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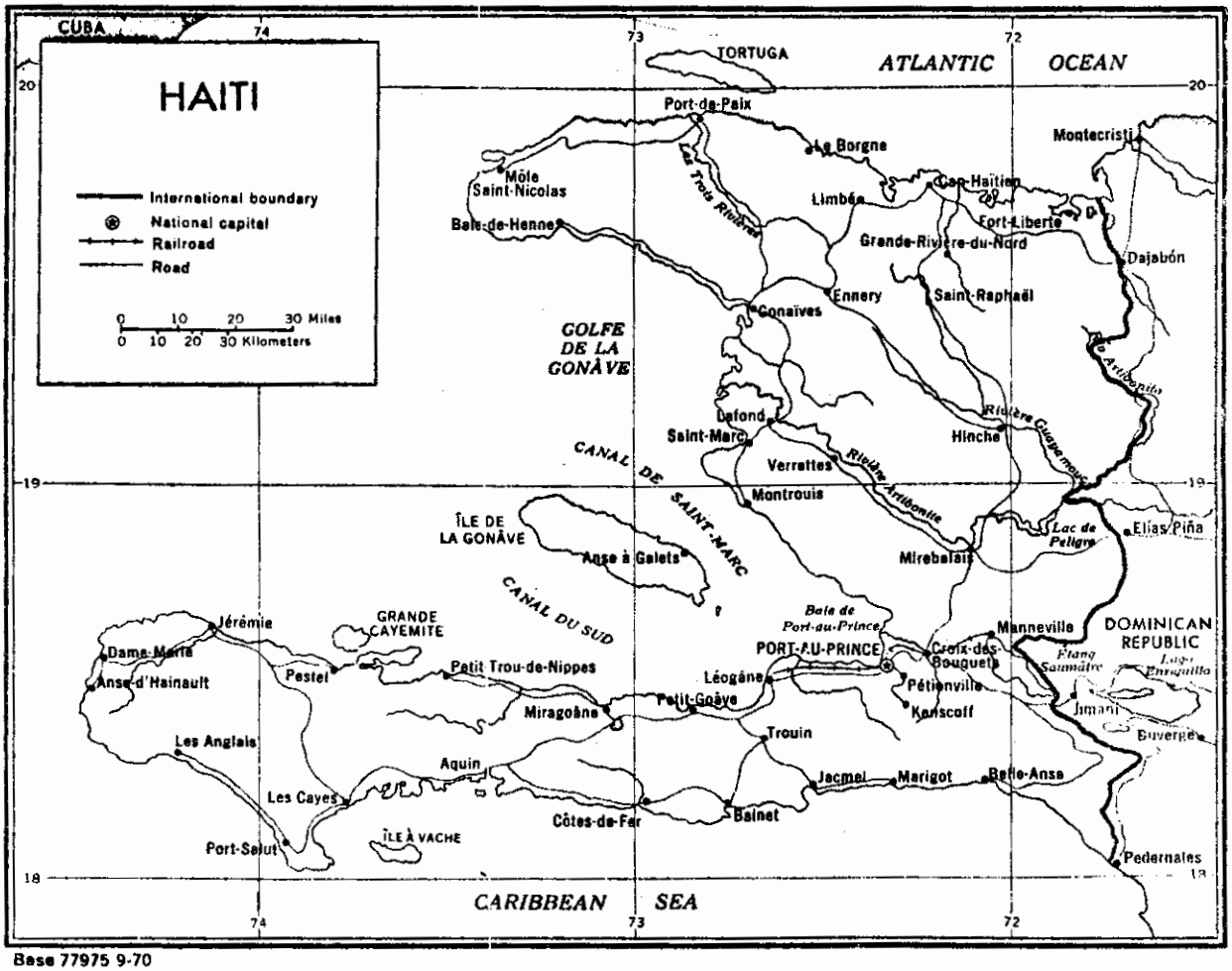
CONTENTS

		Page
I.	INTRODUCTION	1
II.	ECONOMIC AND FINANCIAL SETTING	
	Economic Overview	3
	Balance of Payments	7
	Foreign Trade	9
	Public Finance	12
III.	HAITI'S RURAL POOR	18
IV.	PROBLEMS, CONSTRAINTS, STRATEGIES	30
V.	HAITI'S DEVELOPMENT EFFORT	
	Five Year Plan and Role of the National Planning Council (CONADEP)	35
	Concerns and Attitudes of the Haitian Government and the Haitian Public	43
	Degree of Commitment	45
VI.	PL 480 TITLE I	46
VII.	OTHER DONOR ASSISTANCE PROGRAMS	
	Multilateral and Bilateral Assistance Programs	50
	Private and Voluntary Organizations	62
VIII.	PL 480 TITLE II	65
IX.	RURAL SECTOR	
	Agriculture and Agro-Industry	69
	Strategies for Overcoming Constraints to Agricultural Sector Development	80
	Agricultural Development Strategy	88
X.	ENVIRONMENTAL SECTOR	
	Soil Erosion and Prospects for Land Reforestation	93

		Page
XI.	POPULATION, NUTRITION, HEALTH	103
	Population	104
	Nutrition	109
	Health Development	117
XII.	EDUCATION AND HUMAN RESOURCES DEVELOPMENT	
	Analysis of the Sector	122
	Specific Projects and Programs	134
XIII.	INTERSECTORAL ACTIVITIES	
	Public Administration	139
	Research and Studies	142
	Urban Sector	145
XIV.	ALTERNATIVE STRATEGIES	147
XV.	SUMMARY AND CONCLUSIONS	151
XVI.	PROGRAM LEVEL AND MANPOWER REQUIREMENTS	170
XVII.	STATISTICAL ANNEX	178



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I. INTRODUCTION

Haiti, as it starts its third five year development plan, has much to be proud of -- a record of being the first black republic in the world to gain its independence from a European power, an educated elite with an exceptionally strong intellectual heritage, and a tradition of self-reliance and individual initiative. Despite its sense of pride, Haiti is ill-equipped to tackle the tremendous problems of poverty and overpopulation which it faces as one of the 25 least-developed countries in the world. The literacy rate is only 10% and there are no effective channels by which the French-language oriented government communicates with the Créole-speaking rural population. Government administration is extremely weak and government revenues are not rising as fast as the GDP or the rate of inflation. There is a long history of indifference on the part of the government and the urban elite to the problems and concerns of rural Haiti.

As seen through official Haitian eyes, the country is now involved in an economic revolution following the successful completion of François Duvalier's political revolution. In a country with a long history of division between a social and educational elite which is largely mulatto and the rest of the country, François Duvalier stressed Haiti's African heritage and proclaimed himself the representative of the black majority of the country. Following his election to office in 1957, President François Duvalier was faced with a number of internal and external challenges to power and the country was subject to tremendous social turmoil. Opponents to the regime were eliminated or forced to leave the country, the civil service was purged, the press was rigidly controlled, a paramilitary organization -- the Tonton Macoutes recruited largely from the rural and urban poor -- was created and effectively controlled the countryside. Only a few development projects were completed -- Péligre hydropower project, the international airport, and the paving of the road to Léogane. International aid to Haiti was terminated, production and national income decreased, government revenue fell and funds were diverted to nondevelopment purposes.

The events of this period have left, by and large, only a shell of an effective government organization. While many highly qualified Haitians still remain in the government, they do not (with some praiseworthy exceptions) work full time at their assigned tasks. There has been no general salary increase for the civil service in nearly 15 years despite a staggering increase in the cost of living. Civil servants have adapted their conduct to this fact of life. Most civil servants hold outside jobs and devote only a small number of hours per day to their government work or they use their positions improperly to supplement their official pay.

If an official wants to push a program vigorously, he finds that there is practically no money for operating expenses. Public administration problems are not limited, of course, to a shortage of funds; they are deeply imbedded in the political and social structure of the country.

Even if it had an efficient and well-motivated civil service, Haiti would have great difficulty in bringing change and progress to its rural population. Over the years, the rural sector of Haiti has evolved into a world of its own. The traditional regional market towns have lost their economic importance and Haiti consists of a rural sector which depends directly on the burgeoning "Republic of Port-au-Prince" which in turn faces very serious problems of supplying even minimally adequate basic services to its rapidly growing population.

Thus, this DAP examines the A.I.D. mandate of helping the poor majority who are the rural poor of Haiti within the broader context of the need to create a viable economy and an effective political and administrative structure and of Haiti's concern that international assistance not infringe on Haiti's hard-won victory to be master in its own house.

II. ECONOMIC AND FINANCIAL SETTING

Economic Overview

Haiti entered the 1970s in the twilight of Dr. François Duvalier's presidency. The country had undergone a steady decline in per capita income, deterioration of public institutions, disintegration of basic infrastructure, continuing population growth, and accelerating environmental problems. In the six years of Jean-Claude Duvalier's presidency, there has been a conscious attempt at economic development and some real progress:

-- Significant progress in observance of fundamental human rights has encouraged donor nations and institutions to initiate and rapidly expand assistance programs.

-- Progress in reconstruction of basic infrastructure, e. g., roads, is continuing.

-- Improvement in public administration has occurred. The effectiveness of the Minerals Institute (INAREM) provides a fine example of the accomplishments possible with an adequately trained and well-paid staff.

-- The long-term decline in GNP and per capita income has been reversed. The real rate of growth (an average of approximately 2% per year for the past five years) is minuscule but, if sustainable for five to ten years, could provide a basis for movement through the predevelopment stage.

-- The tourist industry provides an important source of foreign exchange.

-- The light industrial sector is growing steadily although slowly and now employs approximately 35,000 workers. It is the country's most dynamic sector and offers the greatest opportunity for increasing productivity.

-- A significant number of young Haitians have returned to Haiti, bringing with them greatly needed technical skills.

