The figures on the vertical lines show the number of repeaters, and the numbers in the short upward bending lines show the number of dropouts from the system. Thus, the first diagonal row of boxes theoretically shows the flow of pupils promoted smoothly from grade to grade; the second diagonal row shows those repeating only once; the third, those repeating twice, etc. In fact, to construct an accurate student flow diagram of this type would require much more data than are available in Honduras. Because the Ministry does not tabulate any data on repeaters and dropouts, the assessment team conducted several small samples of available raw data in order to estimate average rates of promotion, and repetition, and drop out at each grade level. Use of average repetition, promotion, and dropout rates for all students at a given grade level adds several distortions into the flow diagrams because these rates are not in fact the same for repeaters as they are for students who are in a grade for the first time. As a result the diagrams exaggerate the number of repeaters who stay in school and graduate, and, conversely, underestimate the number of students who go through six grades without repeating at all. These biases counteract one another and result in reasonably accurate estimates of total completion, dropouts, and repeaters.

Since all promotion, repetition, and dropout rates utilized were based on 1974-75 performance, the flow diagrams do not represent any specific entering year cohort, e.g., the cohort that entered first grade in 1970 and should have reached sixth grade in 1975. Had complete data on that cohort been available, it would have shown repeaters still in third and fourth grade in 1975. Not before 1978 or 1979 would it be possible to determine how many of those entering in 1970 actually finished sixth grade. Since following an actual cohort through the system requires use of data from each of the previous six to ten years, it does not give a clear picture of the system as it is currently. The more changes that have taken place during those six to ten years, the greater the difference between the historical performance of the system, as shown by longitudinal cohort analysis, and the current performance of the system. In comparison, cohort analysis based on the most recent cross-sectional data has the important advantage that it does provide an up-to-date picture of the educational system; i.e., it provides something akin to a photograph of the system's efficiency at a recent point in time. Cross-sectional data also provides a good base for projections of the system's performance if current desertion, repetition, and dropout rates remain fairly constant in the future. If the system is improving overtime, i.e., retention is increasing, the projection of retention on the basis of cross-sectional data will underestimate future cohort performance.

Figure VIII-1 shows that for each 1,000 students entering the rural primary system, about 43 percent of the children who begin first grade in rural areas desert the system before reaching second grade. An additional 14 percent repeat first grade before continuing on the second grade. About 290 students, or 29 percent, eventually pass the fourth grade. Of 218 who enter fifth grade, 178, or 82 percent, graduate from the sixth grade. Only 17.8 percent of those entering rural primary schools progress as far as the sixth grade.

FIGURE VIII-1

Cohort Analysis
Rural Public Primary Schools
(based on a sample of 1974-75 data)



$$\frac{2861 \text{ pupil-years}}{290 \text{ students to 4th grade}} = 9.9 \text{ years per 4th grade graduate}$$

$$\frac{3280 \text{ pupil-years}}{178 \text{ students to 6th grade}} = 18.4 \text{ years per 6th grade graduate}$$

Figure VIII-2 shows the performance of urban schools. In urban areas 63.5 percent of children entering school reach fourth grade. This is more than double the percentage achieved by rural schools. Similarly, 54 percent of the urban children reach sixth grade, three times the rural percentage.

If repetition and desertion could be eliminated, it would take only four and six student-years of schooling respectively to produce fourth and sixth grade graduates. In comparison to this theorical optimum and to the urgan system, the rural system is highly inefficient. The rural primary system now requires 9.9 years to produce one fourth grade graduate, as compared with 6.1 pupil years for urban schools. To produce one sixth-grade graduate, 18.4 student-years are required in rural areas as compared with 9.4 in urban areas. In the second sub-cycle of fifth and sixth grade rural schools require only 2.4 pupil years as compared with 2.2 pupil years for urban areas to produce a sixth-grade graduate from those who enter the sixth grade. Most rural and urban students who get to fifth grade are able to complete sixth grade without great difficulty.

Figure VIII-3 represents that will happen to 1,000 students entering rural Central schools. The analysis is based on 1974-1975 data from eight of the best Central schools. The analysis suggests that 502 of every 1,000 entering students reach sixth grade, more than two and one half times the average for regular rural primary schools. Central schools required 6.2 pupil years to produce a fourth-grade graduate as compared to 9.9 pupil years for the regular system, and 9.9 pupil years for the regular system, and 9.9 pupil years to produce a six grade graduate as compared to 18.4 pupil years for the regular system. The Central Schools thus compare very favorably with the regular primary system.

Since all Central schools have six grades and many regular rural primary schools do not, the better performance of Central schools could be due to the increased opportunity to stay in school rather than to qualitative changes in the educational program. To test this hypothesis, the assessment team selected and studied the performance of a control group of eight regular rural primary schools that offer all six grades. The control schools that were chosen from the same geographic area as the eight Central schools that were studied. Figure VIII-4 shows the performance of this control group. The analysis shows that out of 1,000 students entering the control group schools, 346 students finished fourth grade and 213 finished sixth grade. It took the control schools 8.8 and 16.6 pupil years, respectively, to produce a fourth and sixth grade graduate. Comparison of these figures show that the control schools did better than the regular schools but not nearly as well as the Central schools.

The number of pupil years required to produce fourth and sixth grade graduates in each of the school systems and groups studied is shown in the following table:

TABLE VIII-2

Pupil Years Required to Produce Fourth and Sixth Grade Graduates (based on 1974-75 data)

Type of Schools	Pupil Years Required to Produce One Graduate	
	Fourth Grade	Six Grade
Rural Primary	9.9	18.4
Urban Primary	6.1	9.4
Control Group	8.8	16.6
Central Schools	6.2	9.9

The promotion repetition, and dropout rates for the samples of Central schools and control schools utilized to construct figures VIII-2 and VIII-3 are shown in the following table:

TABLE VIII-3

Promotion, Repeating, and Dropout Rates for Sample of Central Schools and Control Schools

	Central Schools			Control Schools		
Grade	Repeating	Promotion	Dropouts	Repeating	Promotion	Dropouts
1	.234	.640	.126	.217	.494	.289
2	.212	.744	.044	.209	.616	.175
3	.143	.707	.150	.129	.615	.255
4	.113	.719	.168	.152	.559	.289
5	.105	.860	.035	.123*	.827**	.050**
6	.033	.967	.*	. 69	.931	-*

* The sixth grade dropout rate has been assumed to be zero throughout.

** The enrollment data for the eight control schools suggested that the fifth grade promotion rate was .932 and the repetition rate was .138. Since the promotion, repetition, and dropout rate must total 1.0, this implied a dropout rate of -.069, i.e. that there was a net transfer of students into the schools. Students may have also transferred into the control schools in other grades and may have transferred into the Central schools. In the computation of rates, transfers coming in would normally have offset students transferring out or dropouts. It has been assumed that students transferring in or out would offset each other. This is clearly not the case at the fifth grade level in the Control Schools. For this reason the promotion and repetition rates have been adjusted downward (proportionately) to levels which appear consistent with the series of Control Schools rates and with the rates obtained in fifth grade in other Honduran schools.

FIGURE VIII - 2
Cohort Analysis: Urban Primary Schools
(based on a sample of 1974-75 data)

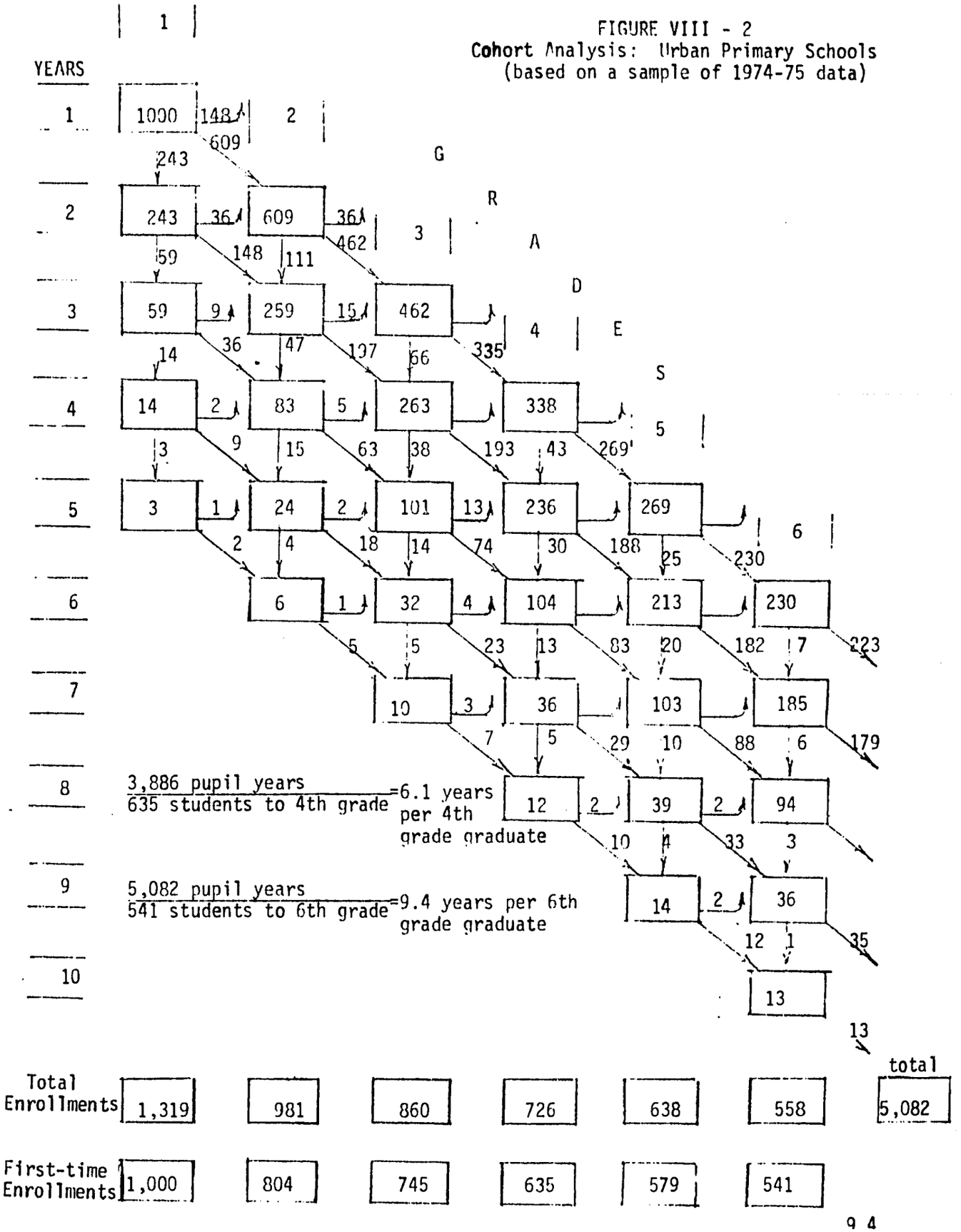


FIGURE VIII-3

Cohort Analysis: Central Schools
(based on a sample of eight
Pilot Schools, 1974-75 data)

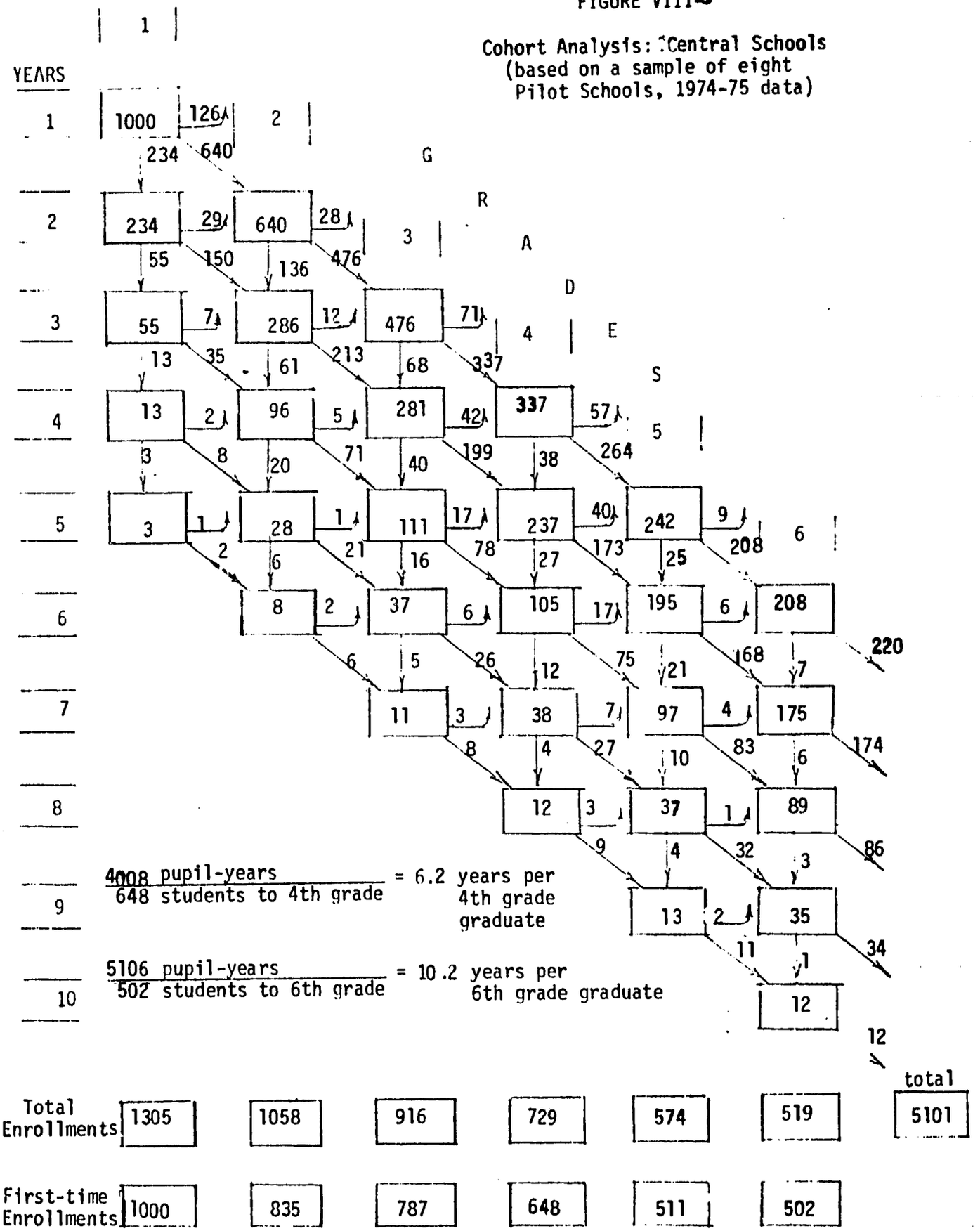
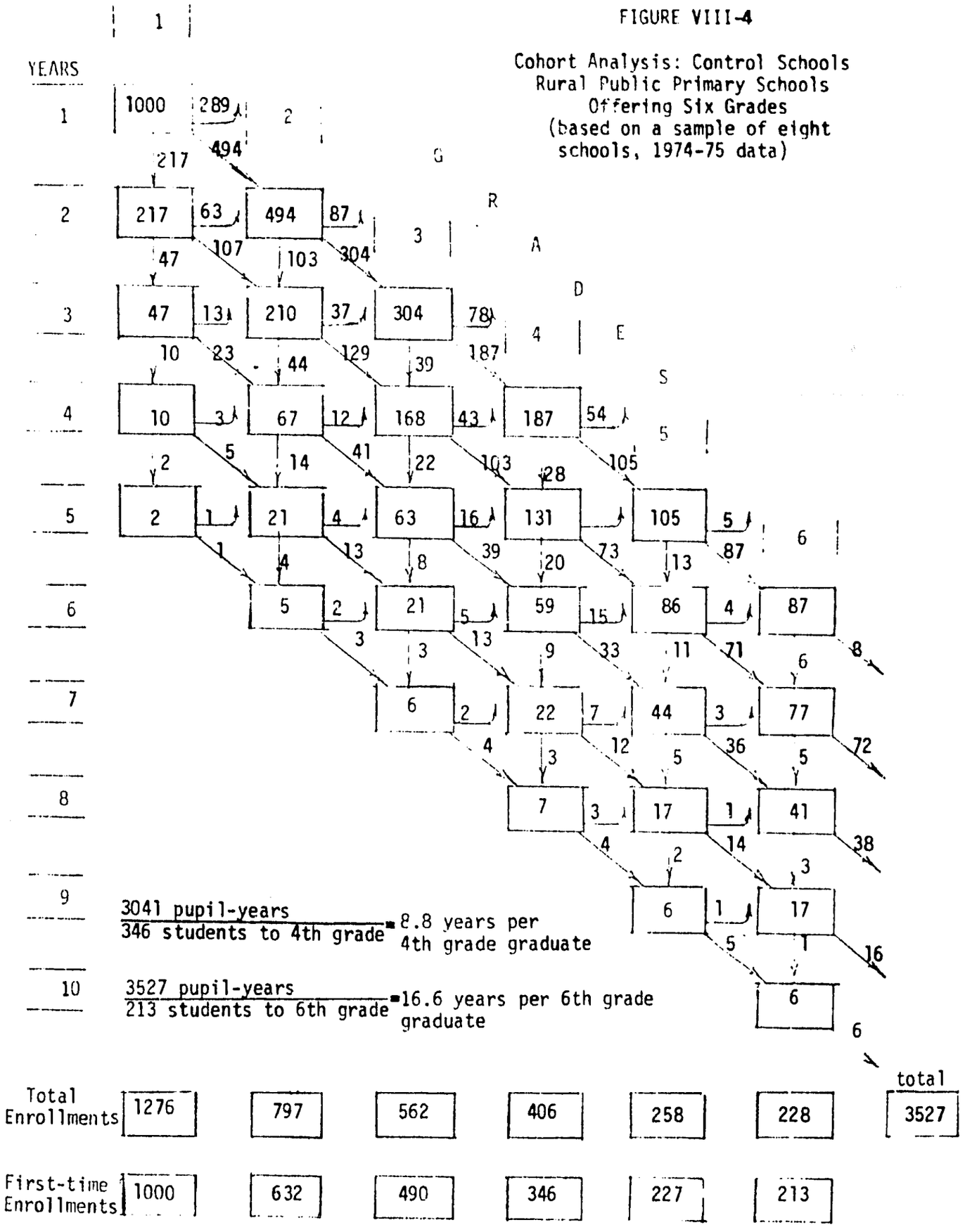


FIGURE VIII-4

Cohort Analysis: Control Schools
Rural Public Primary Schools
Offering Six Grades
(based on a sample of eight schools, 1974-75 data)



$\frac{3041 \text{ pupil-years}}{346 \text{ students to 4th grade}}$ = 8.8 years per 4th grade graduate

$\frac{3527 \text{ pupil-years}}{213 \text{ students to 6th grade}}$ = 16.6 years per 6th grade graduate

A comparison of the relatively favorable Central school promotion and dropout rates with the corresponding rates for control schools and for regular rural primary schools shows why the efficiency of the Central schools is much higher. As compared with other schools, the Central schools in the sample have been highly successful in decreasing desertion. The results suggest that curriculum content and teaching techniques are very significant factors in determining retention in school and that improvements in these factors can increase efficiency in Honduran rural primary schools.

Measures of the significance of repetition and desertion on the internal efficiency of regular primary schools and on the Central schools are reported in Table VIII-4.

The data indicate that desertion is more significant than repetition in explaining the number of pupil years required to produce completers. The table shows that in the regular rural primary system a minimum of 39 percent pupil years provided in grades 1-4 goes to students who dropout before completing the fourth grade. In fact, since much of the repetition is also done by students who will not complete four grades, it is reasonable to estimate that 55 percent or more of the pupil years provided in grades 1-4 goes to students who dropout before completing fourth grade. Similarly, about 65 percent of all pupil years provided in grades 1-6 is absorbed by students who do not complete the sixth grade.

Because of higher student retention, a much larger percentage of the education provided in the sample of Central schools is absorbed by students who complete a cycle. In the first cycle of four grades at least 64 percent of the pupil years provided goes to those who complete the cycle. About 59 percent of pupil years provided in grades 1-6 goes to students who will complete sixth grade.

Comparative Costs and Efficiency

The average salary for rural primary teachers was approximately US$117.50 per month in 1975. Since there were 6,655 teachers for 247,414 students initially enrolled, the approximate teacher cost per pupil was US$38.00. The total cost per pupil in rural areas is estimated to be about US$40.00 per year. This would compare with an approximate teacher cost per pupil in urban areas of US$43.50 and a total cost of about US$ 46.00. The rural-urban cost diferential is attributable primarily to the slightly larger pupil: teacher ratio in rural areas compared to urban areas and to slightly higher average salaries for urban teachers.

Pupil:teacher ratio in 1975 were 37.2:1 in rural areas and 34.2:1 in urban areas. These average pupil:teacher ratios are misleading, however, especially for rural areas, where it is very common to find some teachers with sixty pupils and others with 10 to 15 pupils. This disparity in pupil:teacher ratios is partly due to the existence of schools with very few students, in which teachers will teach two or three grades with very few students in each.

TABLE VIII-4

Pupil Years of Rural Education Provided to a Typical 1,000 Students

Regular Rural Primary Schools

	No. of Pupil Years	Percentage of Total	Percentage of Wastage
Pupil Years for Grades 1-4			
Required(minimum for 290 graduates)	1160	40.5	-
Wastage for repeaters	582	20.3	34.2
Wastage for dropouts	1119	39.2	65.8
Total Provided	2861	100.0	100.0
Pupil Years for Grades 1-6			
Required (minimum for 526 graduates)	1068	32.6	-
Wastage for repeaters	605	18.4	27.4
Wastage for dropouts	1607	49.0	72.6
Total Provided	3280	100.0	100.0

Central Schools

Pupil Years for Grades 1-4			
Required minimum for 645 graduates	2580	64.4	-
Wastage for repeaters	738	18.4	51.7
Wastage for dropouts	690	17.2	48.3
Total Provided	4008	100.0	100.0
Pupil Years for Grades 1-6			
Required (minimum for 502 graduates)	3012	59.0	-
Wastage for repeaters	818	16.0	39.2
Wastage for dropouts	1271	25.0	60.8
Total Provided	5101	100.0	100.0

When teachers are required to teach one grade with very large numbers of students or several grades with small numbers of students, the efficiency with which they are able to teach is reduced. To the extent that the Central schools become central schools for their affiliated schools, absorbing students in the upper grades and permitting a better utilization of teachers, the internal efficiency of the system should improve.

For lack of information, it will be assumed that the average cost per student is the same at each grade level. Having estimated that cost at $40, the minimum cost of producing fourth and sixth grade graduates under the theoretical conditions of perfect efficiency in four years and six years respectively, would be $160 and $240 respectively. The cost for fourth and sixth grade graduates is thus $464 and $816, respectively.

The Central Schools have been shown to be considerably more efficient in terms of the number of pupil years required to produce a fourth or sixth grade graduate. The reduction in wastage in grades 1-4 would be sufficient to permit an increase in the annual cost/pupil of 60 percent, from $40 to $64, without increasing the cost of producing a fourth grade graduate. (Mathematically, $40 x 9.9 pupil years = $64 x 6.2 pupil years) Given the estimated reduction in the pupil years required to produce sixth grade graduates, the cost/student could rise by 80 percent, from $40 to $72, without increasing the cost/graduate. (Mathematically, $40 x 18.4 pupil-years = $72 x 10.2 pupil-years.)

The actual increase in cost/student resulting from the Central School program have been estimated on the basis of the capital and operating expenditures which would be required to carry out the proposed expansion program and on the basis of the costs of existing Central schools. The estimated increase in the annual cost/student to carry out the expansion program is $6.20 (see Statistical Annex). The total cost/student in Central schools would thus be $46.20, or 15.5 percent above the $40 standard cost. This projected cost of Central schools is consistent with an estimated 19 percent increase in the annual cost/student in the Central schools now operating.

If we multiply the annual cost per student times the number of pupil years required to produce a graduate, we find that the traditional rural primary system spends an estimated $396 to produce a fourth grade graduate and $736 to produce a sixth grade graduate. The estimated cost to produce a fourth and sixth grade graduate in the control schools is $352 and $664, respectively. Despite the higher annual cost per student, the sample Central schools produce a fourth grade graduate at a cost of $286 and a sixth grade graduate at a cost of $461. Central school costs/graduate are 28 percent and 37 percent below the comparable figures for traditional rural schools and 21 percent and 31 percent below the control schools.

Since the above analysis is based on a small sample, identical results cannot necessarily be expected in the future. However, the strength of the results obtained in this study suggests that the Central schools program should continue to have favorable effects on the internal efficiency of rural education

even if newly created Central schools fail to equal the performance of the group studied.

The Central school program will also have a considerable effect on the primary education budget. Given the cost per student and the current retention and repetition rates in rural education reported in Tables VIII-1 and VIII-3, the cost per 1,000 entering students can be determined. The Government is spending about $131,200 for each 1,000 students entering the regular primary system, or $131.20 per entrant. For each 1,000 students entering the Central schools, assuming the retention and repetition rates achieved in the eight schools sampled, the Government will need to spend $235,700, or $235.70 per entrant. Comparing these figures, the Central school program would increase the expenditure per entrant by 80 percent. Because of the cumulative nature of education, the full impact of the improved program on enrollments probably will take six to ten years to materialize. The extent to which the Government will need to respond by providing additional resources will depend on whether rural schools can utilize their existing resources more intensively. Most of the expanded enrollment will occur in grades 4-6. Since many rural classes at those grade levels are now quite small, there is probably considerable opportunity for increasing class size and thereby reducing the need for additional resources.

Given the difficulty of projecting changes in retention and changes in the utilization of school resources, it is impossible to accurately project the budget implications resulting from an expansion of the C/S system. It can be shown, however, that a modest expansion in the C/S program such as that proposed by the GOH will not generate impossible budget requirements. The number of children currently served by the 54 schools to be converted to Central schools is estimated to be 200 per school, or 10,800 in total. The number of new entrants each year is estimated to be 61 per school, or 3,294 for the 54 schools. At $40 per student, the total cost to the GOH is currently estimated to be $432,000. If improved retention rates cause enrollments to increase to 312 students per school (16,848 for 54 schools) and the cost per student rises as projected to $46.20 per student. The total cost of the 54 schools would eventually be 80 percent higher, or approximately $778,000. This is approximately what is now spent on urban schools with the same number of entering students. This annual cost, which would not be reached for at least six to ten years, represents slightly over 2 percent of the Ministry of Education's current operating budget. A modest increase in retention is also expected in the 270 satellite schools served by the project. Although no data are available to assess the magnitude of the probable impact on Satellite schools, the relatively small size of these schools suggests that the impact on the budget is not likely to be more than another 2 percent. Thus the required increase in funding should not exceed 49 percent of the 1975 Ministry of Education operating budget. While this additional financial burden appears to be within the Government's ability to absorb, large scale expansions of the C/S program should be preceded by a careful analysis and discussion of the financial implications.

Factors Which May Affect Internal Efficiency

In the previous discussion in this chapter, several factors have been mentioned as causes of the rural primary system's relatively low internal efficiency. These factors may be generally classified as external factors or factors outside of the view of the school system, and factors internal to the rural primary system itself.

Environmental factors, such as the need for labor participation by young children, seasonal migration, severe malnutrition and geographic configurations such as extreme isolation in most cases cannot be changed through modification of the school system. To the large degree that these factors are responsible for high dropout rates in the early grades in the rural system, improvements in the quality of education will not improve the internal efficiency of the educational system. Other factors, however, can be addressed by educational policy. These relate primarily to learning conditions within the primary schools which may influence not only the propensity to drop out or to repeat but also the actual learning which takes place within the system.

Factors within the system which may have a bearing on the internal efficiency of the system include: the composition of the resource-mix, utilization of teaching personnel, curriculum and teaching methods, promotion procedures, and the character and use of the school plant. The relative importance of these factors as well as their characteristics are discussed below both for the traditional rural primary system and for the Central schools.

1. Composition of the Resource Mix: Expenditures on Rural Primary Education

Expenditure levels for rural primary education are not precisely known since the MOE does not disaggregate its budget on these lines and since some funding comes from a variety of local sources. However, it is possible to estimate the percentage of the national government's contribution to education which is allocated to rural primary schools.

Currently, 91 percent of the budget for primary education goes for teacher salaries. In fact, teacher training and the provision of teachers are presently the only major contribution which the GOH makes for primary education. Local funding, ranging from fiscal contributions from municipios or from patronatos for equipment and supplies, to the provision of land and labor for the construction of buildings, apparently is a significant but unestimable portion of total expenditures for education. Excluding these expenditures, the calculation of the aggregate MOE expenditure for teacher salaries in rural areas can serve as a proxy for total MOE expenditures for rural primary education.

Teacher salaries comprise the major part of the MOE's primary education budget; administrative expenses comprise most of the rest. In 1975, 0.5 percent of the primary education budget went for materials and supplies and 0.9 percent was utilized in the production and distribution of educational materials.

These figures indicate that most schools have to obtain their supplies and books through financial contributions from municipalities and/or patronatos, or from international organizations. In most cases, rural schools suffer from shortages of supplies and texts. The insufficient quantities of these have important ramifications for the way in which school subjects are taught and on the effectiveness of the educational program. It is believed that a readjustment in the distribution of budgetary resources to give more emphasis to materials and supplies would improve the internal efficiency of the system.

2. Role of Women

The rural primary school system is not, in quantitative terms, discriminating against female students who enter the system. Ministry of Education data indicate that male enrollment in first grade in recent years has been approximately 10 percent higher than female enrollment. However, during this same period, sixth grade enrollment of male and female students were approximately equal.

In qualitative terms, the Government's intention not to discriminate can be observed in the Central school program, which has an objective equal participation of males and females. This objective appears to be fairly well adhered to. Females work in the fields and males participate in sewing classes. In these ways, the rural school system, especially the C/S school program appears to be facilitating the modification of the sex role stereotypes which have historically prevailed in many Latin American countries.

B. External Efficiency

The external efficiency of an educational system is the degree to which the knowledge, skills, and attitudes obtained by the students who pass through the system conform to individual and societal needs. Of particular interest is the extent to which the rural primary educational system contributes to increased labor force productivity, to economic growth, and to improved distribution of economic and social opportunities within the Honduran national context.

Education, Productivity and Economic Development

The Honduran economy is predominantly agricultural. About one-third of the GDP and more than one-half of all employment is generated by agricultural activities.

TABLE VIII-5

Distribution of GDP and Employment by Sector, 1974

Sector	% GDP	% Total Employment	% Rural Employment
Agriculture	32.3	56.8	82.2
Manufacturing	19.0	11.6	7.2
Commerce	11.9	8.6	2.6
Services	9.4	13.0	3.8
Transport	7.2	2.9	1.1
Other	11.3	7.1	3.1

While urban areas have been growing more rapidly than rural zones, the population is and will continue to be predominantly rural. Since the economy will remain primarily agricultural for the foreseeable future, current and future manpower needs in rural zones will be primarily related to agriculture.

Relationship Between Education and Income

It is generally believed that knowledge obtained through a formal education will result in an increase in an individual's productivity and lead to a greater individual and national income. This thesis is supported by studies in developed and developing countries. In some Latin American countries, the internal rates of return to formal schooling for urban male wage-earners was not only positive but substantially exceeded the rate of return to physical capital. One study showed that primary education, especially, at the fifth and sixth grade levels, provided the highest economic return of any educational level within the formal system. 2/

Evidence that formal schooling contributes to earnings in rural areas, particularly for small farmers, is less abundant. However, data recently analyzed for the Guatemala Education Sector Assessment 3/ indicate that formal schooling makes a positive contribution to the net production of small farmers. The study was controlled for factors such as farm size and use of agricultural credit so that perceived differences in net income could be attributable to education rather than other characteristics of the farm or the farmer. The study suggested that the smaller the farm size, the higher the gains from education. It was also found that the highest returns to education were obtained from fifth and sixth

2/ Carnoy, Martin, "Rates of Return to Schooling in Latin America", Journal of Human Resources, II and III, 1968, pp. 359-374. The internal rate of return is calculated by finding the difference in past, present and future which is attributable to schooling (controlling for other factors such as age and father's occupation) and comparing with the cost of schooling to the level of attainment. Schooling costs include the income forgone by the worker while in school. The internal rate of return is the discount rate which equalizes the increase in income and the costs of schooling. Carnoy also found a correlation between the rate of economic growth for the country and the rate of return to schooling in the country. c.f., Marcelo Selowsky The Effect of Unemployment and Growth on the Rate of Return to Education, The Case of Colombia.

3/ USAID, Guatemala Education Sector Assessment, draft, 1976

grade schooling. The study concluded that the basic literacy and numeracy skills and the reasoning capacity imparted to rural students in primary schools can be a key factor in increasing farm productivity. Similar results could be expected in Honduras.

In the Honduran Family Income and Expenditures Survey, 1967-68, conducted by the Ministry of Economy, data are presented which link educational attainment with income levels for rural zones (see Table VIII-5). Although this data are not extremely useful because of the manner in which they are presented, it does indicate a correlation between educational attainment and family income in rural areas. The higher the educational level, the higher family income is likely to be. It is also true that higher family income permits longer school careers, that families with higher incomes see greater value in more years of schooling for their children, and that children of wealthy families are likely to earn relatively more regardless of the amount of schooling they receive. It is thus difficult to say anything about the degree of causation (schooling to income) on the basis of the available data.

Conversations with directors of rural primary schools tend to confirm the impression that those students who remain in school past the second grade come from families whose economic status is at least slightly higher on the average than those who drop out. It should be pointed out, however, that these differences in family economic status need not be large, and that those who do receive several years of primary education in rural areas are members of the rural poor and not an elite. 4/

Manpower Analysis: The Appropriateness of Education for Rural Needs

Although no studies exist which define the manpower needs for the rural sector in Honduras, it is clear that the vast majority of new employment opportunities must come from within the agricultural sector and, to a lesser degree, in occupations linked to agricultural production. Much of the potential employment in agriculture will be in the rapidly growing north coast region, the center of much commercial farming activity (e.g., banana cultivation), which still has land available for future colonization.