-- High world prices for coffee, Haiti's principal export, enabled Haiti to end 1976 with a significant balance of payment surplus. A small surplus or equilibrium is expected in 1977, despite a series of natural disasters.

Nevertheless, there are fundamental weaknesses in the economy and in its management:

-- Agricultural output on a per capita basis is not increasing and larger quantities of imported foods are needed to prevent starvation.

-- Once a major exporter of sugar, Haiti became a net importer in 1976 - 1977 and no improvement is in sight.

-- Coffee is Haiti's most important export but production remains primitive, quality is uneven, and output is variable. The 452,000 bag export of 1975 - 1976 was a significant improvement over the ten-year average of 350,000 bags but was far less than the 800,000 bags exported in 1910. Exports in 1976 - 1977 dropped back to about 320,000 bags.

-- The foreign investment that is needed to accelerate growth of the light industrial sector is discouraged by bureaucratic obstacles.

-- There is no real budget process.

-- The balance of payments surplus in 1976 was achieved because capital account, invisible receipts, and transfers brought in about $67 million.

-- Abuse of the environment is accelerating and the long-term costs of the abuse will pose formidable obstacles to a development effort.

-- Haiti's taxes are highly regressive. Relatively low customs duty rates on imported luxury items are a sharp contrast to the high taxes on agricultural exports.

-- Consumer prices in Haiti have been increasing at about 18% per year for the past five years.

Current Situation and Near-Term Outlook

The expanded programs of donor assistance began to have a significant impact on Haiti in 1975. These programs are largely responsible for the real, albeit small, growth rate of recent years. The anticipation that they will continue provides Haiti with time to develop basic infrastructure and undertake basic reforms.

Balance of payments problems are not anticipated in 1977 but could emerge in 1978. Light industrial exports are expected to grow slowly. Coffee exports should increase but probably not fast enough to offset anticipated declines in record world prices. The food gap is expected to grow steadily. Invisible receipts and transfers probably will continue at a high level. Tourism probably will grow slowly.

Public finance is chaotic and central financial institutions have a limited role in mobilization of funds. Most fiscal activity is managed through a system of about 400 special accounts at the National Bank which are not subject to programming and audit procedures.

There is some indication that the Government recognizes the seriousness of the problem in that the notoriously corrupt director of the Régie du Tabac et des Allumettes (tobacco and match monopoly), the largest single extrabudgetary activity, was exiled in September 1976. In March 1977, a presidential decree directed that 50% of the Régie's profits be used for development purposes. Nevertheless, a major overhaul of Haiti's revenue and budgeting system remains the essential prerequisite to any serious attempt to mobilize resources for development.

Light industrial production has been the most dynamic sector of Haiti's economy and is expected to continue to grow faster than other sectors. Based on Haiti's most abundant resource, which is its all but inexhaustible supply of low-cost labor, it offers the best base for major productivity increases. However, major improvements in public administration, particularly in the Department of Commerce and in the Customs Service,are needed if there is to be much change in the slow but steady flow of domestic and foreign capital into the sector.

Haiti remains geologically unexplored and there is a remote possibility of commercially exploitable minerals. (Copper deposits exist in Northern Haiti but two foreign companies have not yet been able to find deposits which can be developed on an economic basis.) Petroleum exploration is under way and may continue for a short time. However, the three dry holes drilled recently in Haiti's biggest and best structures suggest that petroleum is unlikely to be a growth factor. Bauxite exports from the small mine at Miragoane remain the only proven mineral resource. The mining company estimates that annual production of 600,000 tons can be sustained for five to six years.

Long-Term Outlook

One can postulate that Haiti will move through the predevelopment stage in eight to ten years if

-- foreign donors continue assistance programs at about the present level;

-- the government undertakes necessary reform measures;

-- appropriate programs are developed to protect the environment;

-- agricultural productivity increases.

Balance of Payments (Table II.8)

Haiti has followed a relatively conservative "19th century" policy in the balance of payments field. The Haitian currency (the gourde) is for all practical purposes freely convertible with the U. S. dollar -- five gourdes for one dollar -- and the Government has imposed relatively few quantitative restrictions on imports.

The development process places strains on the balance of payments position of less-developed countries and Haiti is not exempt from such problems. However, there are also a number of offsetting favorable factors which could help Haiti to overcome adverse developments.

On the favorable side:

-- The National Bank does not provide rediscounting facilities and it is therefore not possible for banks to expand credit. This would harm the balance of payments situation with money created by the National Bank.

-- A number of American and other foreign banks have been established in the country and they obtain part of their working funds from their home offices, thus providing foreign exchange to Haiti and giving some assurance to their customers in Haiti that deposits in Haiti will remain convertible.

-- The National Bank has a tradition of independence and has placed relatively strict limits on borrowing by the Haitian Government. The International Monetary Fund has a representative in Haiti who monitors this matter very closely.

-- The Haitian public and the international business community have confidence in the gourde at its present ratio of 5 gourdes to the dollar.

-- Net current transfers into the country have been rising and are expected to continue doing so. They attained 27 and 40 million dollars, respectively, in 1974 and 1975. The latter amount represented 4.6% of GDP. Private and government sources contributed about equally to the transfers. Substantial private funds were repatriated by Haitians overseas or returning to the country. Government transfers were mostly for economic assistance.

-- Expansion of domestic credit was achieved through overseas borrowing by the banking system, whose liabilities grew by 40 million dollars. This credit was used for short-term loans to the private sector.

-- Amortization of official credits is small and debt service burden presents no problem as of now. Current service and amortization requirements and future projections are shown in Tables II.9-12.

On the unfavorable side:

-- Net foreign reserves of the banking system reversed their positive flow in 1973. In 1975, the net negative flow reached $23 million and the negative level of reserves was $24 million in September 1975 (Table II.13). The situation improved in 1976 and reserves are now positive.

-- There are indications, according to the World Bank report on Haiti, that growing profits from industrial and construction activity are encouraging Haitians to export capital.

-- Exports ceased to grow in 1975. In real terms, exports have actually declined about 2% annually since 1970, led by the traditional agricultural exports. This has offset gains from tourism and the net gains from the growing export of light manufactured assemblies. The gross value of these rose from $13 million in 1971 to $38 million in 1975; with a net 50% domestic value added.

-- A high elasticity of imports to GDP which has resulted in a steady growth of imports: 9% per year in real terms. Imported nonessential goods attained $30 million in 1975 and exceeded imports of capital goods.

Despite these potentially troublesome factors, if the institutional setting described above continues, the balance of payments deficit should reflect primarily "self-financing" factors, e. g., imports generated by emigrant remittances will be financed by these same remittances; trade deficits caused by imports of donor-sponsored investment commodities will be financed by the foreign donor. Thus, we do not believe it is feasible to prepare a balance of payments "gap analysis" of uncovered deficits for future years since the deficits should be to a large extent of the "self-financing" category.

Foreign Trade

Exports

Gross exports, in current prices, rose from $44 million to $93 million between 1970 and 1975. After deducting the value of foreign inputs to assembly exports, the net increase was $35 million, i. e., from $40 million to $75 million, or 87%. World price movements caused much of the increase. However, in real terms, using a deflator of 169.7, the net real increase was about $4 million, or 11%. The weak components were agriculture and mining (bauxite exports rose but copper exports ceased after 1972). Growth occurred in small industries and handicrafts, chiefly industrial assemblies. The pattern of exports is shown, in current prices, in Tables II.14-16.

Traditional exports are coffee, sugar and molasses, cocoa and sisal. Together with essential oils, they accounted for $24 millions of exports in 1971 and $33 million in 1975. They represented 82% and 53% respectively of agricultural and total exports in 1971. In 1975 they represented 82% and 45%, respectively. In the same period, agricultural exports fell from 64% to 55% of total exports. The relative fall in traditional agricultural exports accounts, therefore, for the reduced importance of agriculture in total exports.

Agricultural exports are subject to the vagaries of international prices, export taxes and control by middlemen. Coffee has traditionally accounted for one-third of Haiti's export earnings. For the above reasons, during the last decade although world prices rose, earnings to coffee producers did not rise correspondingly and production has fallen. Efforts are being made to reverse this trend. The export tax was changed from a specific to an ad valorem basis after 1973 and the government, with assistance from A.I.D., has initiated a comprehensive program to assist coffee growers.

The major growth export has been handicrafts and small industrial products. Haiti has become a major producer of baseballs and has developed an important industry in small assemblies. Both are made from imported components. Some 20,000 Haitians are employed, mostly in Port-au-Prince.

The net value added of these exports more than tripled from 1971 to 1974 when they accounted for $21 million out of $73 million total exports or 29%. They only dropped by about 5% during the 1975 international recession. The World Bank suggests that they could continue to grow annually by 10% to 15% until 1980. This would provide employment to between 15,000 and 20,000 Haitians.

The chief service export is tourism, not included in Tables II.14,15 but shown in the text table below.

TOURISM: SOME INDICATORS OF TRENDS, 1973 - 1975

Year	Number of Tourists ('ooo)	Number of Excursionists ('ooo)	Total Expenditures ('ooo)
1973	43.7	143.1	16,767
1974	47.5	188.0	18,486
1975	47.5 (est.)	188.0	21,844

Source: Haitian National Tourist Office, in World Bank Report No. 1243-HA 1976 Table 29

About 47,000 tourists and 188,000 excursionists visited Haiti in 1975, from which $22 million in gross foreign exchange was earned. The import content of goods is estimated at between 15% and 30%. Thus, tourism provided at least $13 million in net foreign exchange. Growth prospects are modest until better internal transportation and hotels are available. Meanwhile, some 6,000 people are employed, chiefly in Port-au-Prince.

Imports

Total annual imports are shown in Table II.17 to have grown from $59 million (296 million gourdes) to $136 million dollars (681 million gourdes) in 1975, an increase of $77 million or 130%, considerably outstripping the 87% increase in net exports. The detailed composition of imports is shown in Table II.18. Shown below are the total, capital and nonessential imports.