The major portion of the jobs in agriculture, both in the north coast and elsewhere in Honduras, will not require extremely high levels of skills. Rather, they will generally require basic skills, a basic reasoning capability, and an exposure to a broad range of agricultural and livestock activities, which will facilitate the acquisition of technical knowledge from agricultural extension agents and/or via mass media.

In other words, the skill level for most manpower needs in rural Honduras will be low. However, a fairly complete primary education must be viewed as an essential factor in raising agricultural productivity and in implementing a rural-based economic development strategy.

4/ There is qualitative evidence that increased school attendance by lower income children has apparently occurred as the result of the provision of a snack (merienda) at school.

TABLE VIII-6

INCOME LEVEL ACCORDING TO EDUCATIONAL ATTAINMENT

RURAL ZONES, 1967 - 68

Family Income Level

(Lempiras/Year)

Family Member Educational Level	L.2,000		2,000-7,000		7,000+		Total	
No Education	2,045 51.7%	92.5%	159 44.3%	7.2%	7 63.6%	0.3%	2,211 51,1%	100%
Primary 1 - 3	1,607 40,6%	93.0%	119 33.1%	6.9%	2 18.2%	0.1%	1,728 39.9%	100%
Primary 4 - 6	296 7.5%	81.1%	68 18,9%	18.6%	1 9.1%	0.3%	365 8.5%	100%
Secondary and Above	8 0.2%	36.4%	13 3.6%	59.1%	1 9.1%	4.5%	22 0.5%	100%
TOTAL	3,956 100%	91.4%	359 100%	8.3%	11 100%	0.3%	4,326 100%	100%

Source: Elaborated from Family Income and Expenditure Survey, 1967-68, Ministry of Economy, General Directorate of Statistics and Census, 1970 (1976), p. 47.

NOTE: This data is rendered less useful than might otherwise be the case because educational levels of individual family members (5 years and more) are plotted against family income. This does not necessarily weaken the correlation between education and family income but it definitely impinges upon the validity of assuming that more education results in higher income.

Constraints to External Efficiency

The analysis of the rural primary educational system may be divided into two parts for purposes of assessing the constraints to external efficiency. There are constraints to the production of trained human resources and to the utilization of these resources.

From discussions earlier in this section, it is apparent that in past years the system has been unable to educate students without a large number of dropouts and repeaters. Only a small percentage of students who begin primary school graduate from the sixth grade. Although this is partially the result of deficiencies within the system, a significant but undeterminable percentage of student dropouts is caused by external factors such as the necessity of children as young as 8 and 9 years in lower income families to help their parents in the fields. In addition, there is a lack of perception among many rural parents of the value of more than one or two years of schooling for their children. This perception results partly from a failure on the part of parents to understand the value of education in changing society and partly from a failure of schools to provide an education closely related to the rural environment.

The utilization of the human resources produced by the rural primary system is undoubtedly sub-optimal. The low level of economic development in Honduras inevitably means that school training at any level is unlikely to be utilized fully. To maximize the utility of schooling, it is essential that course content be periodically reviewed to ensure that schools are preparing rural youth for the conditions they will face upon leaving school and to adapt to changes in those conditions.

IX. MASS MEDIA USE FOR RURAL EDUCATION

The introduction of non-formal rural education for adults, possibly using mass communication, has many implications, particularly in societies where rural people have not previously been incorporated into national life in terms of economic participation or the reception of services. A national system which begins to directly involve those rural people in the life of the country is beginning something new. Some countries maintain the rural situation as it is; a few have sought to reduce the poverty and isolation of the countryside in dramatic ways. But, most countries are somewhere in between, and among these is Honduras.

This section of the assessment deals with the feasibility of using the mass media as a part of government program for non-formal rural education in Honduras. It is meant to provide a clear view of the rural mass communications situation in Honduras, as a basis for understanding and planning.

A. Mass Communications in Honduras

In this country of almost 3 million people, there are 115 radio transmitters. Whether in the campo or in the city, radio is evidently everywhere. They are carried by campesinos coming from the fields, by street-side vendors, and by teenagers cycling down dusty streets. No bus or taxi seems to be without one.

Television is just beginning in Honduras, with two stations in Tegucigalpa and one in San Pedro Sula. The impetus comes from commercial interests, as it does for radio. However, television need not be entirely a commercial phenomenon; it may, in fact, be a way to reach some of the marginated people in the cities. Plaza Sesamo is already being aired. While no statistics are available on television ownership, TV aerials can be seen not only in Tegucigalpa and San Pedro Sula, but also in La Ceiba, Tela, Progreso, Choluteca, and other places. Even in the poor districts of cities, television is far from unknown.

Most of the transmitters surround the two major cities, Tegucigalpa in the Department of Francisco Morazán and San Pedro Sula in the Department of Cortés. While there are four departments without any transmitters, signals can be picked up throughout the country. Transmissions are done in both medium wave and short wave, with some stations transmitting in both. Short-wave transmissions can be especially useful for rural people in isolated areas, because medium-wave signals are blocked by the mountains. Short-wave signals can cover the entire country.

On February 28, 1976, the Government of Honduras began broadcasting over its own outlet, Radio Honduras, in Comayaguela. At this time, Radio Honduras has only a ten-kilowatt, medium-wave transmitter and is limited to a forty-mile radius of the capital. However, the government plans to install three repeater transmitters to extend the coverage nationwide. Radio Honduras is administered by the Ministry of Culture, Tourism and Information.

TABLE IX-1

RADIO TRANSMITTERS IN HONDURAS, BY DEPARTMENT

DEPARTMENT	NUMBER OF TRANSMITTERS
Atlántida	9
Colón	0
Comayagua	6
Copán	2
Cortés	35
Choluteca	7
El Paraíso	4
Francisco Morazán	35
Gracias a Dios	0
Intibucá	0
Islas de la Bahía	2
La Paz	0
Lempira	0
Ocotepeque	1
Olancho	4
Santa Barbara	3
Valle	1
Yoro	6
TOTAL	115

SOURCE: National Radio Office

The goals of the national radio are not firmly established, and the specific programs and the purposes of those programs have not yet been clearly defined. Radio Honduras will not be a commercial station; rather, it will charge other government agencies for the use of its facilities, at less than commercial rates, and hopes to be self-sufficient financially. The intricacies of scheduling programs, dividing time among many ministries and agencies, and evaluating the success of the programming will consume a great deal of time and energy in the immediate future.

With very few exceptions, radio in Honduras is a commercial phenomenon, supported by advertising and providing entertainment. Radio is considered a form of entertainment. Experience in Honduras and elsewhere indicates that an infrastructure is necessary for the creation of an image in the public mind of radio as an educational tool. Based on this, Radio Honduras will need to develop such an infrastructure to become a source of education.

There are a few radio stations in Honduras which are more than commercial operations, however. They transmit educational and cultural programs to their listeners, and follow up with extension activities. These stations provide examples of private-sector involvement in rural areas to change the traditional patterns of campesino life. Two groups which are involved in rural development efforts using radio are Acción Cultural Popular Hondureña and Radio Evangélica.

B. Rural Radio Projects

1. Acción Cultural Popular Hondureña began sixteen years ago under the auspices of the Catholic Church. Modeled on the Colombian radio schools which were begun by Msgr. José Salcedo in the late 1940's, ACPH has grown into a system of radio schools and is now a broad-based adult basic educational movement. 1/

ACPH has gradually developed into a reality that is now broader than its Colombian model. As White describes it:

> "A great deal of the emphasis of the radio schools has been no more than to teach basic educational skills: literacy; elementary arithmetic; some fundamentals of citizenship, agricultural technology, health and moral principles. But from the very beginning the objectives of the radio schools and the radio school movement have been much broader than simply teaching reading and writing. A general objective stated by ACPH, the administrative body of the radio schools, is 'to awaken in the campesinos a spirit of initiative which allows them to make use of their own resources, and consequently inspire in them the search for the goal of a better future'.

1/ ACPH has been very closely analyzed and evaluated; cf., The Adult Education Program of Acción Cultural Popular Hondureña, by Robert A. White, 1972. That report is cited frequently in the description of ACPH here.

"The realization has become increasingly clear with the directors of the radio schools and the leaders of the radio school movement that the ignorance and backwardness of the rural lower status population is not due solely to the inability to read and write. It arises from the institutions of the rural lower status population in a state of isolation and dependence. For this reason, what began as radio schools has gradually expanded into a broad basic educational movement which is attempting fundamental changes in rural institutions and even the social structure of the whole country. The scope of the present study is the analysis of the radio school movement as an instrument in accomplishing this broader objective: developing more adequate values in campesinos and changing institutions in rural communities."

Although ACPH's educational outlook remains essentially Christian and is devoted to the integral education of the whole man of every man, it is now run by a board of directors which is not answerable to the bishops. Certainly now as in the beginning, the radio schools benefit from the strong support of priests in the rural areas. They have been instrumental in forming many listening groups, and they represent an infrastructure of trained and motivated leaders reaching into the rural areas.

The first step in the formation of ACPH listening groups in rural areas is the selection by the community of a person with at least minimal literacy skills as the monitor. This individual then goes to an ACPH training center, where he learns techniques for organizing and conducting the listening groups. After receiving this training and a sense of ACPH's educational orientation, the monitors return to their villages. They receive no salary, but all of their travel expenses are paid.

Coordinators, generally campesinos whose work involves travel on foot and horseback to outlying communities, maintain contact with each monitor and his group. They supply materials to the listening groups, assist in their use, and check to ensure that they are using them effectively. Also the coordinators administer the delivery and return of primary school equivalency tests; the radio schools have been recognized as a legal source of primary education since 1972. Radio school students who pass the equivalency test receive their primary school diplomas. The Ministry of Education designs and corrects the tests, and grants the diplomas.

ACPH designs and produces all of its own audio programs and visual materials. The paid staff in 1975 included nineteen central staff members and sixty-five coordinators. 2/

2/ These personnel are involved in the primary education/literacy program for adults; in 1972, ACPH initiated an agricultural education program, described in The Agricultural Education Program (Programa de Promoción Agrícola of ACPH), by Robert White, ACPH, March, 1973.

Some information is available on ACPH expenditures and the sources of its support. The best summary seems to be the one in the Informe General de ACPH, 1972-1973, dated July 28, 1973, and written by Orlando Iriarte, then director of ACPH. In general, he noted a decline in support from Honduran sources, particularly private industry. During the same period, donations increased from international sources, including Adveniat and Misereor (Germany); Catholic Foundation for Overseas Development (Ireland); and Vastenactie (Holland). GOH inputs continued at the same level of $15,000, which the Government currently provides. The report says that to increase income, each student in the radio schools will be charged $1 per year, and local fund-raising efforts will be increased.

Some elements of the 1972 and 1973 budgets show the level of spending for the literacy program and for other ACPH work. According to the report, in 1972, 9,500 persons became literate at a total cost of $127,500, for a per-person cost of $13.42. The variable in this calculation is the definition of "literate" Certainly, White would not agree with these figures; he looked closely at radio-school graduates. In his research, "minimal functional literacy" is defined as the ability to read a current news article in a newspaper slowly and with difficulty. Between 1961 and 1970, an estimated 19,358 individuals took the radio-school literacy examination; of these, 59 percent did show minimum functional literacy. Further analyzing these students, White found that approximately 32 percent attributed their literacy to previous primary school experience, and another 32 percent attributed their literacy, at least partially, to previous public school experience. Although the radio schools of ACPH were a decisive factor in the literacy of more than 7,000 campesinos, only about 3,000 complete illiterates were estimated to have achieved minimal functional literacy through the radio schools. 3/

By 1975, the literacy program was reaching 18,000 students in sixteen departments, of whom 9,000 took the final tests. The budget was up to $300,000. However, ACPH lost many students in Choluteca during 1975, when Radio Paz, its station there, was shut down due to pressures from major landowners.

The operating costs for the Agricultural Education Program in 1972 were $19,350. The program was financed by interest on the rotating loan fund, which also serves as a source of supervised credit; by small contributions from the learning groups; and by a small percentage of the sale of agricultural supplies through associated consumer cooperatives.

In January 1973, after the Agricultural Education Program had been in operation for one year, six agricultural instructors were working with significant success in the southern region of Honduras with more than 1,000 small farmers in approximately 100 groups. A daily broadcast focused on current projects of the groups. The program was expanding rapidly in the area and was projected to be self-supporting by early 1974. 4/ Unfortunately, in

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3/ White, p. 345.

4/ White, pp. iii - iv.

1974 harvest yielded barely enough for the peasants to eat. There was nothing left to sell. Through the Honduran Development Foundation the loans were refinanced for another year, and the goal of self-support had to be postponed.

The Agricultural Education Program reports that in 1975 it reached 8,850 heads of families; its estimates indicate that this figure will exceed 13,000 by April 1976. According to the Government's Dirección General de Alfabetización y Educación de Adultos, loans totaling $492,859 had been made through 1975 to peasants all over the country, with an encouraging record of repayments.

With its programs in literacy and agriculture, ACPH more than any other private rural development agency bears witness to what is possible in rural Honduras and to the autonomy that the Government has allowed to private groups. The greatest success of ACPH has been in motivating and organizing campesinos to be more active in seeking to control their own lives. This is what White concludes after his most painstaking study: 5/

> "Four general educational goals were proposed by the radio schools and the radio school movement: literacy training, inculcating a general motivation to initiate change, developing organizational capacity, and encouraging greater participation in the local and national governmental process.
>
> "1. ...the radio school movement has not been able to radically reduce the level of illiteracy, even in communities where it has functioned well, mainly because of the obstacles to literacy in the campesino's life.
>
> "2. In the second goal, stimulating the general motivation to initiate social change, the radio-school movement has been quite successful, especially in developing the activistic values of control over the physical environment and greater independence of paternalistic figures in rural neighborhoods. But, there was less success in developing a sense of the necessity for more basic structural changes in favor of the rural, lower status population.
>
> "3. The radio-school movement has also been quite successful in the third goal, developing organizational capacity and participatory collective decision-making institutions in rural communities. But participants in the movement are still lacking in the ability to make more complex rural development organizations, such as cooperatives or a permanent local community government, function well.
>
> "4. ...the radio-school movement has had much less success in the fourth goal, the development of a greater awareness of, and ability to participate in, the national governmental process. But it has influenced the growth of a more balanced, constructive political attitude at the local community level and has contributed to the reform of municipal government."

5/ White, pp. 888 - 889.

ACPH appears to have served the rural community in these ways for many years. Its efforts have not all been successful, but it has had a significant impact; and it is certainly the most firmly established agency for rural adult education in Honduras.

2. Radio Progreso in El Progreso in the Department of Yoro is the ACPH outlet in that area. This station, owned by the Jesuit Mission from the Missouri Province, was established in 1970 to communicate with the people in Yoro, and to help ACPH, which pays for the use of the facilities now. Radio Progreso has both short-wave and medium-wave facilities to broadcast the radio schools for 22 hours per week; on medium wave, Monday through Friday, from 4:00 to 6:00 P.M.; and repeating the material on short wave, Monday through Friday, from 6:00 to 8:00 P.M. On La Voz del Campo, which is carried on short wave for two hours each Saturday, letters from campesinos are read and discussed.

Because of its technical quality and potential, Radio Progreso is important. The short-wave capability allows total coverage of Honduras for the radio schools, to anyone who has a short-wave receiver. ACPH tries to give a suitable radio to every group; depending on location, this may mean a short-wave or a medium-wave set. During Hurricane Fifi, Radio Progreso was the only station on the north coast to stay on the air. It was the sole source of news to the rest of the country for several days, and was honored by its competitors for this effort.

Radio Progreso also offers its own programs as reinforcements to the training courses given to campesinos at the Jesuit Center in El Progreso. This is done on a very small scale, but it does represent another use of rural radio for development support, in that broadcasters have some personal contact with the target audience.

3. Radio Evangélica is a station in Comayaguela sponsored by the Conservative Baptist Church based in Wheaton, Illinois. Literacy is taught through two fifteen-minute programs per week, over an eight-week cycle. There are three cycles per year. The course is first announced by radio, and individuals who wish to be "guides" are asked to write to the station. Each guide forms a group of illiterates and supervises them during the course; he must be able to read and write himself. Printed materials are sent to the guide for each of the students. Toward the end of the course, a form is sent to the guide so that he can rate the progress of the students and report that progress to the station. This is the only form of evaluation. Students who have learned to read, in the opinion of the guide, are sent a "diploma" indicating satisfactory completion of the course. If they wish, they can also receive additional materials to read, so that their new skill is immediately reinforced. Since the inception of the program six years ago, 800 guides have participated and 2,000 to 3,000 students have completed the course. Forty-eight groups are currently enrolled.

4. Radio Mundo in San Pedro Sula broadcasts Escuela Para Todos, based in Costa Rica, which consists of responses to questions that come to San José from campesinos wherever the program is heard. The responses are carefully given and very clearly explained. The program has no infrastructure in Honduras, however.

At present, these are the only rural radio project in Honduras with any type of extension component. ACPH, a major force in rural Honduras, basically has the field to itself. Currently, there are no Government programs in the rural areas which use radio.