MAJOR COMPOSITION OF IMPORTS
(In current dollars)

	1971	1972	1973	1974	1975	Annual Change
Total imports	59.2	65.8	76.7	111.3	136.2	+ 21%
Capital Goods (Machines and Transport only)	10.4	11.4	14.0	18.0	27.5	+ 27%
Percent of Total	18%	17%	18%	16%	20%	
Nonessential Imports	-	-	-	28.4	30.3	
Percent of Nonessentials	-	-	-	25%	22%	

Capital goods (including automotive) accounted for between 18% and 20% of imports. Nonessential imports (including passenger cars) accounted for 25% and 22% of the total imports in 1974 and 1975, respectively. Both categories approximately maintained their shares of the total during the rapid rise in imports in 1974 and 1975. Raw materials quadrupled between 1970 and 1975 but only account for 8% of imports.

The pattern of foreign trade is one in which the trend favors the urban areas at the expense of the rural areas. The increase in imports has been heavily weighted towards nonessentials for the urban population. Only capital goods, to the extent that they improve transport to rural areas, are of benefit to the rural population.

Public Finance

Administrative Organization

Resources for public expenditures are mostly generated by three agencies: the Revenue Administration (AGC); the Customs Administration (AGC); and the Régie du Tabac. In addition, the National Bank (BNRH) has a number of key roles. It acts as a national treasury, receiving and dispensing revenue and customs receipts allocated to the Operational Budget. It also maintains special accounts for the above three and for certain other government agencies, amounting in total to as much as the Budget revenues.[1/] The National Bank also performs the central banking process and, additionally, functions as a commercial bank. The Bank is independently powerful. Although the Secretary of State for Finance is Honorary President of the Board of Administration of the Bank, he has no vote.

In addition, there is a Ministry of Finance which exercises much less than normal authority. The Ministry manages the Operational Budget but in 1975, only 83% of revenue and 36% of customs receipts are estimated to have been allocated to the Operational Budget. The remainder, along with other extrabudgetary collections, were dispensed through special accounts by the National Bank without passing through the budgetary process, thus bypassing any possibility of effective coordination or control. Indeed, the authority of the Ministry of Finance is so limited that in 1975 only 47% of total revenues and 31% of total expenditures were accounted for in the Operational Budget. The trend has been downward since 1971, when the figures were 59% and 49%, respectively (see Table II.19). From this trend, the World Bank has inferred that extrabudgetary accounts enjoy a higher priority than the budget.

The Régie du Tabac produces revenue in two ways:

-- from sale of its products,

-- from a variety of excise taxes, known as "commissions," which it imposes on many local and imported goods.

Its revenues can only be estimated. They amounted to about 15% of total revenues, or about 80 million gourdes in FY 1975. (Five gourdes equal one dollar.)

1/Budget revenues = revenue collected for the account of the Ministry of Finance which is available to finance the Operational Budget (Budget de Fonctionnement).

According to the World Bank, CONADEP has responsibility for planning the use of only 29 million gourdes (13%) of the 214 million gourdes spent on development. The remaining 87%, or 201 million gourdes, were not subject to CONADEP's planning system. However, CONADEP's major current power derives from its influence over decisions on the use of aid provided by foreign donors. (See Table II.20)

Analysis of Fiscal Operations

Overall Situation

Table II.20 shows that Haitian fiscal activity is composed of both budgetary and extrabudgetary revenues and expenses. Since the latter are unusually large, an overall assessment of Haitian public finances must include both budgetary and extrabudgetary elements.

Taken as a whole, fiscal deficits rose in five years, 1971 to 1975, from 47 million to 191 million gourdes. The deficit to gross domestic product ratio, in the same period, rose from 2.1% to 4.4%. Table II.19 shows that the deficit, after declining to 25 million gourdes in 1973, rose sharply to 106 million in 1974 and 191 million in 1975. In the same two years the nominal Gross Domestic Product (GDP) also rose sharply by about 50%, but was outstripped by the deficit increase of 65% This deficit reflects both the low increase in government revenue and the rapid increase in development expenditures financed by foreign donors.

From 1971 to 1975 total revenues rose by 80%, while total expenditures outstripped the rise in revenues by increasing a total of 115%. In both cases the sharpest rise has occurred since 1973. Development expenditures accounted for nearly half of the total expenditure growth. Current operating expenditures actually declined slightly in real terms. The revenue structure and administration appear to be too inflexible to capture the potential increase in revenues resulting from the rise in GDP. Some of the widening gap between revenues and GDP may be accounted for by the time lag between development expenditures, particularly for infrastructure, and the resulting growth of taxable activities.(see tables II.21,22).

The Government of Haiti has covered the deficits by internal and external borrowing and by foreign grants donated both by official agencies and by private organizations. These are shown in Table II.23. In 1975 foreign borrowing and grants rose sharply while domestic borrowing declined correspondingly.

Revenues

Total revenues rose 8.3% annually between 1971 and 1974. In examining the revenue trend, 1975 receipts must be omitted because they included, among extrabudgetary revenues, a large payment of back bauxite export taxes. In real terms, revenues actually dropped between 1971 and 1974 by 4% annually, of which 3% in budgetary and 6% in extrabudgetary revenues. The revenue to GDP ratio declined from 11.8 to 9.3 percent. This compares unfavorably with 13.7% for a standard small size country derived by the World Bank. However, the Bank states that the ratio for most Central American countries is closer to that of Haiti.

The composition of budgetary revenues, in current prices, is shown in Table II.24 and the percentage contribution of each to total tax revenues in Table II.25. Note that the difference between budgetary and tax revenues is minor.

Indirect taxes provided between 63% and 80% of tax receipts in 1975, depending upon the interpretation of each of the "Other" taxes. Customs receipts are the most important indirect tax and yielded 50% of tax revenues in 1975. This relative importance of customs receipts has been slowly declining. In 1971 they provided 56% of budgetary tax revenues.

Excise taxes have declined from a peak yield in 1973 of 41 million gourdes, or 22%, to 29 million in 1975, or only 13% of total tax revenues. This decline resulted from detaxation of essential foods such as flour and sugar.

Other tax revenues, chiefly I. D. cards,registry, motor vehicle and stamp taxes contribute 16% to total tax revenues. Although their relative contribution is small, they have almost doubled since 1971.

The yield from direct taxes is small but income tax receipts have tripled in 4 years, mostly from taxes on profits of enterprises. The growth of enterprises is providing a new and potentially important source of revenue.

Export taxes have traditionally been a source of customs revenue in many developing countries which export raw materials and agricultural products. Haiti is no exception. Tables II.24,26 show that export taxes accounted for 30.9 million gourdes in 1975, 14% of total budgetary tax revenues. Most of this was derived from coffee. This rose progressively but rather modestly by 18% in 4 years.

The structure and pattern of taxes and tax receipts is highly regressive but not unlike that of most small developing countries. The collection of small amounts of direct taxes from many individuals is both expensive and beyond the administrative ability of such countries.

In view of the importance of customs revenues, some additional analysis is provided. Fortunately, information is available for all customs revenues, budgetary and extrabudgetary. Imports and duties showed the following trends:

	1971	1972	1973	1974	1975	1971-75 Change	
		(in million of Gourdes)				Amount	Percent
Duty-exempt imports	82.2	99.4	93.7	203.7	274.8	192.6	234%
Taxable imports	214.0	229.8	289.6	352.9	406.0		
Total import duties	114.2	117.6	127.5	148.7	212.8		
of which budgetary duties	61.8	64.8	70.4	76.1	79.3		
Change in taxable imports	-	7.4%	26%	22%	15%	192.0	96%
Change in import duties	-	2.9%	8.4%	17%	43%	98.6	86%
Change in budgetary duties	-	4.8%	8.6%	8.1%	4.0	17.5	28%
Ratio of import duties to taxable imports	53%	51%	44%	42%	52%	-	-

The import yield from taxable imports declined until 1974, then rose again to nearly the same level as in 1971. During this period, duty-exempt imports rose by 234%, most of it in the last two years, probably accounted for by the expansion of development and infrastructure projects. The fluctuation in import duties may be related to many factors, among which

-- Accuracy of valuation,

-- Efficiency of collection,

-- Changes in the mix of imports,

-- Specific duties which are changed only at intervals of several years,

-- Fraudulent duty exemptions under the guise of development imports,

-- Errors in customs statistics.

The World Bank suggests that import duties could have been increased by 77 million gourdes in 1975 by the following measures:

	Millions of Gourdes
Strict application of ad valorem rates	29.8
Selective increase in duty rates	42.6
Elimination of some exemptions	4.3
Total	76.7

Of great significance is the small proportion of budgetary duties in relation to total import duties, 54% of the total in 1971 and 37% in 1976.

Expenditures

From 1971 to 1975 total annual expenses of the Central Government more than doubled, increasing by 114%. In this total, budgetary expenses increased by 34% and extrabudgetary expenses by 191%. Consequently, the extrabudgetary share of the total passed from 51% in 1971 to 69% in 1975. In constant prices, budgetary expenditures actually fell by 12% from 152 million gourdes to 120 million, while extrabudgetary expenditures rose by 69% from 158 million to 272 million gourdes. Total expenses rose 26% from 211 million to 393 million gourdes (table II.28).

Most of the expenditure increase occurred in 1974 and 1975, principally in the extrabudgetary operating (+ 47 million gourdes or + 46% over the 1971 level) and in development expenditures (+ 50 million gourdes or + 92% over the 1971 level). Development expenses are also extrabudgetary. These increases are in current prices. In constant prices they were the only categories which showed a net increase over the four-year period. All other categories declined in real terms.