C. Support Services

The Materials Production Center of the Ministry of Education provides textbooks and supplementary materials to public school children in Honduras. According to its director, the Center has five basic tasks: production, printing, training, distribution, and evaluation. At the present time, production and evaluation receive little attention, because of budget limitations. The distribution system has been improved in recent years, but the achievement or rapid distribution of enough materials to all of the primary schools is still a distant goal. The demand for materials far exceeds the supply. Delays in delivering books sometimes result in materials arriving months after the beginning of the school year.

In terms of printed communication for a program in non-formal education for rural adults, both the needs and the constraints are numerous. Until recently, the Center produced only primary school materials; the entire task of developing adult materials lies ahead. The Center is presently understaffed for all of the needs of primary schools. Meeting those demands and the additional requirements of an adult program will require a major expansion, under the present structure or within some new format. The skills and experience of the present staff represent a resource which can contribute to future programs; however the Center is expanded.

It is essential to maintain two-way contact with any nationwide program, whether in primary or non-formal education, but it requires major effort. The producer of the message carried by the media need to know the reactions of the audience. If materials are an integral part of the communication program, whether they are school books, family planning materials, or agricultural supplies, an effective delivery system must be developed for the program to retain its credibility. In a country like Honduras, this means a process of ever-broadening supervision so that the parts of the system can be in touch with the center. The mass media have immediate penetration into remote areas, and it is tempting to believe that they can reach into those areas and bring about major changes by themselves, that it will never be necessary to worry about communications overland. The efficiency of the media is disarming, but it has not been shown that they can replace teachers, discussion groups, or other personal interactions. Generally printed materials must accompany broadcasts. The media can provide information, however, using the best resources that a central studio can muster. Their prestige supports development workers in new programs; they can make villagers realize that they are part of a larger regional or national process. In short, they can contribute a great deal to rural development. Whenever thought is given to using the mass media, however, consideration must also be given to making them part of a two-way process of communication.

Investments in mass media, without providing for supporting forms of communication as well, have not been found to be an effective use of resources.

Planners must face the needs for more effective delivery systems; for supervision of rural education, with the implied vehicles, adequate funds for local travel, and constant contact with the rural areas; and constant contact with the rural areas; and for capable people involved on many levels.

D. Planning

In this section on mass communications, the radio schools of Acción Cultural Popular Hondureña have received the most attention. They represent the principle use of mass media for rural education in Honduras.

As the Government of Honduras begins to plan its own education program for rural adults, perhaps using radio, it seems logical that it could learn much from ACPH.

The ACPH radio schools incorporate much of what has been learned elsewhere about the best techniques for using the media in rural programs. The interaction between rural monitor and his group, the continuousprocess of supervision and feedback, the assurance that the radios are adequate and functioning, the involvement of the rural people in the process: these aspects of the radio schools in Honduras find corroboration from lessons learned in India, Mexico, Tanzania, and Senegal, all countries that have used mass media for rural education. Because the atmosphere of Honduras allowed it, ACPH has grown markedly since its initiation in 1960; it has gone into the rural areas and accomplished something concrete. As stated in its reports, ACPH soon discovered that the problems they found there were not soluble by literacy alone, but required basic social change. In a society like Honduras, where few are wealthy and most are very poor, the political implications are plain.

E. Recommendations

1. To avoid duplication of effort and possible animosity, every effort should be made to coordinate any proposed non-formal education program with the ACPH radio schools. ACPH's integration of the mass media into its multifaceted communication program represents a solid model, based on theory and experience, that a new program would do well to consider.

2. Any proposed non-formal education program requires goals which are well defined and clearly stated. Massive, effective literacy programs for rural adults have not been carried out in Honduras; the success of the ACPH radio schools in this regard is quite limited, as White points out. ACPH has acknowledged that the primary concept promoted by their radio schools is not literacy, but basic social change.

3. Government personnel need to be trained in all aspects of mass communication, including use of radio as an educational tool and the production of effective radio materials. Some of the training might be given by radio or by cassette to stimulate operational reality. ACPH might assist in this.

4. A set of printed materials should be developed to accompany audio programming and an effective delivery system should be established to allow those materials to be used as fully as possible.

5. Any Government program should not limit itself to use of the national radio network, which is just now beginning. The start-up difficulties of a non-formal education program might be compounded by the concurrent start-up difficulties of Radio Honduras.

6. Any non-formal education program using radio should not base its expectations on what ACPH is doing now, but on what ACPH was doing at a similar stage in its development.

7. Broadcasts should be produced in the rural areas, including participation by the study groups whenever possible. Accomplishments, new ideas, and complaints relating to the non-formal education system would be a lively ingredient that might be particularly stimulating to the students.

8. Programs should be produced at the rural pilot schools to give the students a clear idea that they are part of a large and important national effort. The production of radio programs in the field is technically quite simple with a cassette recorder, and it can humanize the use of mass media. Mobile production teams can be used for all types of rural programs, and when done with zest and creativity, they add immensely to the use of the media.

F. Conclusion

This analysis of existing rural radio projects in Honduras as a backdrop for any future program has tried to examine planning implications as well. The need for continued cooperation between the Government and existing radio programs is essential to improving and increasing the educational services offered to the rural Honduran adult.

X. EXTERNAL ASSISTANCE

A. AID Contributions

From 1963 through 1974, AID financed a project in Central America under ROCAP and ODECA to develop regional textbooks. In Honduras, approximately 7,000,000 texts were developed and printed; storage facilities were constructed; and a computerized distribution system was established. The total contribution under this grant for Honduras was $2,273,000, and the counterpart portion was $1,110,000.

In 1967 AID loaned $7,000,000 for a secondary school project. The counterpart was $3,500,000. It included funds for educational materials, books, equipment, furniture, construction, and curriculum reform. The project is nearing termination. Sixteen secondary schools have been constructed, equipped, and furnished; the curriculum reform is in process. Each school has shops, science laboratories, home economics rooms, and library space.

As a result of the hurricane that struck Honduras in September 1974, AID made its Reconstruction I Loan for primary school reconstruction in the north coast area. This was a $1.5 million project which included school construction, furniture, educational materials, equipment, and teacher training. Two hundred and eighty-two classrooms are being constructed and approximately 43 schools are being repaired. The loan will terminate in September 1976.

In 1974 AID donated $7,200 for the training of eighty teachers at the Pan American school at El Zamorano.

B. Other Donors

The Interamerican Development Bank (IDB) currently has one large educational project in execution. It includes $814,000 in grant money and a loan of $6,750,000, with a $1,500,000 counterpart. Vocational schools in Tegucigalpa and an agricultural school in Atlántida are being constructed. These schools are under the jurisdiction of the Ministry of Education. The four year project includes scholarships, construction, books, equipment, training and technical assistance. The IDB is also executing a loan of $4,800,000 to build a training hospital for university doctors in Tegucigalpa. The counterpart for this loan is $5,962,000.

The IDB has loaned $2,800,000 to the Ministry of Natural Resources for expanded agricultural research and extension services. This loan terminates at the end of CY 1976. An IDB mission is arriving in the near future to study the possibility of other educational loans. Nothing is currently known about their future plans.

The World Bank is disbursing a $12,000,000 loan in various areas of education, with a counterpart of $5,300,000. It consists of funds for the following: to the Ministry of Education for the construction of the Superior Teacher Training School (ESP), the practice teaching secondary school affiliated with the ESP, four normal schools, and their twelve affiliated practice teaching schools; to the National Institute for Professional Training (INFOP) to build

three technical training centers, two in San Pedro Sula and one in Tegucigalpa; and to the Ministry of Natural Resources for renovating and constructing the secondary level agricultural school at Catacamas and three campesino leadership training centers. The loan provides funds for technical assistance, furniture, materials, books, equipment, and an implementation unit.

A World Bank team was in Honduras in April 1976 looking into the possibility of another loan in education. Any decisions will be made pending the result of further exploration in July by the World Bank technical team.

UNESCO has two advisors in Honduras. One divides his time between advising the Superior Planning Council on non-formal education and advising the Superior Teacher Training School. The other advises the Superior Teacher Training School in various educational areas.

Until 1974, UNICEF provides $45,000 worth of tools and educational materials to primary schools in the frontier areas. They plan to cover another 390 schools with $39,000 worth of commodities by 1979. They also donated tools to schools in the zone affected by Hurricane Fifi.

CARE constructs primary schools and provides food for school lunches. During the past year they built 150 primary school classrooms in the Pompilio Orgega program and 162 classrooms in the AID-financed RR. I Loan. These were all built with community self-help. This participation consisted of donating the land and supplying all the sand, gravel and rock needed in the construction project. They were also expected to provide two volunteer workers each day.

CARE supplied other construction materials and skilled labor. The Pompilio Ortega project was financed by national lottery funds.

For several years the OAS supplied scholarships for various types of advanced training and $63,800 in grants for laboratory and educational materials. They have also provided technical assistance to the Superior Teacher Training School in various academic and special technical areas. This assistance has been discontinued. The OAS does, however, have one advisor in non-formal education at the Superior Planning Council.

XI. CONSTRAINTS

The National Development Plan describes the education sector goals as (1) equalization of educational opportunity and (2) linkage of education to national development. The constraints discussed below have been determined from an analysis of rural primary and non-formal education. They have also been recognized in the GOH National Development Plan and have been further confirmed by the experience of MOE personnel.

The ranking of constraints is a difficult undertaking, as attempts to address one without attention to others are likely to prove inadequate. Nevertheless, recognizing that other specialists with different experiences might arrive at different conclusions, the assessment team has attempted to rank the constraints in an order which it believes adequately defines their priority.

1. Conditions of the Target Group

The conditions of the target group and the learning needs implied by those conditions present a constraint to both primary and non-formal education.

The target group profile demonstrates a series of interrelated constraints to education which stem from the socio-economic conditions of the rural areas. The majority of the peasants, who comprise some 70 percent of the country's inhabitants, do not participate in the national market system to any significant degree. In the rural areas malnutrition is particularly severe, resulting in high infant mortality, deficient mental and physical growth, low resistence to disease, and consequent loss of labor and productive capability.

These characteristics of the target group are causally related to the ecological and productive conditions of rural Honduras. The majority of the peasants work on small farms, most of which are located on lands of marginal productivity. Modern agricultural technologies are used by limited numbers of the peasantry.

The content of education in most rural primary schools does not meet the needs of the rural population. Needs are determined by such factors as land, labor, agriculture, climate, and geography in different regions of the country. Illiteracy rates in the rural area are very high and the number of children completing primary school is low.

2. Budget

The achievement of educational goals is impeded by a lack of financial resources. Honduras presently devotes 21 percent of its national budget to education; more than 61 percent of the Ministry of Education budget and 91 percent of the Primary Education budget are allocated to salaries. Funds for construction, instructional materials, supervisory travel, and teacher

preparation are sometimes insufficient to improve the quality of education to the extent desired by the GOH. The overall resource base available to both primary and non-formal education is limited. As a result of the lack of financial resources, the scope of activities is restricted with regard to potential user coverage and to the range of educational opportunities that can be offered.

3. Personnel

Four constraints associated with personnel are described in this section.

a. Rural Teachers

The rural teaching force is less adequately prepared than the urban teaching force. More than 33 percent of the rural teaching force is less than fully qualified according to MOE standards, and few of them have received training in subject areas which are directly relevant to the rural environment. Rural teachers, therefore, are not able to use agricultural and other basic activities as points of departure to increase the relevance of the traditional curriculum, nor to make efficient use of the local environment to enrich or complement what they teach in their classes.

The present in service training program lacks the permanent location, staff and equipment to provide the type of short-term training needed to improve the quality of rural primary teachers.

In addition to the constraint described above of providing the proper kind of teacher to the rural primary school, there is an additional problem in keeping him there. Many teachers either leave the teaching force for higher paying jobs elsewhere or request transfer to urban areas where the general quality of life is higher. In addition, the shortage of adequate housing for teachers in rural areas is a significant disincentive.

GOH has developed some salary incentives for rural areas, such as extra pay for teaching in frontier areas or where health conditions are deemed to be hazardous. These steps have not been adequate to maintain an experienced trained teaching force in the rural primary schools, nor have they prevented a rapid turnover in personnel.

b. Administrative Capability

The Ministry of Education has more than 1,600 men and women working in eight major units in the eighteen departments of the country. Although the top-level administrators are competent in their fields and have had long experience, the lack of sufficient numbers of well-trained, middle-level managers and administrative technicians is a constraint to the operation of coordinated program of educational development. Training is needed in such areas as administration, planning, and research and evaluation. An adequate

supply of trained middle-level managers would relieve top administrators of the responsibility for day-to-day program management, so that they might devote more effort to internal coordination and policy review, essential to the smooth and effective operation of the Ministry.

c. Professional Capability

The supply of professional educators in the regional offices of the Ministry of Education is too limited to meet the demand for technical advisors. There is a need for specialists in curriculum and instructional materials development; special practical fields (agriculture, sewing and manual arts); basic academic subjects (mathematics, science, social studies and Spanish); research, testing and evaluation; supervision; and teaching methodology.

d. Non-Formal Education Personnel

Technical expertise available for non-formal education programs is in short supply. Volunteers, who make up the bulk of some programs' field personnel, are very inadequately trained. It is essential that trained administrators be utilized so that technical expertise can be brought to bear on priority development problems. It is equally essential that volunteers should receive more formal training before being assigned to the field.

4. Efficiency

The inefficiency of the rural primary school is illustrated by the millions of dollars spent annually on students who leave school after completing only the first or second grade without acquiring much learning. Other resources are wasted because repeating rates are high. The low internal efficiency of the rural primary system can be attributed to many causes.

The present curriculum for the primary school is urban oriented and thus has little relevance to the needs and interests of rural children. In addition, teaching materials such as books and audio-visual aids are in short supply and do not relate specifically to the rural experience.

5. Access

Access to the school system is impeded by the circumstances in the rural areas. These include difficult geography, distance to school, health and nutrition conditions, the lack of physical facilities, inadequate buildings, insufficient furniture and equipment. The shortage of classrooms and multipurpose classrooms in many cases requires the sharing of one classroom by more than one teacher, each teaching a different class. The lack of space, desks, blackboards and other teaching facilities detracts from the quality of education which each child should receive.

6. Communications and Coordination

The flow of information in the MOE is slow and erratic; each major unit of the Ministry tends to concentrate on its own problems without giving sufficient consideration to the manner in which those problems or their solutions will affect other units. Without adequate and timely information, planning and formulation of program policies cannot be carried out on a rational basis. The lack of information leads to decisions which make less effective and efficient use of available resources than might otherwise be possible, and inhibits the coordination between elements of the Ministry, thus further reducing effectiveness.

There is insufficient overall coordination, specifically at the national level, of the various governmental agencies engaged in the provision of education services to the rural population. Coordination between ministries and other national agencies can increase the level of cooperation at the working level, i.e., between school personnel and technicians from outside the Ministry of Education. The rural primary schools, for example, need inputs from technicians in such areas as agriculture, health, nutrition, farm credit, and cooperative organizations, in order to make the curriculum more relevant to rural life and to meet more effectively the needs of the school-age population. Similarly, the same technical inputs, if available, will improve the quality of non-formal programs for rural adults.

Non-formal education, by its very nature, encompasses a wide variety of programs conducted by many different organizations. There are national public and private organizations involved in non-formal education, as well as organizations offering only one or a few courses within a limited area. There is a need for some mechanism for technical coordination to ensure that resources are not wasted in duplicating or competing with existing programs.

XII. STRATEGIES

A. National Development Priorities

The GOH's fundamental goals for national development are to increase rural productivity and to improve income distribution. Among the means to achieve these goals are improvements in health, education, and housing conditions, and by supplying the human resources necessary for productivity increases. The rural population will receive priority assistance in these areas.

The Government's education policy emphasizes the creation of equal educational opportunities and the linking of education to national development. Education will be integrated into the development process by a reorientation of basic primary education and through non-formal training for adults.

The GOH Plan for education has a clear statement of what will be taught: learning that is relevant to the development process, without detriment to the core curriculum of academic knowledge and literacy skills. The why of this thrust is to facilitate development activities in other sectors. Education is not only conceived as a prime mover in development, but also as a handmaiden of progress. It is clear that the principal element of the how in rural education is the Central/Satellite (C/S) school program, which plays a pivotal role in both primary and non-formal education activities. Both modes of education are linked in mutually supportive roles around the C/S institution.

The primary school cycle is the basic component of the Honduran educational system. Assistance is needed to increase the effectiveness and efficiency of primary education in achieving development goals. For adults who have not benefited from the formal system, training in skills necessary for a more effective utilization and preservation of natural resources will increase their occupational effectiveness.

B. Education Sector Strategy

The GOH, in contrast to other developing countries, recognizes that it has neither the physical and financial nor the human resources required to provide universal primary education. It has, therefore, decided to adopt a policy of gradual expansion and to devote more effort to increasing the quality of education, especially for the rural population.

1. Rural Primary Education

Three options might be considered for the rural primary education system. The first option is to continue with the traditional program. despite its inefficiencies. Access to formal education would be kept open. This alternative would be socially and politically acceptable to many users of education.

The second option is to close the rural primary schools and create an alternative system to perform the basic functions of formal education. However, there is no assurance that this alternative can be either effective or efficient. The social and political costs would be too high and it would be inequitable to rural children, whose access to the formal system would be closed while

remaining open to their urban counterparts.