A functional distribution of extrabudgetary operating expenses would be necessary to make a correct assessment of operating expenditure trends by individual ministries. Referring to the admittedly incomplete budgetary operating expenditures, General Administration and Economic Services absorbed most of the increase in budgetary expenditures (in current prices). Health increased moderately, while Defense, Education and Community and Social Services remained virtually stable. In constant prices, expenditures by the latter functions declined considerably (tables II.29,30).

In view of the real decline in budgetary operating expenses, a decline in the quality of services provided by Government Ministries is a definite possibility. Table II.33 shows that in real terms, average salaries of the approximately 17,000 civil service employees has fallen about 6% per year, from 4,357 constant gourdes in 1971 to 3,256 gourdes in 1975, a total reduction of 1,101 gourdes or 25%. In constant dollars this represents a decline from $871 to $651 per year.

Financing the Deficit

In 1975 borrowing from the Haitian banking system fell to 31% from 62% in 1974. This was offset by an increase in net disbursements and grants from abroad. Grants compensated for 12.3 million dollars in net credit from the banking system. The increase in net foreign disbursements resulted principally from an increase of gross disbursements from official sources amounting to $21 million in 1975 compared with only $0.4 million in 1974.

The share of public saving in deficit financing fell from 12.4% to 11.4% but increased slightly in actual volume, from $4.0 million in 1974 to $6.6 million in 1975. Foreign resources, including foreign grants, financed 72% of total development expenditures in 1975, compared with only 27% in 1974 (table II. 34).

III. HAITI'S RURAL POOR

According to the A.I.D. interpretation of the Congressional mandate, the rural poor are known by the following criteria:

Income	:	Per capita income below $150;
Nutrition	:	Daily diet of less than 2,160 to 2,670 calories;
Health	:	Life expectancy at birth of less than 55 years; Infant mortality rate of over 33 per 1,000; Birth rate of over 25 per 1,000.

In rural Haiti, all measurements fail to meet the minimum standards set by the Congressional mandate:

Income	:	$55 per capita;[1/]
Nutrition	:	1,850 calories per day;
Health	:	Life expectancy 51 years; Infant mortality 149 per 1,000; Birth rate 36 per 1,000.

Haiti, in the mid-1970s, has a population of approximately 4.6 million people who live in an area of 10,714 square miles. Port-au-Prince, the capital, has approximately 653,000 inhabitants; about 426,000 other people live in urban or semi-urban areas administratively designated as towns. In rural Haiti live over 3.5 million people or approximately 77% of the population. Virtually all agricultural land is under cultivation; pressure on this land is 429 people per square mile. The annual population growth rate is 2%. Of the 3.5 million people who live in rural Haiti, 92% have a per capita income of $40, an amount even lower than that of the national average.[2/] These are the rural poor. For all intents and purposes, they are the entire rural population.

Landholdings and Tenure

The rural population of Haiti is composed primarily of small farmers. The average farm size is 1.4 hectares. Generally, the Haitian peasant cultivates his land to feed himself and his family. If his landholdings are of sufficient size, he cultivates the land to buy commodities that his farm

1/ In 1970 dollars. In 1976, per capita income is estimated at $80. No increase in buying power is postulated because of inflation.

2/ In 1970 dollars.

does not produce or to grow cash crops for export. In the cultivation of these farms, the hoe and machete replace animals; machinery is not used in agricultural production in Haiti.

Not only is rural Haiti characterized by small landholdings, it is also characterized by fragmentation of these holdings. After independence in the early 19th century, attempts were made to preserve the plantation system in the North while land was parcelled out in the South. In the course of the century, the plantation system was virtually abandoned and individual ownership encouraged. The increase in population together with inheritance patterns based on the Napoleonic Code, under which each child inherits land equally from both parents, has accentuated this fragmentation. Statistics on the number of dispersed plots range from an average of 1.8 plots for each farmer to an average of 3.4 plots.

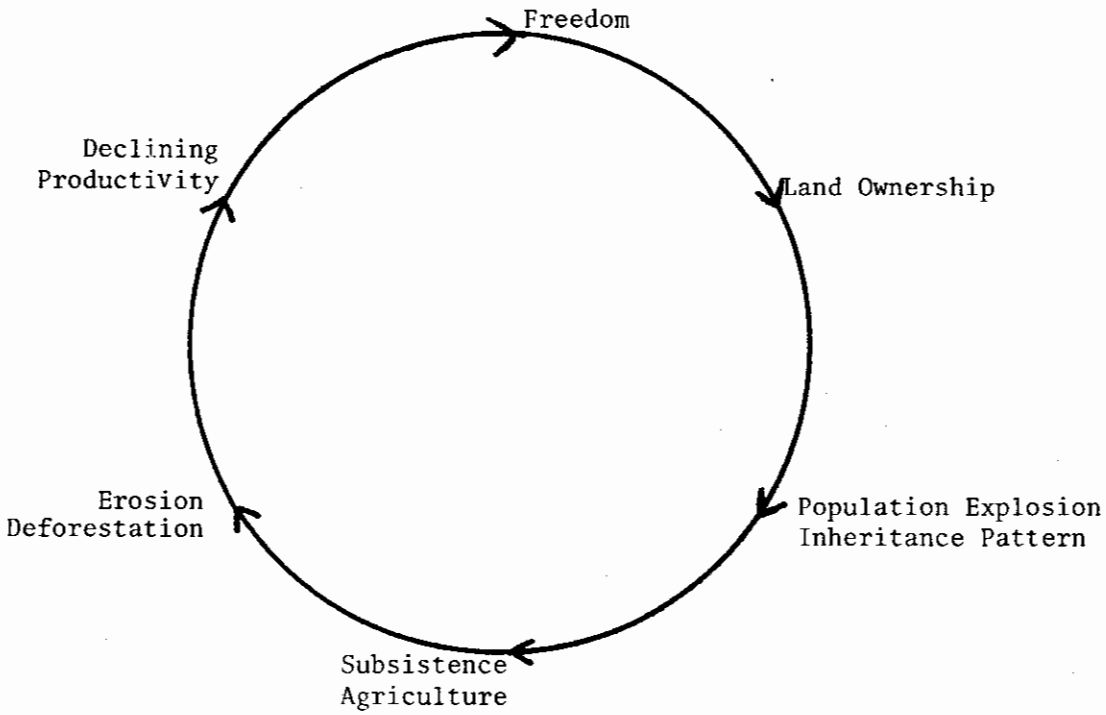
If the plots are dispersed over a wide area, their cultivation and care become a problem for the farmer. One solution to this problem is polygamy. The practice of plaçage or common law union is widespread throughout rural Haiti. A farmer may have his femme caille -- his first wife to whom he may or may not be legally married, and one or more femmes jardins -- women who work on and look after his plots for him. The children of these unions may or may not be acknowledged by the father. It is customary, however, that all children (even those who have not been acknowledged) share in the property of their parents. The land is divided among all heirs.

Although the cultivation of dispersed plots may appear excessively time-consuming, it also has a certain economic advantage: it gives the farmer access to different ecological zones. The primary distinctions made by the Haitian peasant are those between morne (hillside) and plaine (plain) and between terre froide (cold land) and terre chaude (hot land). Not only can he grow a greater variety of crops, but such dispersion also serves as a form of insurance against crop failure in one particular area.

This fragmentation of land has led to a multiplicity of land tenure arrangements. At one and the same time a farmer may be owner, renter, and sharecropper. It has also led to the creation of a sub-group among Haitian peasantry. As the population has increased and land has become less and less available, the landless peasant has migrated to the city to become a part of the urban poor or, as is becoming more and more the case, he leaves his villages at harvest to go to other villages in search of work. The landless peasant -- whether in urban or rural surroundings -- falls into the category of the poorest of the poor.

Given the shortage of land and the lack of alternative employment opportunities in either rural or urban areas, ownership of land is held in high esteem by the rural population. Not only does ownership of land give the peasant some security, but it also confers on him power and prestige. He gauges his success in terms of gradual acquisition of more land if it is available or if he can acquire funds for its purchase.

Nevertheless, the peasant resists government registration of his land. His resistance grows out of his history. In the chaotic politics of Haiti since its independence, each new group usurped the property of its predecessor and the peasant was often the first to suffer. Independence brought freedom but also the need to insure economic independence by ownership of land. By the mid-19th century, the question of land ownership was already at the core of the rural problems in Haiti



The suspicion of the peasant toward any government move to regulate land ownership had been aroused. It persists until today.

Income and Employment

During the period 1971 - 1975, growth in the agricultural sector was 1.2% per annum, but the rate of population growth was 1.1%. Hence, there was practically no increase in per capita income during that period. In rural Haiti, per capita income varies with location of landholdings. Those farmers who live in the more arable and irrigated regions have a standard of living generally superior to that of farmers living in the mountainous

regions. According to the 1970 census, 89.3% of the rural population was engaged in agriculture; however, the 1971 census noted 80.9% of the population actually living on farms. Can one assume, then, that approximately 9% of the rural population is composed of landless laborers and their families? Of a potential rural labor force of 1.5 million, 61.8% are regarded as economically active with the vast majority of this number -- 82.2% -- engaged in agriculture.

The 1970 census gives average per family consumption of essential goods and services in rural areas as $397.08. Per capita income is calculated at $55 per year. Average per capita expenditure on food is calculated at $43 which leaves $12 for such other basic necessities as fuel, medical care, and clothing. In 1970, 92% of the rural population were at, or below, the absolute poverty level. In 1977, the situation has changed little, if at all.

Basic Services

The rural-urban dichotomy which has characterized much of the history of Haiti has led to the virtual neglect of the rural areas in terms of basic services provided. In the field of education, 26.0 per cent of the 6 through 12 age group in rural areas is presently in school as compared with 89 per cent in urban areas. Furthermore:

- -- Only 3.4% of the 1966 cohort in rural primary school completed the course as compared with about 50% in urban primary;
- -- More than 50% of enrollment is in the first year class and 70% of these do not continue on to the second year;
- -- Most rural children are 10 years or older before they enter school.