The third option, which is the one that has been chosen by the GOH, is to make the present system more efficient and effective. The strategy for this improvement is the C/S program, begun as a pilot school program in 1972. It is designed to provide a more relevant curriculum for rural primary students by incorporating agricultural and other practical training into the basic academic curriculum. Agricultural and technical projects are initiated by teachers and students. The projects serve as laboratories in which students learn the practical value of scientific knowledge and skills in the academic curriculum. They also provide reinforcement for the content of primary school learning. The school becomes directly involved in rural production activities.

Another important element of the GOH strategy is to maximize utilization of existing institutions and facilities. The C/S schools are to be transformed into community-centered institutions. Requirements for this change will be limited to the addition of multipurpose classrooms and the construction of additional classrooms as required to relieve overcrowding.

The only new institution which is required is an inservice teacher training center. This is an outgrowth of the existing teacher training program. Supervisors serve as instructors and hold courses in existing school buildings located in large towns throughout the country. The proposed new center will bring together a specialized staff, educational facilities and rural teachers in a manner which would not be possible under the existing program. This will enhance the internal efficiency of the program.

2. Non-Formal Education

The strategy in non-formal education must provide a content, methodology, and management model.

There are two general strategic options available to the GOH to accomplish its goals in non-formal education. The first option is to set up a full fledged parallel system of education for those who have not benefited from the formal system. Two variants of this option are the Popular Education Plan and Rural Development Centers Plan. The management model of both of these plans consists of inter-institutional coordinating committees of the national level with policy and executive functions, regional level commissions, and local volunteer implementers. The methodology of education is both is to develop formal cycles and levels of instruction for participants. The content of education includes all the core academic curriculum of primary schools and practical instruction in health, agriculture, nutrition, and other subjects.

This option envisions the construction and staffing of educational centers throughout the rural areas. Cost estimates range from $12 to $25.5 million for the Popular Education Plan, and $14.9 million for the Centers Plan. The principle feature of this strategy is the cost of establishing this alternative educational infrastructure.

The second general option is to establish a non-formal system that combines mass media technology with the existing educational infrastructure. The content of education is practical instruction in agriculture, health, and nutrition which is determined by the particular learning needs of the user groups. The methodology of instruction is to determine user learning needs, to design materials that directly respond to them, and to produce learning programs that meet these needs. The delivery of these learning programs will utilize mass media, volunteer instructors, and the existing educational facilities. The management model is one that builds from the needs of the users by establishing a permanent information system to assess the activities of program designers and implementers.

These options contrast in several respects. The first contemplates extensive capital investment by creating an alternate physical infrastructure. The second contemplates use of the existing rural schools system with modest construction inputs. In terms of teaching methodology, the first contemplates face-to-face instruction; the second utilizes mass media and personal means. The content of the first system includes an academic and practical curriculum that proceeds through a course cycle; the content of the second system is learning in practical subjects whose utility has been determined by user surveys.

There are convincing benefit-cost and user-incidence reasons for adopting the second general strategy. The second is less costly both in the short and the long run; capital outlay and maintenance are minimized by using existing schools. The use of mass media, along with instructors, extends coverage of the rural population. The methodology of responding directly to user needs increases the likelihood of participation by rural adults.

C. AID Assistance Strategy in Education

The GOH educational strategy is described in the National Development Plan and is being implemented in such programs for rural areas as the Central/Satellite School program and nascent non-formal education programs. It is targeted to the needs of the rural population and is fully consistent with AID priorities as enunciated by Congress in the Foreign Assistance Act and as stated in AID policy documents.

Successful implementation of this strategy will have significant impact on alleviating constraints to rural development which respond to educational interventions. The Assessment has revealed that the GOH has designed a C/S school system which is relevant to rural needs and is in the process of developing non-formal education programs which focus on the learning needs of the rural population. The assessment also found that external assistance will be required if the GOH is to continue to expand and improve its educational programs.

To assist the GOH to effectively carry out its strategy, AID has adopted the following sectoral strategy which directly supports the overall AID rural development strategy in Honduras.

a. Expand AID financial and technical support to the rural education program at least initially in the following ways:

1. Support the expansion of the Central/Satellite school program from its present 73 Central and 365 Satellite schools to 250 Central and 1,250 Satellite schools.

2. Expand and improve existing efforts to provide inservice training for teachers and directors in the C/S school program.

3. Design low-cost supplementary teaching materials (teacher's guides, stories, games) that offer specific suggestions which teachers can use to relate the contents of the formal curriculum to the agricultural, basic skills, and health and nutrition activities carried out in the school, and design low-cost supplements to existing texts which can be distributed to students.

4. Support the expansion of the existing self-help construction program of the Office of School Construction in order to enable existing rural schools to adapt and expand their facilities.

5. Provide training in investigation, design and evaluation of supplementary teaching materials.

6. Upgrade the administrative capacity of the Ministry of Education, with particular attention to the C/S school unit in the Department of Primary Education.

b. Expand and continue assistance to non-formal education for rural adults:

1. Develop a staff in the MOE capable of designing, pretesting, implementing, and evaluating non-formal education programs for rural areas.

2. Upgrade the capabilities of the MOE staff in non-formal education so that it may effectively carry out non-formal education programs in the rural areas.

The AID assistance strategy must be viewed in terms of its support to a larger GOH effort to make the rural primary school an effective instrument in rural development, both for the children enrolled in the school and for the adults and out-of-school youth in the community.

ANNEX A. AN ANALYSIS OF TWO REGIONAL TARGET GROUPS

In general, rural Honduras is culturally homogeneous. Landholding patterns are fairly similar, except for the northwest region; the general class structure is similar from one region to another; the economy is usually centered around local regions; and there are slight variations in ideology and values. The differences are as follows: (1) there is more communal land in the north, and more ejido land in the west; (2) there is more salaried labor in the northwest; (3) there is a differential distribution of agricultural technology; (4) there are marked regional specialties in terminology, especially with agricultural technology; and (5) market patterns are different, with town markets and market days confined mainly to the western region and commerce in other parts of the country organized in stores.

Two regions are selected for in-depth consideration. They present the cultural contrasts enumerated above. They are distinct agricultural regions, with different ecological settings and consequent difference in human adaptation.

1. Highland Peasantry: The Western Region

The western highlands of Honduras have 27 percent of the total population of the country. This region has four sub-regions, one of which has been selected for intensive analysis in this assessment. The Gracias sub-region has similar ecological and socioeconomic characteristics. It has 43 municipalities located in 5 departments. The majority of the land is mountainous: of a total of 5,983 square kilometers, there are only 148 square kilometers of flat valley land.

The regional climate varies from humid temperate to humid sub-tropical. Climatic zones are defined by the topography. Valleys have a rainfall of 1,000 mms. per year in a rainy season of four months or less. Piedmont slopes have higher rainfall (1,000-2,000 mms.) in a rainy season that lasts up to seven months. Some of the mountain peaks have rainfalls of 3,000 mms., this becomes an important factor in consideration of erosion problems on the mountainside.

The flora is influenced by topography and rainfall. It varies from humid sub-tropical forest to humid mountain forest. The piedmont slopes are covered with natural pine forest vegetation. They constitute watersheds that feed mountain strems which flow into four major rivers. While rain and stream water is relatively abundant, underground water resources are lower than in most of the country.

a. Land Use and Land Tenure

Only 598,300 hectares of land are available in the entire region. About one-third of this land is actually occupied by farms. Of this land in use, one-fourth is cultivated in annual or perennial crops. Another quarter is lying fallow or in natural pasturage, and one-fifth is in cultivated pasture. The remainder of the land in farms is forest area. (See Table A.1)

The soils of the Gracias region are primarily Type IV soils, 1/ which are suitable for very extensive agricultural use, with a low production per hectare. One-fifth of the land has good pine forest coverage, classified as Type III because it is most suitable for forestry exploitation. The remaining 30 percent of the soils are Type I and Type II, distinguished by the degree of slope. Type I land is fertile valley land which is physically capable of producing high yields per acre. Type II is on gently mountain slopes and is capable of moderate yields given the correct conservation practices. (See Table A.II)

The pattern of land tenure in the Gracias region is one of numerous minifundios and a few relatively large latifundios. The 19,062 farms under 50 manzanas in size occupy a total of 171,567 manzanas. The average size of these minifundios is 9.0 manzanas. There are 963 farms over 50 manzanas occupying 120,386 manzanas, and the average size of these latifundios is 125.01 hectares. (See Table A.3)

Most of the land (86 percent) in Gracias is either in ejido or private usufruct. The extremely small amount (no more than 1 percent) of national land is indicative of the more general land use situation. National land is very scarce because of the high population density. The small amount of rental land (2 percent) shows that there are very few peasant families that subsist on land to which they do not hold usufruct rights. (See Table A.5)

b. Demography

The demography of the region is conditioned by availability of arable soils. This demographic characteristic is typical of the highlands of Honduras, especially the western highlands region. The region has a great number of people in small areas of natural fertility. The absolute population density is 30 persons per square kilometer, but the relative population density is 1,224 per square kilometer of cultivable land.

c. Crop Cultivation and Marketing

The principal crop of the Gracias region is corn; 70 percent of cultivated area is occupied by corn alone, or corn in combination with legumes. Beans are planted in 13 percent of the cultivated land, and the remaining cultivated land is occupied by tobacco and a variety of vegetable crops. There is no firm estimate on the percentage of corn and bean land that is devoted to commercial farming. Tobacco and legumes are produced entirely for commercial distribution.

The marketing of crops is through a network of small merchants and intermediaries. The market system in the region is similar to that found in the western highlands of Guatemala, or the Oaxaca and Chiapas areas of Mexico. This market complex arose in colonial times and has been analyzed in other areas in terms of central place theory. Around one regional pole, the city of Gracias,

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1/ Based on FAO classification in Plath, Uso Potencial de la Tierra, Honduras

there are numerous sub-polar towns. These towns have weekly markets in which small-scale farmers from the surrounding hills sell their wares. The weekly and day-to-day marketing of produce are handled by merchants in these towns, who either sell the products locally or ship them to larger urban markets. The price of transport out of this region is one disincentive to export of produce; there are no paved roads on the region. The gravel all-weather roads lead out to San Pedro Sula in one direction and Comayagua in another direction. These roads are in such bad condition that they raise the price of transport.

Technical assistance presently available in the region is minimal. There are two agricultural extension agents, one in Gracias and one in Lepaera, serving all 20,000 farms. There is one BANAFOM Bank agency in Gracias, which provides credit to medium and large scale farmers. In the past year, an agricultural credit cooperative has been installed for small scale agriculturists. This cooperative, in Lepaera, has about 50 members at present.

d. A Representative Peasant Village

A detailed consideration of one community in the region will illustrate the present conditions of this particular population. The community of Gualan has 50 families, most of which live in a hamlet strung along either side of a stream. Most of the land used by villagers for their crops has between a ten and forty degree slope. At the center of the dispersed houses is the village school, built by the community and CARE in 1968. The school has 6.6 manzanas of relatively flat land.

There are three different climate zones within walking distance of the village settlement. Peasants in the village have land in all three zones. There is "tierra fria" on the high mountain slopes. Small areas of it are suited for potatoes, though it is primarily used for corn planting by the swidden method. The settlement is actually located in the temperate land. There are two micro-environments within this temperate area: the hillsides and the quebradas, slopes alongside stream beds. The natural shade and thick forest cover of the quebradas provide an environment for coffee cultivation. About one-fifth of the villagers produce coffee for sale, though most of them have a few bushes for family consumption. The hillsides are used primarily for cultivation of corn, with beans intermixed in the corn fields. There are patches of gently sloping land which are used for production of vegetables for the market. The third type is tierra caliente, at lower elevations.

The peasantry of this village is semi-subsistence. Corn and beans are produced primarily for family consumption, while cabbage, onions, garlic and coffee are produced for sale in the market. All but one of the 22 families interviewed have sufficient land for supplying subsistence needs, and about 40 percent of the villagers produce significant amounts of cash crops.

Division of labor is complex. While women do the domestic chores such as cooking, cutting wood, washing, and caring for the children, they also do agricultural labor. Women care for the fruit trees and small amounts of annual crops that grow around the house. In addition, women assist in the planting and harvesting of corn. The men's tasks are the heavy clearing and preparation of land for annual crops, the periodic weeding (roza) of crop land, and the bulk of harvest activities.

The corn crop cycle is similar to that practiced throughout the region. There are two annual crops - primera and postrera. In some of the highest regions the growing season is too long to permit two crops. For the tierra caliente, three crops and sometimes four are reported. Temperate and tierra fria soil is used for no more than two consecutive years of crops. There is sufficient land available to permit 5-6 year following. Men walk up to two and a half hours to reach land, rather than reuse land closer to the village that has not fallowed for a sufficient period.

These economic characteristics are typical for the Gracias region. There are some variations brought about the population density and climatic differences. In general, a semi-subsistence peasantry with swidden corn cultivation and mixed intensive fruit and vegetable production is found throughout the region. About 75 percent of the land in the village is Type III or Type IV. The rest is Type II land, which with some modifications can be devoted to intensive cultivation.

The health and nutrition characteristics of the peasantry in Gualan are typified by the common saying: "Our campesino is poor but not miserable". The pre-school and school age children observed in the survey of the village do not exhibit outward signs of severe malnutrition, but intestinal disorders cause a relatively high infant mortality rate.

Aldeas and caseríos in Honduras do not have formal community political organization. All politico-legal matters (births, deaths, marriages, taxes) are handled at the municipal capitals. Gualan's only formal organization is a patronato with dual religious and civil functions. Its civil functions are primarily school-related matters, although the projects sponsored by the patronato vary from year to year.

Communications with the external world are by two means: radio and footpath. The Gracias area is covered by a number of commercial radio stations. Land communications are limited: most of the peasant villages are linked by trail only to towns or large villages along the three main all-weather roads. Distances to roads vary from 15 minutes to 3 hour walk.

Internal communications are all face-to-face. In this regard, it is important to note that children serve an important function in linking the village "grapevine". Children are conduits of information between households and between the school and villagers. Formal town meetings never take place. There are periodic meetings of the patronato, but only 40 percent of the heads of household belong.

e. Summary

The peasants of the western highlands are semi-subsistence cultivators.

The major problem in the western highlands is the limited amount of Type I and Type II agricultural land. The topography and quality of most of the soil in the region is not suited for intensive production of annual crops. Extensive agriculture, using swidden techniques, is practiced on most of the piedmont slopes. Increasing population density is exacerbating the soil erosion problem.

The peasant economy in this western area is an integrated system of production and distribution with definite characteristics:

1. Cultivation is predominantly subsistence oriented, not profit-maximizing.

2. Agricultural technology is traditional and rudimentary.

3. The family is the basic unit of production.

4. Marketing is done through intermediaries and town markets.

5. There is a relatively low per capita income, low productivity, and low levels of saving and investment.

The peasants in the region already have a significant link to the commercial sector of the nation. They produce cash crops such as coffee, fruit and legumes. An increase in the productivity of the land which they already devote to cash crops would boost income considerably. Since 51.1 percent of farm land is in the 5-50 manzanas range, there is a significant percentage of the peasantry who already devote or can devote some of his production to the market sector.

The western region typifies the agricultural situation of the mountainous Honduran highlands. One solution to its problems is to encourage population migration to the relatively unpopulated areas of the houselands. The next section considers the situation of the peasantry in one area when the government has encouraged this migration.

2. Northern Lowland Peasantry: The Aguan Valley and Surroundings

The Northern area of Honduras, between the Sula Valley on the West and the Mosquitia region on the East, stands in contrast to the highlands region. Its ecological and socioeconomic characteristics are polar opposite to the highlands. This area will be discussed as it was in 1970, with a consideration of the agrarian reform program conducted between 1971 and 1975.

There are 18 municipalities located in four departments in this region, occupying 8,498.6 square kilimeters. The flat valley land of the region occupies 32 percent of the total area. The highlands of Gracias, on the other hand, has only 2.4 percent of its area in valleys. Most of the region is located between 200 and 500 meters above sea level (a.s.l). A small mountain range bisects the region, with a mountain peak that reaches 2,454 meters a.s.l. Average yearly temperatures range between 26-28C.

Rainfall in the region is conditioned by the topography. The Aguan valley has about 1,000 mms. of rainfall in a four month rainy season. The mountain slopes have a rainy season that is four to seven months long, with 3000-5000 mms. of rainfall. The coastal rainy season lasts seven months or more, with 2000 to 3000 mms. of rainfall. The rainfall in the valley areas is sufficient for annual crops, but irrigation is necessary for some of the perennials that are being introduced. The ecology of the entire region is characterized as wet tropical forest.

Due to the topography of the region, underground water resources are very abundant. Irrigation is possible in the area either through diversion of river flow, or installation of wells.

a. Land Use and Demography

The potential of the soil in this area is vastly superior to that of the Gracias region. About 38 percent of the soil is classified as Type I, in contrast to the 6 percent of the Western highlands. On the other hand, 6 percent of Northern land is Type II soil in contrast to the 24 percent of Western highlands soil. Thus, a great proportion of Northern soil is suitable for intensive cultivation with mechanized means. (See Table A.I)

The total population of the region is 132,638. The absolute population density is half of that in the Western highlands (17 persons per square kilometer). The population density per square kilometer of cultivable land (Type I and II) is 49, in contrast to the extreme density (1224) of the Western highlands.

These statistics underline the stark ecological and demographic differences between the highlands and the lowlands of Honduras. The Gracias region has a very high density of population on a small amount of cultivable soil. The North has a low density of population with very abundant cultivable soil.

The actual use of land in the North reflects this contrast. Only 16.6 percent of the total area is used for farm purposes. In the Gracias region, 33.4 percent of the area is actually used. The difference in actual use of the land is attributable to the difference in population pressure. 2/. There is a great amount of cultivable soil that is not actually in use on the North Coast because of the low population pressure. (Table A.2)

b. Land Tenure

Less than one-third of the land in this area is in the 5-50 manzanas class, in contrast to the 51.1 percent in the West. The average size of the small farm is, however, about the same — 10.5 manzanas. (Table A.3). This pattern of land tenure has been drastically altered by the agrarian reform program in the Aguan Valley, which is discussed below. Most of the land is in private holdings or is classified as national land. (Table A.5)

c. Agricultural Activities and Marketing

Extensive cattle-raising and cash crop production characterized the larger farms. Most of the peasants, however, cultivate maize and beans as well as some cash crops.

2/ Population pressure is a function of the absolute number of inhabitants and the arable soil in a given geographical area.

The productivity of the soil is reflected in the figures for production of corn. Farms here produce 35 quintales per hectare, whereas average productivity in the Gracias region is 21. In the period when these figures were developed corn production was done by traditional farming methods in both ares.

The marketing in this region was done through stores and also through two agencies of the BANAFOM for purchase and storage of grains. These agencies were established because of the high volume of basic grains produced in the region.

d. The Peasantry and Agrarian Reform: The Aguan Valley

The Aguan Valley area of the North region is now the scene of a massive agrarian reform program, initiated in 1970 with financing from BID. The National Agrarian Institute (INA) has carried on a development program that has evolved through three stages since its inception. The original design of the program was directed toward colonization and settlement of 3,000 peasant families from densely populated areas in Honduras in the Bajo Aguan Valley. They were to be settled on individual parcels of land, combining annual and perennial crops. When the project began, the pattern of land tenure and land use was one of minifundistas producing for subsistence, and middle-to-large farms devoted to extensive cattle-raising.

During the first eighteen months of the project, the project was shifted to establishment of small cooperatives of existing minifundistas because of the difficulties of land expropriation. From June 1971 to the end of 1972, the project shifted to the second phase: legalization of the boundaries of the de facto occupants of land, without affecting the larger landholdings; the formation of peasant cooperatives was temporarily abandoned. Through 1973, groups of organized peasants from the Departments of Yoro and Progreso were settled on 5,000 hectares of national lands on the margins of the Aguan Valley. More than 500 individual parcels of land were established. Credit for African oil palm and for citrus orchards was made available through the INA program.

Beginning January of 1974, the goals of the National Development Plan were announced. The design of the project assumed its present form: occupation of unused or idle lands, and resettlement of cattle ranchers on the piedmonts neighboring the Valley. Peasant cooperatives were established on the Valley land which was taken over the INA. By August of 1975 there were 4,000 families in 66 cooperatives throughout the region. During this period, Hurricane Fifi caused some population movement; the members of the cooperatives moved to higher land while the floods remained, and returned to their lands after the water receded. There was a major influx of peasants from other areas through early 1975.

By December of 1975, 495 families remained in the cooperatives. The departure of some of the Fifi immigrants was the principal cause of this drop in the number of Aguan families.

The INA provides agricultural extension and social promotion services to the Aguan cooperatives. There is an agronomist and a promoter for every 3-5

cooperatives. Crop conditions, cultivation practice and credit extension, are assessed by the agronomists. The promoters deal with organizational matters in the cooperatives.

Some of the cooperatives have mechanized operations for African oil palm and basic grains. The land suitable for mechanization is held collectively. Members of the cooperative work on this land for wages paid from the credit received by the cooperative as a whole. The sale of corn and oil after harvest repays the loans. Profits are put into a social development fund and are also distributed. No more than a third of the cooperatives are yet producing significant profits.

Some of the available land in these cooperatives, when mechanization is impractical, is divided into family parcels of land. Member families grow crops on these for family consumption. There are some cooperatives where this mechanization is still in process. And there are some cooperatives where the land is not suitable for mechanization, so that other techniques of intensification will have to be introduced.

c A Representative Cooperative Village

The town center of the Aguan Valley is Tocoa. Located two kilometers from there is the village of San Isidro. There are three large cooperatives in San Isidro. Two of the oldest cooperatives in the INA program are here—San Isidro and Bajo Aguan. One of the most recent cooperatives—La Norteña-was relocated at the outskirts of the village after Hurricane Fifi. These three cooperatives have African oil palm and mechanized cultivation of basic grains, and are typical of the cash-crop cooperatives in the Bajo Aguan program.

The village of San Isidro was a cluster of semi-subsistence agriculturalists prior to 1970. There were three or four families who raised cattle on medium-size farms. During the first phase of the INA project, the two cooperatives were formed with membership from the village and from peasants groups that emigrated from the western and southern regions. The third cooperative was composed entirely of emigrants, who were moved by INA to San Isidro. Most of the houses in the village are of wattle-and-daub construction. A housing project financed with international loans to INVA is underway for all three cooperatives. It will be located on the outskirts of the present village, and built by self-help methods.

Each of the three cooperatives has a dry-goods store, a warehouse/storage center for its equipment and its harvest, and rudimentary meeting rooms. One school serves all the children from the three cooperatives, and also from the San Isidro villagers who do not belong to the cooperatives. The school meets in two rented locations, while a permanent building is under construction by the CARE/AID program.

Each cooperative is organized in a similar fashion. All cooperative members are voting participants in the assembly, which meets monthly. Officers of the cooperative are elected by the assembly. The primary qualification for officership is the ability to read and write. While the San Isidro cooperatives do not have a problem, INA officials point out that in some cooperatives this

drastically limits the number of eligible officeholders. The accounting system of the cooperatives is operated jointly by cooperative officers and INA accountants.

The typical member of one of these cooperatives works for wages on the communal and that is devoted to palm or mechanized basic grain cultivation. Work is organized by each cooperative, with the supervision of the agronomist from INA. Each cooperative member also has some personal land on which he can grow any crops that he wishes.

The official requirements for entering of the San Isidro cooperatives are approval by the assembly and payment of the application fee of 2 lempiras. There is some turnover of membership in these cooperatives, although it is not of the magnitude found in the cooperatives that do not have cash crops.

In contrast to Gualan, the cultivation activities are oriented toward commercial production, with some subsistence cultivation by each member family. The technology of agriculture is increasingly modern; all three of the cooperatives own tractors, plows, and harrows. The family is the basic unit of subsistence production, but the cooperative is the basic unit of commercial production. Marketing of cash crops is done by the cooperatives. The income in all three cooperatives is about $350 per family, in contrast to the average of $60 prior to the establishment of the cooperatives.

e. Summary

The economic characteristics of the peasantry of the region prior to the Aguan project were typical of the Honduran peasantry in other regions witn small family farms, producing basic grains primarily for subsistence, were the basic units of production. There was more production of corn for the market than in the highlands. The local rural elite in the area subsisted on cattle ranching. This co-existence of small farming and extensive cattle ranching holds true in the Olancho area, in much of the South Coast, and in scattered valleys throughout other regions of the country. Some of the Aguan Valley was occupied by large banana and pineapple plantations. In other valley and coastal regions of Honduras there still are numerous large banana, sugar cane, and pineapple plantations.

In the Aguan Valley, the peasant is a semi-subsistence cultivator in the process of transition to commercial farming. The GOH is providing the infrastructural support for this transition. The trends in this area are planned for similar regions in Honduras, with good soil potential and low population density. Cooperatives with commercial and mechanized production have per family incomes of $350.00 while the other cooperatives average $225.00.

This region is a contrast to the West in land use, land tenancy and population density. Much less of the potential arable land is actually used. What is in use is more oriented to the market economy. There is little ejido land and much national land. And the population density, both relative and absolute, is significantly lower.

TABLE A.1 POTENTIAL LAND USE, IN PERCENTAGES *

		POTENTIAL USE		
		NATIONAL TOTAL	GRACIAS REGION	NORTH REGION
I.	Annual Crops	9.1	2.0	43.8
	A. Intensive Use	7.8	2.0	37.9
	B. Extensive Use	1.3	-	5.9
II.	Perennial Crops	7.8	28.0	-
	A. Intensive Use	-	4.2	-
	B. Extensive Use	7.8	23.8	-
III.	Forest Use	56.1	21.0	56.2
	A. Hardwood	29.5	2.1	46.2
	B. S/Beach	1.3	-	-
	C. Pines	25.3	18.9	10.0
IV.	Very Extensive Use	27.0	49.0	-
V.	TOTAL		100.0	100.0

*SOURCE: Caceres Pineda, M.A. Regionalization Agricola de Honduras

TABLE A.2 . ACTUAL LAND USE, IN PERCENTAGES *

REGION	Total Area	Annual Crops	Perennial Crops	Fallow	Natural Pasture	Cultivated Pasture	Forest & Under-ground	OTHER
National Total	100.0	14.4	7.9	9.2	17.3	28.9	19.0	3.3
Gracias Region	100.0	14.9	9.2	11.2	17.3	19.4	24.4	3.6
North Region	100.0	9.2	9.9	9.8	11.7	36.5	20.1	2.8

* SOURCE: Derived from Censo Nacional Agropecuario

TABLE A.3. AVERAGE FARM SIZE BY MANZANAS *

REGION	Number of Farms 1-49 mzas.	Area of Farms 1-49 mzas.	Avg. Farm Size 1-49 class	Number of Farms 50 +	Area of Farms 50 +	Avg. Farm Size
NATIONAL TOTALS	167,396	1,375,391	8.2	10,954	2,086,109	190.1
GRACIAS REGION	19,062	171,567	9.0	963	120,386	125.01
NORTH REGION	6,468	67,916	10.50	819	132,840	162,205

SOURCE: Censo Nacional Agropecuario 1965-1966

TABLE A.4 DISTRIBUTION OF FARMS BY SIZE, IN MANZANAS *

REGION	SIZE IN MANZANAS 1-4	5-19	20-49	50-	TOTAL
NATIONAL	187,660	599,230	588,501	2,086,109	3,461,500
TOTAL	5.4%	17.3%	17.0%	60.3%	100.0%
GRACIAS	22,255	78,216	71,096	120,386	291,953
REGION	7.6%	26.8%	24.3%	41.3%	100.0%
NORTH	6,102	28,845	35,960	132,846	200,762
REGION	3.0%	12.9%	17.9%	66.2	100.0%

TABLE A.5

COMPARISON OF TENANCY DISTRIBUTION OF FARMS: 1965*

TENANCY CLASS	NATIONAL TOTAL	%	GRACIAS REGION	%	NORTH REGION	%
FREEHOLD	1,598,800	46.2	80,141	27.6	76,769	38.2
NATIONAL	343,500	9.9	1,081	0.4	63,966	31.9
EJIDAL	542,700	15.7	139,624	47.8	18,842	9.4
RENTAL LEASED	176,000	5.1	5,800	2.0	5,589	2.9
FREE & NATIONAL	111,200	3.2	2,176	0.8	7,403	3.9
FREE & EJIDAL	230,000	6.9	31,106	10.6	2,692	1.3
NAT. & EJIDAL	42,400	1.2	1,160	.4	5,294	2.6
OTHER COMBINED	364,900	10.6	29,789	10.2	17,291	8.6
T O T A L	3,461,500	100.0	291,953	100.0	200,762	100.0

* SOURCE: Censo Nacional Agropecuario, 1965-1966.

ANNEX B: AN OVERVIEW OF THE HONDURAN EDUCATIONAL SYSTEM

A. Organization of Formal Instruction

1. Primary Education

There are six years of basic primary school, though some schools have one to three pre-primary years. In 1975, 93.5 percent of the estimated 492,000 primary school age children were enrolled. Ninety-five percent of this enrollment was in public schools. The public primary schools had 12,190 teachers and the private system had 855. Seventy-two percent of the 1,874 complete schools were located in the rural areas. However, 99.2 percent of the 2,728 schools with less than six grades were rural.

2. Secondary Education

Secondary education has two levels. The basic level, with three years of instruction, had 165 schools enrolling 48,442 students in 1975. The second, or diversified, level had 17,100 students of which 32 percent were in the general academic program, 12 percent in teacher training, 46 percent in commercial and secretarial programs, and 10 percent in technical and agricultural programs.

3. Post-Secondary Education

The only university in Honduras is the National Autonomous University of Honduras (UNAH), with a central campus in the capital city and two regional branches. Of the 10,635 students enrolled in 1975, 24 percent were in engineering, 15 percent in business administration, 13 percent in medicine, 11 percent in law and 11 percent in economics.

The Ministry of Education operates the Superior Teacher Training School to train secondary school teachers. Nine hundred and sixty nine students were enrolled in the school's four year program.

B. Organization of the Ministry of Education

1. Organizational Structure

The Minister of Education, appointed by the Chief of State, administers and implements policies, plans, programs, and educational standards. This office is directly responsible to the Chief of State for execution of actions and obligations.

The Vice Minister, also appointed by the Chief of State, collaborates directly with the Minister in decision making. He is directly responsible for the administration of the budget. There are seven General Directorates: Primary Education, Secondary Education, Vocational Education, School Construction and Maintenance, Adult Education, Art and Culture, and the Superior Teacher Training School. The directors of these constitute an Advisory and Policy Council to assist the Minister. Each one executes programs in his area

of responsibility.

Other Ministerial units include the Office of the Special Assistant, headed by the Director of Operations; General Administration; Personnel; Technical Education Services; and Transportation and Maintenance Services.

The Office of Integral Planning is directly responsible to the Minister of Education. This Office has responsibility for planning, gathering statistics, and research. An ad hoc Education Reform Commission has been functioning in the Ministry of the past four years. This group is responsible for reform of the curriculum and the restructuring of the education system.

2. Analysis of the Managerial Capacity

The Ministry of Education (MOE) has more than 1600 nonteaching employees in 7 major directorates. The quality of top management is adequate but the support personnel are in need of training in educational management, planning, research and evaluation. They are often former teachers with no preparation to perform the technical functions by the Ministry.

The tendency of MOE administrators is to unduly centralize control, causing delays in decision-making and the execution of activities. This system places a burden of non-essential decisions on administrators whose time is limited. This not only delays but on occasion thwarts decision-making. Development of standardized procedures, decentralization of decision-making, and design of a more effective post-audit system could materially reduce the load of high level administrators and the time required for decisions to be made and implemented.

As with most government agencies, the flow of information in the MOE is slow and haphazard. Though a substancial amount of information is collected every year, the data are seldom, if ever, utilized for purposes of policy and program formulation. Information processing is several years out of date and the usefulness of much of the data is questionable.

In order to alleviate the administrative constraints, it is recommended that:

1. Inservice courses be offered in administration, planning, project management and control, and research techniques.

2. An internal management analysis unit be developed, with the tasks of analyzing the administrative procedures of the Ministry, recommending improvements in the procedures, and developing detailed procedures to implement proposed changes.

3. An information system be designed in order to get needed data to decision makers in a prompt and effective manner.

C. Financing of Education

The main source of financing ordinary expenditures is the ordinary revenue budget, derived primarily from direct and indirect taxes. These are detailed in GOH budgets. Almost all of the direct expenditures on education in Honduras come from Central Government budget. Some municipalities devote a portion of their budget to classroom construction, but no figures are

ANNEX C: A "TYPICAL" RURAL PRIMARY SCHOOL

If one could characterize a "typical" rural primary school in Honduras today, it would be a school located in a caserio of forty to sixty houses, with an enrollment of about eighty students distributed over three to six grades. The assumption here will be that the school has four grades, two classrooms and two teachers. One teacher, has 43 students in first grade, and the other teaches 37 students in the second, third, and fourth grades.

This "typical" school was constructed with material indigenous to the region, and with asbestos roofing, cement, and iron reinforcements obtained from CARE through its self-help program. Although the school was constructed six years ago by parents and other community members in collaboration with two teachers, the building is now in need of repair. The roof leaks, the door closes with difficulty, and the outer wall needs plastering.

The school building is located on a half-acre of land donated by the municipality. There is currently a small flower garden, and a small vegetable garden is planned.

The internal appearance of each the two classrooms reflects the initiative of the respective teacher. Each has a piece of painted wood used as a blackboard. One teacher has enlisted the help of the parents to make long benches and desks; the other teaches in a classroom without desks. Some students are crowded onto long benches, while others sit on the floor.

The ages of the students vary; first graders range from 7 to 14 years of age, although most of the 13 and 14 year olds are in the upper grades.

Enrollment decreases sharply after the first grade. There are 40 percent as many second graders as there are first graders and the number of students in the fourth grade is 15 percent of the number in first grade. If the school were to be visited during harvest season there would be a noticeable reduction reduction in attendance as the majority of the students would be in the fields helping their parents. In fact, many students are out of school for two or three weeks during this period. During the rainy season, attendance may be lowered due to bad roads or foods. Indeed, the child who attends school regularly, only missing school when he or she is sick, is the exception rather than the norm.