In addition, parents not only have to purchase school books and materials but they also have to pay $3.50 a year to help defray the operating costs of the school.

The rural Haitian family suffers the diseases of the impoverished. The typical rural house is a two-room structure with a framework of tree branches pinned to poles driven into the ground. The walls are plastered with adobe. The roof is made of palm thatch or straw. The floor is dirt. The houses have two doors and two windows which are open only during the day. Piped water does not exist in rural areas. The family usually gets its drinking water from springs in the vicinity, which are often as far as one hour's walk from the house. Tetanus, respiratory diseases, diarrheal diseases, intestinal parasites, malaria, nutritional deficiencies are prevalent. In the field of health, the following services are provided in the rural areas:

0.2 physicians	per 10,000 inhabitants
0.4 nurses	per 10,000 inhabitants
0.7 beds	per 10,000 inhabitants

Little or no credit is available in the rural areas although the demand is present. The situation becomes acute during the months of July through October when speculators lend money at rates which are more than 100%.

In the areas of supervised agricultural credit, the Institute for Agricultural and Industrial Development reached the following percentages of the rural population in the early 1970s:

1970-71	-	0.6 per cent
1971-72	-	0.9 per cent
1972-73	-	1.3 per cent

In the field of agriculture, there are a total of 203 agronomists in the public sector, giving a ratio of one agronomist per 3,000 farm families to provide extension services.

Community Participation

Community organizations and group participation in community affairs are determined on the one hand by rural class structure and on the other by political administration of the rural areas. There is no general agreement on how many social classes are found in rural Haiti. The United Nations report of 1969 identifies four:

-- landless laborers;

-- owners, renters, and their sons;

-- owners who live in town and practice a profession;

-- notables (or gros nĕg) who do not necessarily own property but whose status derives from the authority associated with their position -- be it political, administrative, religious or educational.

In government administration, the urban areas have been subject to civil administration and the rural to military administration since the early nineteenth century. Universal suffrage for legislative and executive office exists, at least in theory, but the right of local self-government is still not a reality for the peasantry. Although the Code Rural Francois Duvalier in the early 1960's included legislation for local self-government, it was never implemented. At the community level there exists no formal legally recognized organization which represents the interests of the peasants. There are, however, informal organizations which can be classified as either traditional or modern. The traditional forms have been in existence since independence; the modern first appeared about 20 years ago. The distinction is arbitrary as both forms share much in common.

Of the traditional forms of organization, the most widespread are the coumbite and escouade.

A coumbite is organized when a farmer wants work done on his land. He invites his neighbors -- perhaps 30 or more -- to come and prepare his land, harvest his crops, or construct a house. In return for their labor, he provides music, food and drink. It is understood that the sponsor will reciprocate with his labor when one of the participants organizes a coumbite. This is particularly true of peasants who enjoy the same social status. Generally, the upper class, i. e., the notable, or gros nĕg, do not help the middle class when they organize a coumbite. The upper class will organize but not participate in coumbites, the middle class will both organize and work, and the lower class will only work. The gros nĕg reciprocates by becoming the patron of those who are of a lower social status; he helps them when the need arises in return for their loyalty and support when he needs it.

The coumbite is a temporary arrangement for only a day; the escouade is a more permanent arrangement under which a small group of men -- usually six or seven -- agree to work together to:

-- cultivate their respective plots in turn with no payment involved;

-- hire themselves out as a group to other farmers at a daily wage with each member having his specific day on which he receives the money earned by the group.

The escouade is basically a democratic work group in which all members have an equal say, with the same rights and obligations.

One characteristic of both the coumbite and the escouade is that their leaders have no authority or prestige outside the immediate group. Although the escouade is more permanent than the coumbite, it may also be temporary with a changing membership. The relatively temporary nature of these traditional organizations suggests a reluctance on the part of the peasants to form permanent associations which limit his autonomy. The peasant's attitude is shaped by his environment. The Haitian farmer lives at little more than bare subsistence level with the recurring threat of famine. If he is to assure food for himself and his family, he cannot become involved in any permanent organization in which demands may be made on his harvest. He prefers to seek a patron who can help him by recommending him for a job, paying his medical bills, lending him money -- all in return for loyalty and performance of personal services.

A duality characterizes the Haitian peasant's attitude: on the one hand, he maintains a degree of independence vis-a-vis his economic environment; on the other, he seeks the protection of a socially and economically more important person.

The principal modern forms of organization are the Conseil Communautaire (Community Council) and the Societe Agricole de Credit (SAC). Community Councils evolved from the Haitian Government's interest in development at the local level. In the 1950s, both the Community Development Service of the Department of Agriculture and the Adult Education Branch of the Department of Education provided training in community development. In 1961, the two were combined to form the National Office of Community Education (ONEC), responsible for training community development specialists. ONEC was reorganized in 1969 as the National Organization for Literacy and Community Action (ONAAC). There are presently 2,300 community councils associated with ONAAC, 500 of which are officially recognized by the organization.

A study of the HACHO community councils in the Northwest shows that the typical community council is composed of an executive committee and, on an average, about 60 active members. The executive committee is responsible for

running the council. It organizes, proposes and discusses projects, arranges council work days, appoints subcommittees, proposes projects to HACHO, maintains projects already underway, and admonishes recalcitrant members. In short, the committee is responsible for defending the best inerests of the community council.

The responsibilities of the individual members include the payment of monthly dues, regular attendance at council meetings, participation in projects, and payment of special quotas for the financing of specific projects. Membership is open to both men and women.

In terms of participation, these community councils are characterized by the following:

-- The members of the committee are usually better educated (they are all expected to be literate) and economically better off than rank and file members. The average family income of all council members is $431.00, while that of committee members is more than double this. Thus the community council tends to be dominated by a Gros Nèg -- a pattern found elsewhere in Haiti.

-- There is no limit to the length of time a committee can stay in office. There are committees in the Northwest that have been in power since the founding of the council, as long as nine years ago.

-- The poor do not join community councils. The average family income of non-members in the area (34 per cent of the sample) is $261; i. e., $37 per capita.

The community council tends to perpetuate the existing hierarchical social structure exemplified in the coumbite. But this is one of the realities of Haitian society -- found at all levels. Such a system places a great responsibility on the committee because it assumes committee members are always working in the best interests of the community. It also does little to foster the development of leadership qualities among other members.

At present, there are approximately 700 SACs in rural Haiti -- organized through the Bureau de Credit Agricole (BCA) and based on the idea of escouade. A SAC consists of a group of between 7 to 15 friends who join together to obtain credit as a group. The loan is given by the BCA to the group, the group lends it to individual members,and the group is responsible for repayment. Little information is presently available on the internal

workings of these SACs. A recent study surveyed 14 SACs established by coffee farmers under the Small Farmer Development Project financed by A.I.D. It found that in cases of default, the balance due by delinquent members is paid by the other members and, afterwards, steps are taken to recover the amount from the delinquent. To date, these coffee SACs have been concerned primarily with credit and have not become involved in any other activities.

Noneconomic Constraints

If one were to believe the "experts", the primary noneconomic constraint to development is the peasant himself -- particularly his fatalism, his lack of motivation, his belief in voodoo.

If the word "realism" is substituted for "fatalism" the constraint is valid. Given the scarcity of basic services in rural areas, the low quality of those actually provided, and the fact that the peasant is often living at the extreme edge of poverty -- shortage of land, bad harvests, expenses incurred through illness or death -- he simply cannot afford to take risks. Based on his previous experiences, he becomes prudent, knowing that in the final essence he must rely on his own resources and, to a lesser extent, those of his patron.

At the time of independence, Haiti had an excellent irrigation system. This system deteriorated during the civil strife of the 19th century and was partially restored during the American occupation in the 20th century. At present only 70,000 hectares are irrigated out of a possible 115,000 hectares. Why has the peasant not been motivated to maintain these systems? One report has pointed out:

-- the organizational inefficiency of the governmental irrigation service;
-- the weakness of technical training for the management of these systems;
-- the excessive fragmentation of land.

But, additional data appear in other reports:

-- favoritism in distribution of water;
-- payment of tax for water never received;
-- payment of surcharges.

Voodoo, as a force in the Haitian peasant's life, has its origin in West African religious practices. It most resembles traditional African religion as a means by which the practitioner can explain, control, and

predict the world within which he lives. In Haiti, the loa (spirits) and their specific personifications, the phenomenon of possession, the role of the dead, the relationship between gods and the land, provide a core of belief, a series of philosophical postulates about reality. Thus, in a society in which many of the basic services are lacking, the houngan or voodoo priest is an important man who must be taken into consideration. He fulfills the role not only of priest, but also of doctor and diviner.

Historically, voodoo has played an important role in Haitian society. Closely associated with the struggle for independence, many Haitian leaders have been involved with it over the years. In its most negative aspect, voodoo is a form of control which helps the poor accept their lot. The peasants continue their search for a better life in devotion to their voodoo gods because in the reality in which they live, faith only seems to offer a way of forgetting the actuality of insufficiency in all aspects of their existence.

But, voodoo has its joyous, creative, exuberant aspects as well. In peasant life, a voodoo dance is an important social occasion. Voodoo permeates Haitian art -- its music and its painting as well as its dance. It permeates peasant life -- its influence cannot be ignored.

The Family and the Role of Women

"Pitit ce riches" "Children are riches" a Creole proverb gives the attitude of the Haitian peasant. The peasant has always hoped to have many children. The more he has, the more hands to help him in his work and to care for him in his old age.