Unlike the average rural teacher ten years ago, one of the two teachers at this school has a primary teaching degree from a Normal school. The other is in the process of getting his degree through the profesionalización program at the Superior Teacher Training College; he is in the second year of a five-year program. The first grade teacher has also attended two one-month inservice training courses given by the Office of Primary Education; one in math and the other in sewing and manual arts. In order to attend these courses, she has to leave the other teacher in charge of her students.

The instructional materials available at the school are limited; an incomplete set of the ODECA/ROCAP textbooks and teacher's guides has been received over the past few years. Other teaching materials available in the individual

classrooms reflect the initiative and ingenuity of each of the teachers. The first grade teacher has several wall hangings made of posterboard. In addition, she uses seeds, stones, and leaves for her manual arts class and to teach basic concepts in math. The walls of the other classroom, however, are still quite bare. While the teachers have managed to get a limited amount of paper supplies from the Office of Primary Education and the municipality, they buy most supplies needed out of their monthly salary checks.

Last year the auxiliary supervisor visited the school twice and sent four written communiques. One, which came at the beginning of the year, contained information on enrollments. Another, at the end of the year, reminded them of the procedure for final exams. Two that came during the year offered suggestions on how to carry out community fiestas.

The students arrive at 7:30 every day and remain in classes until 11:30. In the afternoon they return at 1:30 and leave at 4:40. While the morning classes are divided into 45 minute periods for Spanish, social studies, science, and health, most of the afternoons are devoted to manual arts and physical education.

In the morning, the teaching activities center around the blackboard. The teachers play an active, directive role and the students, a passive role; they listen, take notes, answer questions, and write at the blackboard when asked to do so by the teacher. Most of the lessons are based on the ODECA/ROCAP texts, although the first grade teacher also uses a set of teacher's grades written by the education reform commission (COREPLA). Her notes from the inservice course in Math provide her with a variety of practical ideas.

Rarely does learning take place outside of the four walls of the classroom; the two teachers have made few attempts to relate formal subjects to each other and to the manual arts and basic skills activities. Although both have read in the ODECA/ROCAP teacher's guides that they should make an attempt to do this, they object that it is "just rhetoric". The guides offer no practical suggestions as to how interrelate the activities.

During the afternoons, the majority of the girls and some of the younger boys learn embroidery and manual art skills. The older boys, meanwhile, spend most of their time with the second, third, and fourth grade teacher doing carpentry and weaving. In May, when the rainy season begins, all the students will spent one or two hours a week caring for the vegetable garden.

Attention to improving of health and nutrition practices have been minimal at this school, although all students receive a daily glass of milk distributed through SNAAM. While health and nutrition will be covered this year in the home economics class, the information imparted will be quite theoretical. Last year the school received a visit in March from the health center 50 kilometers away when they were carrying out their yearly vaccination campaign. They expect to receive another visit this year.

At this school there is close contact between the teachers and the community. In addition to visiting each student's house during the enrollment period, the teachers have organized a Sociedad de Padres de Familia that meets once a month. Three years ago the teachers helped the community organize its first patronato.

The teachers at this school have not offered literacy courses to adult members of the community. However, three years ago the first grade teacher organized a course in sewing for women in the community and this year she would like to try out some of the ideas she learned last year in the inservice teacher training course.

The parents of the students are positive about the school, although most are aware of little more than the fact that at school their children learn to read and write. When asked what they think of the texts, those that can read answer that they really don't know, as their child is not allowed to bring them home. Very few plan to send their children to secondary school as the nearest is too far away and too expensive.

When asked how accessible schooling is now as compared to when they were children, most parents reply that when they were young there were very few students; classes were held in one of the community houses; and there were no textbooks. The teacher who gave classes had himself only been to sixth grade. Several also commented that one of the big differences now is that in addition to having a school building and qualified teachers, there is even some choice of schools for their children. Although the community school is the closest, there is another primary school four kilometers away.

ANNEX D: TABLES AND CHARTS

Public Education Information Summary Chart

Primary Education Organization Chart

Total Urban and Rural Primary School Enrollment by Grade: 1968 to 1975

Age-Grade Distribution of Pupils in Rural Public Schools, Percentage in Each Grade, 1975

Total Primary School Enrollment by Age and Grade, 1975

Comparison of Population with Number of that Age Enrolled in Primary School

Enrollment in Primary Education by Grade and Area (Urban/Rural) in 1975

Public and Private Rural Primary Students Enrolled, Examined and Passes by Grade: 1974 to 1975

Number of Central Schools, Satellite Schools, Students and Teachers in the Central/Satellite Program - 1973 to 1975, 1976 and 1977 Projections

Number of Urban and Rural Primary Teachers by Public and Private Schools with Annual Rate of Change: 1971 to 1975

Total Urban and Rural Primary Teachers by Number of Grades Taught: 1971 to 1975

Number of Fully Qualified Urban and Rural Primary Teachers: 1971 to 1975

Number of Urban and Rural Primary Teachers by Sex, and Percentage of Female Teachers: 1971 to 1975

Number of Supervisors by Level and Qualification 1971 to 1976

Ministry of Education Budget, 1973-1975

Projected Estimate of Cost of Primary Education in 1980, Based on Estimated Growth of Gross Domestic Product and Central and Education Budgets

Costs per Student at Central Schools

Cost of Public Education 1975

Primary Education Expenditures as a Percentage of Total Education Expenditures

Percentage Distribution of Employed Population 1974

Economically Active Population 10 Years of Age and Over by Sex and Occupation, Number and Percentage 1974

Employed by Branch of Economic Activity, Population 10 Years of Age and Over

Percent Population 10 Years of Age and Older by Level of Educational Attainment and Sex: 1974

Radio Transmitters in Honduras, By Department

Approximate Number of Schools Receiving Food Supplies Through CARE's School Feeding Program, Number of Children Affected and Pounds of Food Distributed

Population Density by Department, 1961 - 1974

PUBLIC EDUCATION

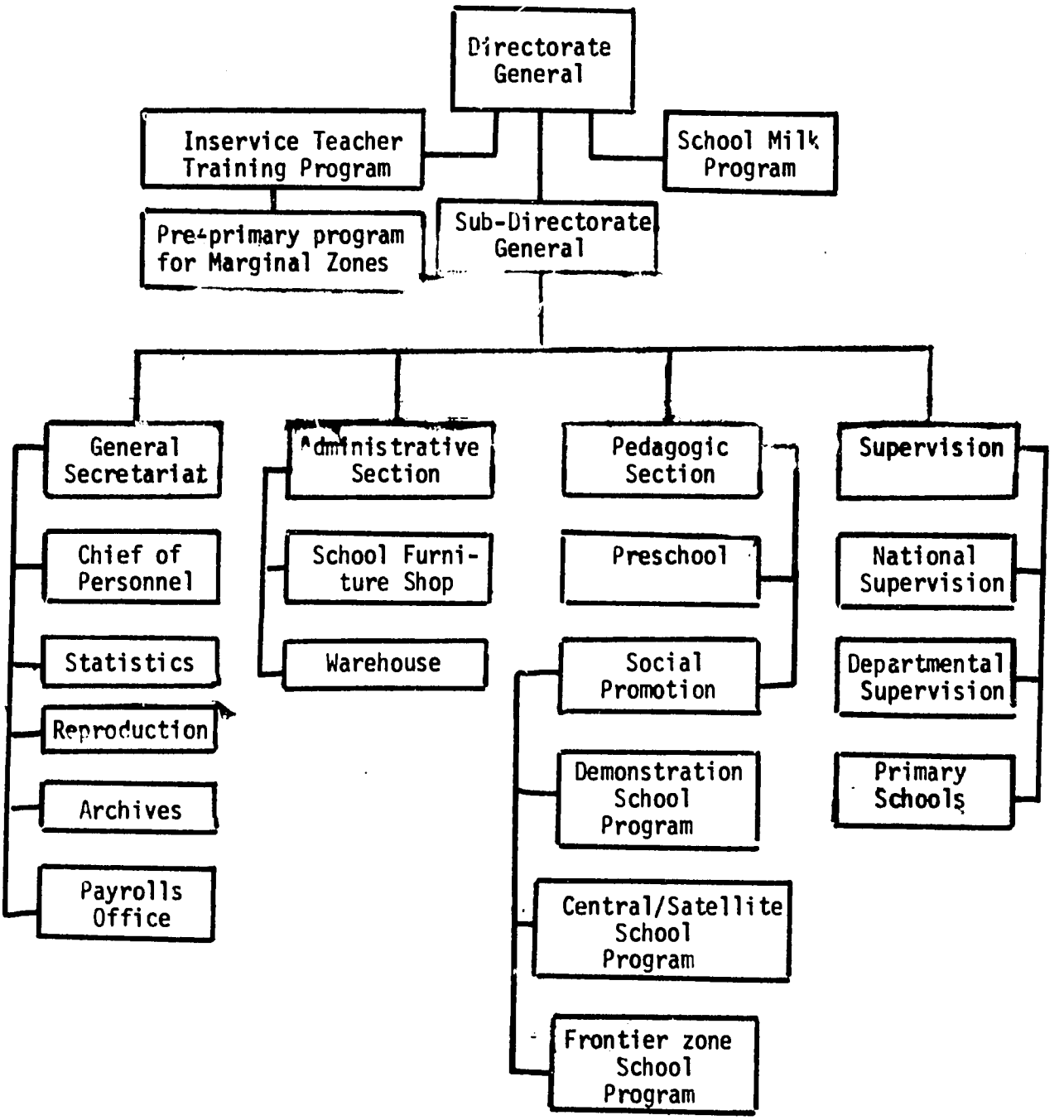
INFORMATION SUMMARY

CHART

According to Approved Budget for FY 1975

- SECRETARIAT
- SUB-SECRETARIAT
  - Office of Special Asst. to Ministry
  - General Admin.
  - Personnel Office
  - Education Tech. Services
  - Transportation & Maint. Services
  - Prim. Education Department
    - Directorate & Administration
    - School Feeding Assistance Pgrms.
    - Prod.Distrib. & Use of Educ. Material Service
    - Curriculum Dev. Center
  - Senior High School Department
    - Directorate & Administration
    - Junior & Senior High School & Teacher Education
  - Vocational Education Department
    - Directorate & Administration
    - Arts & Trades Educ.
    - Special Skills Workers
    - Agric. Education
    - Commercial Educ.
  - Sup.Teacher Trg. School "Francisco Morazán"
    - Directorate & Administration
    - Teacher Education Office
  - Maint.& School Const. Department
  - Arts & Cultural Ed. Department
  - Alphabetization & Health Education

PRIMARY EDUCATION ORGANIZATION CHART 1/



1/ Until 1976 the Materials Production Center was a dependency of the Directorate of Primary Education. The Center is now a part of the newly formed Directorate of Technical Support Services for Educational Programs.

SOURCE: Directorate or Primary Education, Ministry of Education

TOTAL URBAN AND RURAL PRIMARY SCHOOL ENROLLMENT BY GRADE: 1968 TO 1975

AREA AND GRADE	1968	1969	1970	1971	1972	1973	1974	1975
Primary, Total	376,966	392,670	384,856	392,658	412,050	420,714	444,192	459,925
Grade 1	134,472	139,923	135,258	135,738	147,476	146,286	158,336	166,338
Grade 2	83,876	83,563	83,800	84,760	85,933	91,856	93,666	94,361
Grade 3	64,925	65,580	62,398	62,557	65,656	66,427	70,613	72,689
Grade 4	42,111	47,250	45,562	46,366	47,780	49,307	51,482	53,292
Grade 5	30,024	32,145	33,034	35,461	36,224	37,546	39,693	40,943
Grade 6	21,558	24,209	24,804	27,776	28,981	29,292	30,402	32,302
Urban, Total	159,872	171,169	167,535	175,843	182,284	187,630	193,629	201,684
Grade 1	42,215	46,275	44,199	47,160	49,977	49,913	51,299	56,364
Grade 2	32,149	33,837	33,750	35,018	35,976	38,061	38,917	38,235
Grade 3	28,230	29,892	29,196	29,567	30,944	31,864	33,453	34,298
Grade 4	22,775	24,814	23,907	24,689	25,601	26,886	27,473	28,055
Grade 5	19,187	19,742	19,891	21,361	21,406	22,159	23,188	24,133
Grade 6	15,316	16,609	16,592	18,048	18,380	18,747	19,299	20,599
Rural, Total	217,094	221,501	217,321	216,815	229,766	233,084	250,563	258,241
Grade 1	92,257	93,648	91,059	88,578	97,499	96,373	107,037	109,974
Grade 2	51,727	49,726	50,050	49,742	49,957	53,795	54,749	56,126
Grade 3	36,695	35,688	33,202	32,990	34,712	34,563	37,160	38,391
Grade 4	19,336	22,436	21,655	21,677	22,179	22,421	24,009	25,237
Grade 5	10,837	12,403	13,143	14,100	14,818	15,387	16,505	16,810
Grade 6	6,242	7,600	8,212	9,728	10,601	10,545	11,103	11,703

SOURCE: Unpublished records in the Directorate General of Primary Education, Ministry of Public Education.

AGE-GRADE DISTRIBUTION OF PRIMARY SCHOOL ENROLLMENTS: 1975

GRADE	TOTAL	AGES 6 1/2	7	8	9	10	11	12	13+
1	166,338	20,704	61,612	34,233	20,167	12,884	7,783	5,105	3,850
2	94,361	367	10,526	30,060	20,052	14,166	8,340	6,345	4,505
3	72,689	1	294	8,741	22,750	15,786	10,731	7,773	6,613
4	53,292	0	1	321	6,748	16,071	11,788	9,197	9,166
5	40,943	0	0	28	320	5,271	12,445	10,372	12,507
6	32,302	0	0	0	2	245	4,316	10,972	16,767
TOTALS	459,925	21,072	72,433	73,383	70,039	64,432	55,403	49,764	53,408

SOURCE: Unpublished records in the Directorate General of Primary Education, Ministry of Public Education.

AGE-GRADE DISTRIBUTION OF PUPILS IN RURAL PUBLIC SCHOOLS, PERCENTAGE IN EACH GRADE, 1975

AGE	TOTAL NUMBER	TOTAL PERCENT	1	2	3	4	5	6
6 1/2	11,060	4.5	98.4	1.6	0	0	0	0
7	41,394	16.8	90.4	9.4	.2	0	0	0
8	40,386	16.4	54.6	37.3	7.9	.2	0	0
9	37,794	15.3	36.3	31.2	26.0	6.4	.1	0
10	34,277	13.9	27.9	27.2	23.0	17.4	4.4	.1
11	28,009	11.3	22.2	20.4	22.0	18.1	13.7	3.6
12	24,949	10.1	15.5	24.5	17.4	17.3	14.7	10.6
13+	28,892	11.7	11.3	11.8	15.5	18.1	20.6	22.7
	246,761	100.0						

SOURCE: Ministry of Education records.

TOTAL PRIMARY SCHOOL ENROLLMENT BY AGE AND GRADE, 1975

		GRADE					
AGE	TOTAL	1	2	3	4	5	6
6 1/2	21,072	98.3	1.7	-	0	0	0
7	72,434	85.1	14.5	.4	-	0	0
8	73,355	46.7	41.0	11.9	.4	0	0
9	70,039	28.8	28.6	32.5	9.6	.5	-
10	70,599	27.0	20.0	22.4	22.8	7.5	.3
11	55,403	14.0	15.0	19.4	21.3	22.5	7.8
12	52,006	9.8	15.9	15.6	17.7	19.9	21.1
13+	53,408	7.2	8.4	12.4	17.2	23.4	31.4

SOURCE: Ministry of Education Records

- Less than 0.1 percent

SCHOOL-AGE

COMPARISON OF POPULATION WITH NUMBER OF THAT AGE ENROLLED IN PRIMARY SCHOOL

1974 CENSUS		1975 ENROLLMENT		
AGE	NUMBER	AGE	NUMBER	% ENROLLED
6	86,982	7	72,433	83.3
7	84,881	8	73,383	86.4
8	82,823	9	70,039	84.6
9	80,754	10	64,423	79.8
10	78,749	11	55,403	70,4
11	76,880	12	49,764	64.2

SOURCE: Ministy of Education records.

ENROLLMENT IN PRIMARY EDUCATION BY GRADE AND AREA (URBAN/RURAL) IN 1975

	URBAN		RURAL	
	NUMBER	PERCENT	NUMBER	PERCENT
TOTAL	201,684	100.0	258,241	100.0
1	56,364	27.9	109,974	42.6
2	38,235	19.0	56,126	21.7
3	34,298	17.0	38,391	14.9
4	28,055	13.9	25,237	9.8
5	24,133	12.0	16,810	6.5
6	20,599	10.2	11,703	4.5

SOURCE: Ministry of Education Records, 1976

PUBLIC AND PRIVATE RURAL PRIMARY STUDENTS ENROLLED, EXAMINED AND PASSED BY GRADE: 1974 TO 1975

		1	2	3	4	5	6	TOTAL
	PUBLIC SCHOOLS							
1974	Initial Enrollment	103,556	51,690	34,395	21,586	14,401	9,526	235,154
	Examined	86,723	45,185	30,863	19,160	12,675	8,711	203,317
	Passed	62,460	37,774	25,984	16,851	11,287	8,319	162,675
1975	Initial Enrollment	107,279	53,994	36,329	23,435	15,300	10,424	246,761
	Examined	87,610	46,483	36,989	20,120	13,371	9,833	208,406
	Passed	63,158	38,572	26,130	17,421	11,905	9,338	166,524
	PRIVATE SCHOOLS							
1974	Initial Enrollment	3,481	3,059	2,765	2,423	2,104	1,577	15,409
	Examined	2,959	2,718	2,381	2,067	1,795	1,391	13,311
	Passed	2,324	2,217	1,950	1,689	1,525	1,329	11,034
1975	Initial Enrollment	2,695	2,132	2,062	1,802	1,510	1,279	11,480
	Examined	2,151	1,777	1,731	1,583	1,345	1,137	9,724
	Passed	1,718	1,391	1,399	1,299	1,063	1,084	7,954

SOURCE: Unpublished records in the Directorate General of Primary Education, Ministry of Public Education.

NUMBER OF CENTRAL SCHOOLS, SATELLITE SCHOOLS, STUDENTS, AND TEACHERS IN THE CENTRAL /SATELLITE PROGRAM - 1973 TO 1975, 1976 AND 1977 PROJECTIONS

ITEM	1973	1974	1975	1976	1977
CENTRAL SCHOOLS	34	34	73	123	250
SATELLITE SCHOOLS	170	170	365	615	1250
STUDENTS	19,701	21,654	48,000	65,530	137,250
TEACHERS	620	718	1,110	1,918	3,942

SOURCE- Unpublished records in the Directorate General of Primary Education, Ministry of Education

NUMBER OF URBAN AND RURAL PRIMARY TEACHERS BY PUBLIC AND PRIVATE SCHOOLS WITH ANNUAL RATE OF CHANGE: 1971 TO 1975

I T E M	1971	1972	1973	1974	1975
PRIMARY TEACHERS					
Primary Teachers, Total	10,957	11,354	11,712	12,302	13,045
Urban Teachers, Total	4,950	5,221	5,347	5,347	6,041
Public	4,502	4,747	4,879	5,135	5,536
Private	448	474	468	507	505
Rural Teachers, Total	6,007	6,133	6,365	6,660	7,004
Public	5,689	5,775	5,986	6,266	6,654
Private	318	358	379	394	350
PERCENT DISTRIBUTION					
Annual Rate of Change					
Urban	(NA)	5.5	2.4	5.5	7.1
Rural	(NA)	2.0	3.8	4.6	5.2

NA - Not available

SOURCE: Unpublished records in the Directorate General of Primary Education, Ministry of Public Education.

TOTAL URBAN AND RURAL PRIMARY TEACHERS BY NUMBER OF GRADES TAUGHT: 1971 TO 1975

AREA AND NUMBER OF GRADES	1971	1972	1973	1974	1975
PRIMARY TEACHERS					
Primary, Total	11,107	11,354	11,752	12,332	13,045
1 grade	5,535	5,783	5,970	6,304	6,513
2 grades	1,850	1,837	1,887	1,876	1,964
3 grades	1,826	1,571	1,681	1,679	1,782
4 grades	854	941	948	1,017	1,106
5 grades	371	454	445	491	505
6 grades	216	275	260	324	403
No assigned grade	455	493	561	640	772
Urban, Total	5,043	5,221	5,346	5,633	6,029
1 grade	4,151	4,388	4,482	4,629	4,708
2 grades	392	320	300	336	391
3 grades	72	57	54	81	95
4 grades	12	13	5	21	61
5 grades	2	5	6	4	53
6 grades	5	2	1	3	55
No assigned grade	409	436	498	559	666
Rural Total	6,064	6,133	6,406	6,699	7,016
1 grade	1,384	1,395	1,488	1,676	1,805
2 grades	1,458	1,517	1,587	1,540	1,573
3 grades	1,754	1,514	1,627	1,598	1.687
4 grades	842	928	943	996	1,045
5 grades	369	449	439	487	452
6 grades	211	273	259	321	348
No assigned grade	46	57	63	81	106

SOURCE: Unpublished records in the Directorate General of Primary Education, Ministry of Public Education.

NUMBER OF FULLY QUALIFIED URBAN AND RURAL PRIMARY TEACHERS: 1971 TO 1975

I T E M	1971	1972	1973	1974	1975
Fully Qualified Teachers, Total 1/	8,246	8,499	8,873	9,658	10,614
Urban	4,907	5,173	5,283	5,586	5,962
Rural	3,339	3,326	3,590	4,072	4,652
Non-fully Qualified Teachers, Total 2/	2,711	2,855	2,839	2,644	2,431
Urban	43	48	63	51	78
Rural	2,668	2,807	2,776	2,593	2,353
Percent Fully Qualified Teachers					
Urban	99.3	99.1	98.8	99.0	98.7
Rural	55.8	54.2	56.4	61.1	66.4

1/ Teachers with formal training in primary education who have graduated from a normal school or university.

2/ Teachers with primary school and possibly some secondary school education who have also completed professionalization courses or in-service training programs, or who have some years of practical teaching experience in primary schools.

NUMBER OF URBAN AND RURAL PRIMARY TEACHERS BY SEX, AND PERCENTAGE OF FEMALE TEACHERS: 1971 TO 1975

AREA AND SEX	1971	1972	1973	1974	1975
PRIMARY TEACHERS					
Urban, Total	4,950	5,221	5,347	5,642	6,041
Male	1,159	1,146	1,142	1,235	1,384
Female	3,791	4,075	4,205	4,407	4,657
Rural, Total	6,007	6,133	6,365	6,660	7,004
Male	2,002	1,958	2,051	2,101	2,334
Female	4,005	4,175	4,314	4,559	4,670
PERCENT DISTRIBUTION					
Percentage of Female Teachers					
Urban	76.6	77.5	78.6	78.1	77.1
Rural	66.7	68.0	67.8	68.4	66.7

SOURCE: Unpublished records in the Directorate General of Primary Education, Ministry of Public Education.

NUMBER OF SUPERVISORS BY LEVEL AND QUALIFICATIONS 1971 TO 1976

I T E M	1971	1972	1973	1974	1975	1976
Supervisors, Total	142	142	132	157	154	154
Departmental	18	18	18	18	18	18
Auxiliary	69	69	77	57	51	51
School directors who function as Auxiliary Supervisors	55	55	37	82	85	85
Full qualified Supervisors	76	76	73	53	44	44
Non fully qualified Supervisors	66	66	59	104	110	110

SOURCE: Unpublished records in the Directorate General of Primary Education, Ministry of Education.

MINISTRY OF EDUCATION BUDGET

1973 - 1975

(Millions of Lempiras)

	1973	%	1975	%
CURRENT				
Central Administration	1,187	2.2	2,168	3.2
Primary Education	32,548	61.1	39,647	58.0
Secondary Education	4,413	8.3	5,287	7.7
Teacher Training	931	1.7	1,588	2.3
Vocational Education	1,708	3.2	1,872	2.7
Adult Education	414	.8	693	1.0
National and International Organizations	7,870	14.8	12,049	17.6
Other	4,203	7.9	5,096	7.5
	53,274		68,400	
INVESTMENT				
Primary School Construction	1,060		—	
School Facilities and Educational Reform	5,693		6,553	
Normal School Construction	-		3,960	
Other	117		1,165	
	6,870		11,678	
TOTAL BUDGET				
Current	53,274	88.6	68,400	85.4
Investment	6,870	11.4	11,678	14.6
	60,144	100.0	80,078	100.0

PROJECTED ESTIMATE OF COST OF PRIMARY EDUCATION IN 1980,
BASED ON ESTIMATED GROWTH OF GROSS DOMESTIC PRODUCT
AND CENTRAL AND EDUCATION BUDGETS

	1974 Actual	1980 Estimated	Annual Growth Rate
Gross Domestic Product (GDP)	1,936.6	2,991.93	6%
Central Government Budget	329:1	583.0	10%
Gov. Budget as % of GDP	17.0	19.5	
Ministry of Education Budget	68.2	122.4	
% GDP	3.5	4.0	
% Government Budget	21%	21%	
Primary Education Budget	35.0 51.3	67.2 54.9	
School-Age Population (7-12)	491,069 1/	630,000 2/	
No. of Pupils (Total)	444,192	630,000	
% Population Enrolled (Apparent)	90.5	100.0	
Public School Primary Enrollment 3/	415,007	588,420	
Cost Per Pupil	84.33	106.70	4%

SOURCES

1/ 1974 Census, as adjusted for single ages.

2/ CONSUPLAN Population Projections.

3/ Assuming same percentage in public schools in 1980 as in 1974.

ANNEX

COSTS PER STUDENT AT CENTRAL SCHOOLS

A. Amortized Capital Costs per Central School

1.	Construction Multipurpose rooms (average 1.3 x $2,800; 20 year amorization)	$ 182
	Classrooms 1/	
	Training Center 2/	$ 20
2.	Equipment ($700; 10 year amortization period)	$ 70
3.	Furniture ($550; 10 year amortization period)	$ 55
4.	Training ($1,400; 10 year amortization period)	$ 140
	Sub-Total	$ 467

B. Operating Costs Per School

1.	Director 3/ (85 percent of $1,250)	$1,063
2.	Watchmen	$ 300
3.	Project start-up costs	$ 100
	Sub-Total	$1,463
	T O T A L	$1,930

C. Cost Per Student

Average Central school size: 312 students

$$\frac{\$1,930}{312} = \$6.19$$

1/ The cost of multipurpose rooms is included in the calculations. The cost of classroom construction has not been included in the calculations because classrooms are not required to implement the qualitative changes which make up the program. Rather the classrooms are required because of present overcrowding and because of expected increases in retention resulting from the project.

2/ The training center will cost $400,000 to build and will serve 2,000 teachers per year. The capital cost of each student place is thus $200. Assuming a 20 year life of the facility, the cost of each student place per year is $10. It is assumed that Central schools will send on the average two teachers each year for training.

3/ Directors at Central schools spend 85% of their working time on Central school activities and 15% on Satellite school activities. Directors will be relieved of teaching responsibility and will be replaced by a regular teacher. Thus the added salary would be that of a regular teacher, $1,250/year.

COST OF PUBLIC EDUCATION

1975

LEVEL	No. OF STUDENTS	BUDGET	COST PER STUDENT IN LEMPIRAS
Primary	435,861	39,013,932	89.51
Secondary	16,202	5,669,314	349.91
HIGHER			
University of Honduras	10,635	9,308,000	875.22
Higher Teacher Training School	969	243,190	250.97

SOURCE: Unpublished records in the Ministry of Education and the General Budget of the Republic Integrated by Programs, Fiscal Year 1975.

PRIMARY EDUCATION EXPENDITURES

AS A PERCENTAGE OF TOTAL EDUCATION EXPENDITURES

000's U.S.$

Year	(1) Expenditures on Primary Education	(2) Total G.O.H. Education Expenditures	(1)/(2)
1970	13,363.3	22,688.3	58.9%
1971	15,702.5	23,416.6	67.1%
1972	16,028.6	28,508.8	56.2%
1973	16,297.0	34,082.4	47.8%
1974	17,522.7	37,200.3	47.1%
1975	19,829.1	40,039.2	49.5%

MOE, 1976

OPIEH

PERCENTAGE DISTRIBUTION OF EMPLOYED POPULATION (1974)

AREA OF ACTIVITY	TOTAL	RURAL	URBAN
Agriculture 1/	56.8	82.2	14.0
Industry 2/	14.9	8.6	25.5
Services 3/	28.3	9.2	60.5
	100.0	100.0	100.0

Source: Estimates of Population and Housing for All of the Republic, Population and Housing Census, 1974; Ministry of Economy Directorate General of Statistics and Census, Honduras, C.A.

1/ Includes Forestry and Fishing

2/ Includes Mining and Construction

3/ Includes all Other Sectors

ECONOMICALLY ACTIVE POPULATION 10 YEARS OF AGE AND OVER BY SEX AND OCCUPATION, NUMBER AND PERCENTAGE (1974)

OCCUPATION	MALE		FEMALE	
	Number	%	Number	%
Total	615,270	100.0	127,810	100.0
Agriculture and Allied Occupations	411,617	66.9	4,508	3.5
Artisans and Machine Operators	68,295	11.1	31,276	24.5
Professional, Technical, and Related Occupations	19,073	3.1	15,852	12.4
Managers and Administrators	5,537	0.9	3,380	2.6
Clerical and Office Employees	14,766	2.4	9,012	7.1
Merchants, Salesmen, and Related Occupations	27,072	4.4	17,513	13.7
Personal Services	12,305	2.0	38,967	30.5
Other	56,605	9.2	7,308	5.7

Source: Estimates of Population and Housing for All of the Republic, Population and Housing Census, 1974; Ministry of Economy, Directorate General of Statistics and Census, Honduras, C.A.

EMPLOYED BY BRANCH OF ECONOMIC ACTIVITY
POPULATION 10 YEARS OF AGE AND OVER

AREA OF ACTIVITY	TOTAL		URBAN		RURAL	
	Number	%	Number	%	Number	%
Agriculture	422,071	56.8	38,700	14.0	383,371	82.2
Manufacturing	86,197	11.6	52,243	18.9	33,954	7.2
Services, Public	96,600	13.0	78,505	28.4	18,095	3.8
Commerce	63,905	8.6	51,691	18.7	12,214	2.6
Construction	22,292	3.0	16,309	5.9	5,983	1.3
Transportation Storage and Communications	21,549	2.9	16,586	6.0	4,963	1.1
Financial Establishments	6,688	0.9	6,358	2.3	330	0.1
Other	23,778	3.2	16,033	5.8	7,745	1.7
TOTAL	743,080	100.0	276,425	100.0	466,655	100.0

PERCENT POPULATION 10 YEARS OLD AND OLDER BY LEVEL OF EDUCATIONAL ATTAINMENT AND SEX: 1974

ATTAINMENT	TOTAL	MALE	FEMALE
Population			
Without education	38.8	38.1	39.5
With some education	60.4	61.1	59.7
Not specified	0.8	0.8	0.8
Primary, Years Completed			
1 - 2	16.1	17.2	15.0
3 - 4	19.9	20.0	19.8
5 - 6	16.7	15.9	17.4
Secondary, Years Completed			
7 - 9	3.5	3.5	3.5
10 - 12	3.5	3.5	3.6
Higher, Years Completed			
1 - 3	0.3	0.4	0.2
4 - 5	0.3	0.5	0.1
6 or more	0.1	0.1	0.1

SOURCE: Unpublished data from a 10% sample household survey carried out by the Directorate General of Statistics and Census as part of the 1974 National Census of Population and Housing.

APPROXIMATE NUMBER OF SCHOOLS RECEIVING FOOD SUPPLIES THROUGH CARE'S SCHOOL FEEDING PROGRAM, NUMBER OF CHILDREN AFFECTED, AND POUNDS OF FOOD DISTRIBUTED - 1973 TO 1976

ITEM	1973	1974	1975	1976
Approximate number of schools receiving food supplies	3000	3100	3200	2500
Number of children affected	265,000	235,000	240,000	180,000
Pounds of food distrituted _/	1,983.000	2,538.000	2,592.000	1,944.000

_/ In 1973 milk powder, soybean oil, bulgur, and WSB were distributed to schools in the Feeding program. Since 1974 the only food item distributed through the program has been WSB.

SOURCE: C.A.R.E.

POPULATION DENSITY BY DEPARTMENT

1961 - 1974

DEPARTMENT	Area in square kilometers (Km^2)	1961 Population	1961 Density Per Km^2	1974 Population	1974 Density Per Km^2
All of the Republic	112,088.0	1,884,765	16.8	2,653,857	23.7
Francisco Morazán	7,946.2	284,428	35.8	451,778	56.9
Atlántida	4,251.2	92,914	21.9	148,440	34.9
Colón	8,874.8	41,904	4.7	77,239	8.7
Comayagua	5,196.4	96,442	18.6	135,455	26.0
Copán	3,203.0	126,183	39.4	151,331	47.2
Cortés	3,954.0	200,099	50.6	373,629	94.5
Choluteca	4,211.0	149,175	35.4	192,145	45.6
El Paraíso	7,218.1	106,823	14.8	140,840	19.5
Gracias a Dios	16,630.0	10,905	0.7	21,079	1.3
Intibucá	3,072.2	73,138	23.8	81,685	26.6
Islas de la Bahía	260.6	8,961	34.4	13,227	50.8
La Paz	2,330.6	60,600	26.0	65,390	28.1
Lempira	4,289.7	111,546	26.0	127,465	29.7
Ocotepeque	1,680.2	52,540	31.3	51,161	30.4
Olancho	24,350.9	110,744	4.5	151,923	6.2
Santa Bárbara	5,115.3	146,909	28.7	185,163	36.2
Valle	1,564.6	80,907	51.7	90,954	58.1
Yoro	7,939.2	130,547	16.4	194,953	24.6

SOURCE: National Population and Housing Census, Preliminary Figures, Ministry of Economy, Directorate General of Statistics and Census, Honduras.

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