Children learn to participate in the economy of the household at a very early age. The father introduces the boys to work in the field; the mother initiates the girls in marketing of farm produce and in housework. At an early age, the peasant develops in his children a sense of responsibility by assigning them definite tasks; for example, fetching water from the nearest spring. The children wake early in the morning, usually at about 4:00 o'clock. With a calabash on their head to carry the water, they make as many trips to the spring as needed to fill two or three clay containers at the house. Only then may those who attend school go. They leave early, about 6:00 o'clock. Usually, the children walk one to two hours to reach school. The boys who do not attend school go to the field with their father; the girls help in the house or replace their mother in selling a basket of farm produce by the roadside. They have little time for play.

Although each member of the family works, the father remains the head of the family. He spends most of his time in the field. He spends his money for schooling of his children, clothing, food; and, because agriculture cannot provide enough money, he borrows, he works as an agricultural laborer; sometimes he migrates.

On one level, the role of women is traditional -- their main responsibilities centering on the well-being of the family: looking after the children, feeding them, doing the washing, and, to a lesser extent, helping the men in the fields. But, on another level her role is far from traditional: it is she who has the primary responsibility for the marketing of agricultural products.

On the average, the Haitian peasant can keep only about 30% of his produce for home consumption. Traditional means of storage do not permit him to stock produce for any length of time. Given the percentage of produce sold, the role of the woman in marketing -- not only in selling produce but in buying staples such as sugar and oil for family needs -- is an important one.

The woman may also operate as intermediary -- a "Madame Sara," originally the name of a migratory bird which flies from place to place and always finds food wherever it goes. The "Madame Saras" in the Haitian marketing system fulfill the same role. They are usually completely independent, sometimes married, sometimes living in placage, and sometimes single.

In the Cul-de-Sac, the area for which the best information is available, "Madame Sara" buys her produce for resale in Port-au-Prince. She usually has her local agents, who are always men, buy produce for her in her absence. She tends to deal with the same people -- agents, producers, truckdrivers, or retailers in Port-au-Prince. And, all these relationships are characterized by pratik -- a form of mutual reciprocity; e. g., a seller of produce always goes to the same buyer and thus receives a good price. In return "Madame Sara" is guaranteed a regular supply. Mutual credit relationships may also be established. Although produce passes through many hands in its journey from producer to consumer, and provides employment for many people in the process, the final mark-up is estimated to be only about 25%. Given her crucial role in marketing, women can and probably do play an important role in the diffusion of new ideas and practices because they spend much time either in the market places or in travelling. In the emphasis now being placed on increasing agricultural production, the marketing woman has a part to play in terms of increases in volume of produce to be marketed and the distances that new crops may have to be carried for lack of demand in the local market.

The Target Population's Perception of its Problems

The Haitian peasant is a realist. If there is a shortage of water and a possibility of irrigation, the peasant sees his most important problem as that of irrigation. If there is no possibility of irrigation, the peasant sees his most important problem as that of construction of roads, schools, and health clinics.

The peasant views roads not only as a way of improving communication but also as a way of making it easier for outside assistance to reach the communities. He views schools as a means of escape for his children for whom he sees little future in an economy of fragmented, overworked, and often under-productive landholdings. He views clinics as a way of overcoming the poor health and disease found in much of the rural areas.

In other words, the peasant makes a realistic appraisal of his possibilities. If there is a possibility for improvement in agriculture, he will perceive agriculture as his most pressing problem. The fact that his perception of agricultural improvement is based primarily on the availability of water rather than on technology is due to the fact that he knows very little about the latter.

Too often, however, the peasant's attitude is almost as if material problems were not of his concern, as if he had reached a state of mind where having done his best, he could not influence further the outcome of his effort. The peasant since the birth of the nation has been forced to accept change, not to provoke change; and in his acceptance of change, he has had no voice with which to express his opinion. Therefore, today, he works to subsist. He works for himself and his family. It is as if he had learned over the years that he is not a full-fledged member of a larger community which forms the nation. And, even within the limits of the family as the extent of his involvement with the nation, the peasant often appears to doubt his chance of success in giving a better life to his children.

Realism, in the Haitian peasant's life, is both a positive and negative force.

IV. PROBLEMS, CONSTRAINTS, STRATEGIES

The problems of rural Haiti which were discussed in detail in "Haiti's Rural Poor" and the constraints to overcoming these problems are summarized in this section. They are given here in brief form and the strategy proposed for overcoming each problem is stated briefly. The details of these proposed strategies are the content of this DAP.

Basic Problems of Rural Haiti

Low income : Most rural Haitians have submarginal incomes.

Proposed strategy : Give priority to programs which will raise productivity and income of the rural population.

Overpopulation : Haiti's present population is too large to be supported at Haiti's current level of technology and by Haiti's resources.

Proposed Strategy : Assist Haiti to achieve zero -- or at least minimal -- population growth within a reasonable period of time.

Infant mortality and poor health : Give priority to programs which reduce infant mortality and improve health conditions.

Constraints to Overcoming Problems

Lack of social cohesion and organization : Rural Haitian society lacks social cohesion; there are relatively few institutions at the local level.

Proposed strategy : Encourage government and private groups to design and carry out development program which will increase social cohesion by creating new local institutions and orienting existing institutions toward developmental objectives. Thus, assist Government programs to increase number, effectiveness, and roles of local voluntary groups such as community councils, precooperative and cooperative organizations, e. g., Société Agricole de Crédit.

Peasants' Isolation	: Rural Haitians live in relative isolation -- few new (developmental) ideas and services are reaching rural areas.
Proposed Strategy	: Encourage government and private groups to increase the flow of developmental ideas and services to the rural people.
Peasant Suspicion of Government	: Most peasants feel that they have suffered more than they have benefitted from activities of the government. Consequently, they are usually suspicious of new government proposals and advice -- particularly new government programs which might affect their control over their land.
Proposed Strategy	: Design projects which the peasant will recognize as a benefit to him. Monitor project implementation closely enough to assure that the project involves "fair play" for rural Haitians and meets basic standards of social justice.
Government's Patronizing Attitude	: The government has an ambivalent attitude toward the Haitian peasants' customs, religion, language, and institutions -- which are African in origin -- and often sees its goal as "civilizing" or at least modernizing, the Haitian peasant.
Proposed Strategy	: Encourage the government to accept Haitian peasant culture as being of merit and to utilize existing customs, religion, institutions, and language as a basis for development.
Government and Elite Indifference	: The government and elite groups in Port-au-Prince have demonstrated little concern for conditions outside of Port-au-Prince.
Proposed Strategy	: Encourage the government to undertake specific programs to match the general rhetoric in favor of development outside of Port-au-Prince.
Weak Government Institutions	: Haiti's governmental administrative structure is antiquated and is generally not now capable of undertaking programs which will strengthen social cohesion of rural people, i. e., help create local institutions and provide services to rural inhabitants.

Proposed Strategy	:	Strengthen government institutions. Encourage government to establish effective methods of using the private Haitian sector to provide services. Encourage the government to work out mutually satisfactory arrangements for using foreign private groups (PVOs) in development work, and for involving private foreign investors in the development effort.
Ineffective Government Personnel	:	Government employees now on the payroll are generally ineffective.
Proposed Strategy	:	Give priority to helping government to improve existing government structure and effectiveness of current employees before moving on to major expansion of personnel.
Inadequate Resources	:	The ineffectiveness of government employees is the cumulative result of many factors, but the major factor is the decline over 15 years in real resources devoted to the operational expenses of government programs. Haiti's civil servants have been given no significant pay increases in 15 years (government employees provide few hours of work per day and capable Haitians outside of the government are generally unwilling to accept government jobs.)
Proposed Strategy	:	Urge the government to provide at least token salary increases to all government employees while providing additional budget allocations for operating expenses and salary reform to development services responsible for programs of increasing production or collecting revenue or planning development activities; e. g., the agricultural section of the Ministry of Agriculture, Ministry of Public Works, revenue collection agencies, CONADEP, top administrative and planning sections of other Ministries.
Low Customs' Receipts	:	Haiti's customs system is archaic and customs receipts are rising less rapidly than total imports (through 74).
Proposed Strategy	:	Continue to focus attention of donor community on need for customs reform and cooperate in efforts to persuade the government to run an honest and efficient customs' collection program which eliminates favoritism for certain importers.

Poor Use of Present Resources	:	Haiti is using a significant portion of current receipts ineffectively and for nondevelopmental purposes.
Proposed Strategy	:	Continue to focus attention of donor community on this issue and cooperate in efforts to persuade the government to use all receipts effectively -- including Régie du Tabac and special account funds for developmental activities such as education, health, encouraging the formation of local institutions.
Poor Maintenance of Capital Projects	:	Projects requiring maintenance have seldom been properly maintained; e. g., roads, irrigation systems, soil conservation structures.
Proposed Strategy	:	Include in design all such projects a program to motivate some target group to want to maintain physical structures and create or strengthen an institution(s) to maintain physical structures.
Foreign Donor Programming Techiques	:	The Haitian government has been somewhat overwhelmed by the programming and project preparation techniques of the major donors.
Proposed Strategy	:	Place maximum possible responsibility on the Haitian government for the selection and design of projects.
Disincentive Effect of Certain Foreign Aid	:	Use of large-scale outside resources of food and money can have a disincentive effect on self-help by the government and peasants and instill a belief that the projects involved are foreign projects to be maintained by the foreigner.
Proposed Strategy	:	Experiment with various programs approaches which vary the proportions between -- time spent on organizing local groups, -- motivation and education, -- payment in cash only, -- payment in food and cash, -- payment in food only.

Need for Self-Help	: In many areas, there is need for greater Haitian commitment to economic and social development or need to improve the effectiveness of the Haitian commitment.
Proposed Strategy	: Link U. S. assistance to Haitian self-help efforts so that there will be a Haitian *quid pro quo* for U. S. economic help.
Low Absorptive Capacity	: The government is having difficulty in implementing all of the programs supported by foreign donors.
Proposed Strategy	: Cooperate with other donors in keeping size of total development effort at level which can be absorbed effectively by Haiti. Work to increase the absorptive capacity of the Haitian economy.
Inadequate Coordination	: There is inadequate coordination by the government in its request for help and inadequate coordination among donors to prevent overlapping of aid.
Proposed Strategy	: Encourage the government to give CONADEP more power to coordinate aid requests and improve preproject approval coordination among donors.

U. S. Assistance Strategy

To help rural inhabitants achieve a better life by developing local institutions which

-- participate in programs to increase production and income in rural Haiti;

-- create a framework for government programs to provide essential services in rural Haiti.

To strengthen government and private institutions -- particularly those involved in rural development and in providing health and family planning services -- which in turn will help to create local institutions able to provide essential services and to introduce new ideas to the people of rural Haiti.

In cooperation with other donors, to link the size of the U. S. development assistance program to the self-help efforts of Haiti.

V. HAITI'S DEVELOPMENT EFFORT

Five Year Plan and Role of the National Planning Council (CONADEP)

At the beginning of FY 1976-77, Haiti published its five year plan for the period through FY 1980-81 and shifted the function of Executive Secretary of CONADEP from the Minister of Finance to an experienced technician who has worked for many years in CONADEP. The significance of the five year plan document for the future is not yet clear but the new Executive Director intends to have CONADEP play a much stronger role than in the past vis-à-vis the government ministries and vis-à-vis foreign donor organizations. Reflecting a widespread Haitian opinion that foreign donors have imposed their own priorities on Haiti by taking the initiative in proposing projects, the five year plan stresses that future development activities must reflect Haiti's development priorities as outlined in the plan. However, the plan contains relatively few clearly expressed new project ideas in the area of rural development and there is no evidence to date that CONADEP itself has any significant number of specific projects in the rural area which it wishes foreign donors to finance.

This lack of specific ideas reflects in part the fact that only the Ministry of Agriculture has had an effective planning unit. The Ministry of Agriculture has not yet gone beyond a policy of "decentralization," although it now has established a planning unit which is receiving A.I.D.-financed technical assistance. The Ministry of Education has made limited progress in education planning; the Ministry of Public Works has a transport study by a foreign consultant and some specific infrastructure ideas, but no real planning unit.

The plan document also will not change one obvious fact of life: the President for Life of the Republic is also President of CONADEP and his wishes and priorities as they unfold will play an important part in determining the project initiatives which will be undertaken by the Haitian Government in the next five years. Thus, the future development program of Haiti will probably continue to be the result of the interplay of discussions and initiatives among foreign donors, the interested technical Ministries, the President's office, and the CONADEP staff.

CONADEP's role in planning the use of Haitian resources is limited since the Special Accounts in the National Bank and approximately two-thirds of the receipts of the Régie du Tabac are effectively beyond the control of CONADEP. These two sources of funds account for approximately 50% of the Haitian Government's revenues.

One should also keep in mind the relatively limited role that any five year plan prepared by technicians can have in overcoming Haiti's development problems. The present relative stagnation of the economy is the result of a wide variety of factors: the class structure of the country, the impact of patterns which maintain the political system but which may impede development, the weakness of the administrative system, the pattern of crisis management at the highest levels of the government. Any meaningful economic progress will come only when basic reforms can be achieved in several related areas. It is unrealistic to expect that CONADEP, or any other group, -- with or without a large number of foreign advisers -- can prepare a document which will solve these basic structural problems. Real efforts to solve these problems can only be initiated at a higher level than CONADEP; and since any solution will affect powerful interests in the country, it is unrealistic to expect that a master blueprint for any such reform will ever be published.

The first volume of the plan provides some broad humanitarian philosophical goals, some honest descriptions of several of Haiti's problems, a few general development themes and a discussion of the expected investments and growth in the different sectors along with a rationale for the projected level of investments in each sector.

Volume II deals with sectoral plans. However, the figures for investment by sector in Volume II differ from the figures in Volume I. This difference is explained by the methodologies used in preparing the two volumes. Volume I sectoral investment represents macroeconomic projections of investment requirements to achieve an output goal, while Volume II investment is the sum of a series of individual investment projects listed in Volume III.

These individual projects were submitted in the first instance by the Ministries and other public bodies. Even a comparison of the two investment projections is difficult since they use different base periods (Volume I uses 1974-75 gourdes and Volume II, 1976 gourdes). The classification system of sectors is different.

CONADEP feels these discrepancies have limited practical importance; e.g., total investment figures in the two documents are relatively close. Volume I lists public investment of 2.68 billion gourdes (1974-75 prices) while Volume II lists 3.09 billion (1976 gourdes). There are, however, significant differences for several sector figures between Volume I and Volume II: in millions of gourdes, agriculture 420 vs. 580; mining, 240 vs. 527.

The five year plan is to lead to the integrated development of a new Haiti capable of offering equal opportunity to everyone for the full development of individual and social potential. The long-term strategy

is based on a humanism of the fraternity of man and the close relationship between man and his physical and social environment. The will of the government and the vital energy of the nation are to be directed toward certain fundamental themes: maximum development of human resources to develop the three aspects of the individual: physical, spiritual, and social well-being. Physical well-being will require emphasis on providing adequate food supplies; spiritual well-being on providing minimum education and technical training to assure that the individual is integrated into productive activities. (The government plans to complement this approach with a long-range effort to create full employment.) The plan envisages the protection and management of the environment, including prevention of erosion and the wise use of space.

At the more practical level, the plan outlines four basic priorities:

-- development of agriculture;

-- creation of a decentralized infrastructure for industrialization;

-- education and professional training;

-- reinforcement of institutional structures, including both public administration and efforts to change traditional ideas.

In its analysis of problems, the plan is often extremely frank; e.g., there are clear statements that development to date has been financed primarily by the rural sector and that the position of the rural sector must now be improved. The plan also recognizes the inequalities in the distribution of income, rigidity of Haitian society, and the lack of integration of the various social groups. The document speaks of the need to create conditions favorable to greater social mobility.

Certain key issues, however, are not faced squarely; e.g., population control policy. While referring to the problems created by population growth, the plan gives relatively little attention to this issue. In the chapter "Social Structure" there is a vaguely worded policy statement: "Haiti's goal is to maintain acceptable proportions between the level of births and deaths, the level of emigration, and the geographic distribution of the remaining population among the regions of Haiti."

The quantitative part of the plan starts with the hypothesis that the Gross Domestic Product (GDP) should increase by an average of 5% per year during the plan period -- compared to 3.6% during the period 1967-1975. The per capita increase in GDP will be 3.28%, assuming an annual population increase of 1.88%.

This estimated overall increase in GDP is then broken down by sector of activity; e.g., the net value of agriculture production will increase by 15.6% during the five year plan period, industrial manufacturing by 35.4%, government by 43.2%, hotels and restaurants by 56.4%.

Estimating that the marginal coefficient of capital is 4, i.e., that $4 need to be invested to obtain an annual increase of $1 in GDP, the document arrives at an investment rate of 20% of GDP. (The 20% calculation results from the goal of a 5% annual increase in GDP and the necessity to invest four times this amount in order to reach this goal.) Thus, investment will increase between 1976-77 and 1980-81, at an annual rate of 10.3%. During the five year plan period, total investment is projected at 4 billion gourdes (1974-75 prices) of which 50% is to be nationally financed and 50% foreign financed. Two-thirds of this total investment will be public and one-third private. Foreign investment will be concentrated in the public sector and 63% of public sector investment will be foreign financed.

In discussing the uses of the national product, the plan projects a drop in the rate of growth of personal consumption from 7.5% in the early 1970s to 4.2% during the plan period. However, the plan gives very little indication of what the government will do to limit the growth of consumption.

In the section on public finance, the plan presents a summary of the government's total budget situation, with the apparent exception of the Régie du Tabac. Thus, in addition to the regular budget information on the current and capital budgets which is published each year, the plan estimates receipts of special funds. It is confirmed that present records do not provide any breakdown of these special account funds between current and capital expenditures. The plan also provides a global estimate of the receipts and expenditures of the various autonomous agencies; e.g., the electricity company, the water company. The publication of official figures on the Special Accounts and autonomous agencies provides a basis for a dialogue with the government on these important financial matters.

The plan also provides an ambitious goal for increasing government revenues, e.g., an increase of approximately 82 million 1974-75 gourdes is projected for each year of the plan period.

This target requires a real increase of revenue of 10% at the beginning of the plan period and 8% during the last year. Based on experience during the last five years, the present tax structure will not generate a real increase of this amount. In fact, regular government revenue, i.e., excluding special accounts, has increased at a slower rate than the general price level. The plan indirectly recognizes this problem by stating that tax collecting institutions should be strengthened. A major new effort will be required in this area if the revenue targets are to be met.

Another key estimate of the plan is that 18% of current government receipts have been available for investment -- a figure which the document believes can be increased to 20% for the plan period.

Thus, the plan arrives at expected or desired foreign aid through the following process:

	Billions of Gourdes
Level of investment 1/	4.000
Less private investment	1.320
Government investment	2.680
Domestically financed 2/	(1.000)
Externally financed	(1.680)

The plan then projects total foreign donor assistance to the public sector of 2.065 billion gourdes and, assuming that 80% of this amount will be capital assistance, concludes that the plan will be basically financed if external assistance is provided in the amounts outlined in the plan. The projection of foreign assistance in the plan is shown in the table.

1/ Based on 5% GDP growth rate and capital to output ratio of 4.

2/ Historical domestic financing of investment plus 20% of the estimated increase in current account government receipts.

Estimated Annual Expenditures of External Assistance in Haiti[a/]

(In thousands of current dollars)

Multilateral & Bilateral Organizations	Total	1976-77	1977-78	1978-79	1979-80	1980-81
Grand Total Loans & Grants	533,161	94,748	95,386	103,312	115,142	124,467
Loans	350,036	66,350	63,425	67,600	73,200	79,455
Bilateral Organizations	122,316	17,750	22,505	24,650	26,946	30,450
Germany	11,906	1,950	2,145	2,360	2,596	2,855
United States	105,410	14,800	19,360	21,290	23,350	26,600
Canada	5,000	1,000	1,000	1,000	1,000	1,000
Multilateral Organizations	227,730	48,600	40,920	42,950	46,250	49,000
IDB	134,400	24,000	26,400	27,000	28,000	29,000
IBRD-IDA	93,330	24,600	14,520	15,960	18,250	20,000

a/ The figures include operating projects, projects being studied, and estimated allowances.

Bilateral and Multilateral Organizations	Total	1976-77	1977-78	1978-79	1979-80	1980-81
Grants	183,125	28,398	31,961	35,712	41,942	45,132
Bilateral Organizations	125,528	18,840	21,520	24,452	28,507	32,229
Israel		210	230	253	275	
Canada		5,500	7,000	8,500	11,000	
China		1,850	450	350	350	350
United States	41,026	6,720	7,392	8,131	8,944	9,839
France SCCT	12,882	2,110	2,331	2,553	2,808	3,090
France FAC	20,160	3,300	3,630	4,000	4,400	4,830
Multilateral Organizations	57,597	9,558	10,441	11,260	13,435	12,903
WFP	12,800	2,100	2,000	2,200	3,000	3,500
IDB	1,830	300	330	360	400	440

Bilateral and Multilateral Organizations	Total	1976-77	1977-78	1978-79	1979-80	1980-81
Multilateral Organizations						
UNDP	18,300	3,600	3,600	3,600	3,700	3,800
OAS	1,342	220	242	265	293	322
FAO(Sécurité alimentaire)	3,300	200	400	500	2,000	200
ILO	200	40	40	40	40	40
WHO/PAHO	6,053	990	1,089	1,198	1,317	1,459
IICA	2,428	400	440	480	528	580
UNICEF	4,305	395	600	800	1,100	1,400
UNFPA	7,049	1,313	1,700	1,817	1,057	1,162

Source: Bureau of Coordination for External Assistance, CONADEP

Concerns and Attitudes of the Haitian Government and the Haitian Public

Haitian-American cooperation will be directly affected by Haitian attitudes toward foreign assistance and Haitian attitudes toward the United States and the U. S. aid program.

One factor which must be considered is the following: stemming from the U. S. occupation of Haiti, there is a widespread although erroneous belief that the U. S. government plays a key role in all important political and economic decisions and that the U. S. government often dictates the specific actions that are to be taken. Thus, actions which may appear from the U. S. viewpoint as cooperation between two countries, e. g., the provision of U. S. technical assistance, could be interpreted by some Haitians as U. S. action to "take over" the Ministry in which the technical assistance program is being carried out.

If we examine the views of government officials, we find a mixture of attitudes. A number of the older technicians have good memories of their contact with U. S. technicians during the late 1950s and early 1960s prior to the withdrawal of the U. S. aid program. Many of them worked side-by-side with the Americans in the servicios which were established at that time.

There are, however, certain attitudes toward foreign aid in general, and U. S. aid in particular, which are not positive. Many Haitian officials believe that

- -- Donors are doing what they want to do and are not trying to follow Haitian development priorities.
- -- Foreign assistance personnel are inclined to excessive management rather than willingness to work through Haitian counterparts and provide Haitians with necessary training.
- -- Foreign experts do not speak the local languages (French and Créole) and have little understanding of Haitian culture.
- -- Foreign experts arrive with preconceived ideas or even prejudices about Haitians and Haitian institutions.
- -- Foreign experts are greatly overpaid.

There is bewilderment or irritation at the hordes of visiting experts who come, who ask questions, and who presumably write reports which often never find their way back to Haitian officials. A number of well-educated Haitian officials do not believe that there is a need for any significant number of foreign experts. These Haitians feel that they are at least as intelligent and well-educated as the experts who are sent to work with them. One often hears the idea expressed that "foreigners should just give us the money and we will get the job done." Thus, projects consisting only of experts are sometimes not considered by Haitian officials as economic assistance to Haiti.

Another attitude is that foreigners will not be permitted to interfere in the internal affairs of Haiti. This was a familiar theme of François Duvalier's and has also marked the speeches of Jean-Claude Duvalier. It was especially strong in his speeches on the sixth anniversary of his rule, April 22, 1977, when he rejected any implication that foreigners could dictate the kind of political system Haiti should have; he also said that international concern about human rights should not be used as a pretext for interference in a nation's internal affairs.

Among the middle- and upper-class Port-au-Prince public, i. e., among nongovernment persons, there is also a growing tendency to question foreign aid and advisers. At public events, e. g., at a movie theater, one can hear negative comments on the presence of a large number of resident foreigners. (This attitude does not appear to apply to foreigners in general, e. g., tourists are welcome.)

Many people question the usefulness of these experts on the ground that they cannot be very qualified: there are so many of them and there does not seem to be any real economic progress. A related criticism is that foreign aid is benefitting primarily the higher officials of the government and that the foreign donors should take stronger measures to assure that foreign aid is used effectively. There is also a feeling that the foreign aid programs should result in more jobs for Haitians and that foreign advisers and their dependents are taking jobs which should be going to Haitians.

In a comparative sense, the general attitude of government officials and persons in the private sector is probably more positive in Haiti than in most countries in which A.I.D. is working. However, trends are important and it is clear that the trend is for the Haitian Government and the Haitian public to be critical of various aspects of the foreign assistance programs of external donors -- particularly the roles, alleged attitudes, skills, number and salary levels of foreign advisers.

Degree of Commitment

A key criterion for U.S. economic assistance is the degree of commitment of a country to development. In Haiti, it will be difficult to achieve progress in specific sectors such as agricultural productivity per unit of land, reduction of infant mortality, or to meet other Section 102 (d) commitment criteria until there has been progress in achieving certain basic institutional reforms. Major progress in specific sectors will require increases in government revenues and salary reform. We believe the major criteria for self-help should be governmental action to reform basic institutions to make its development efforts more effective. Key areas will be:

-- improvements in public administration;

-- fiscalization of special accounts, including establishment of an effective budgeting and evaluation-audit system;

-- increasing customs revenue through a reform of the customs service and rate changes.

Is Haiti meeting these self-help criteria?

We have concluded that Haiti's self-help efforts are good enough to warrant assistance by foreign donors, but that further massive efforts are needed to overcome formidable obstacles to development. We propose that the United States join other donors in linking the level and timing of development assistance to the self-help efforts of Haiti.

VI. PL-480 TITLE I

Even after increasing its self-help efforts in the financial field, Haiti will need funds for development in addition to the financing made available by foreign donors for specific projects. These additional funds will be required not only for development projects and activities which foreign donors are unable or unwilling to finance but also to help finance the Haitian contribution to foreign-donor projects; e.g., Haiti has agreed to provide over $10 million over four years for the Integrated Agricultural Development project alone.

Because of its essential financial role, the reasons for a a PL 480 Title I program in Haiti appear in the following order: To

-- support development objectives through the use of generated local currency revenues for development purposes;

-- assure an adequate supply of basic foods such as wheat and edible oils, thus meeting the nutritional needs of the Haitian population despite possible shortages of foreign exchange and balance of payments problems;

-- develop future markets for U.S. agricultural products.

The Mission has requested that Haiti be included in the PL 480 Title I Core Program with an annual reserve of 30,000 MT of wheat and 5,000 MT of vegetable oil. A Core Program is justified by clear evidence that

-- local currency proceeds of commodity sales are a vital development resource and an assured supply of local currency will permit the government to undertake a rational long-term development program;

-- Haitian food production will not increase fast enough to prevent continued and increasing malnutrition,

How the Core Proposal Will Help to Overcome Key Constraints

The Core proposal focuses the impact of PL 480 resources principally on irrigation and the lack of government services and institutional capacity. Upgrading Haiti's neglected irrigation systems (including drainage) offers one of the best possibilities for obtaining a substantial increase in food production. Virtually all the major donors are involved in rehabilitating these systems: Federal Republic of Germany, FAO, Canada, and the United States. Except for two large systems, the pattern of irrigation in rural Haiti involves small systems with few important structures. Some 72 systems exist, with most ranging in size from 100 to 1,000 hectares.

A.I.D. and the Haitian Government are already deeply involved in rehabilitating these small systems through the use of local currency generated by PL 480 sales. Rehabilitation tasks include repair of diversion structures and canals and organizing community groups for continued maintenance. A more assured supply of PL 480 under the Core Program would put A.I.D. in a better position to work with the government in creating a more comprehensive plan for the rehabilitation of small irrigation systems.

Lack of government services in agricultural reflects the institutional weaknesses of the Ministry of Agriculture. Personnel policies are erratic and salary levels are low. The Ministry is unable to hire enough trained people to provide services directly to farmers and to carry out the essential backup functions of administration and planning. PL 480 Title I local currency would be used specifically to help staff the planning unit in the Ministry of Agriculture -- its understaffing is clearly detrimental to all present efforts to develop the sector. Assurance of Title I continuity under a Core Program would be a useful tool in pressing for reform in Ministry personnel policies and in establishing a program budget with funds to finance a salary reform and an adequate operating budget for research, extension, and other functions.

In addition to the use of local currency in irrigation projects and in the Ministry of Agriculture, the Haitian Government plans to use local currency to help support various A.I.D.-assisted projects. Title I resources can help the government to maintain its counterpart contributions and thus can contribute to the success of several A.I.D. development efforts in the country; e.g., farm-to-market road construction. The Haitian Government will be submitting additional projects for approval.

We will continue tight management of local currency generation. It

-- Costs (other than salaries of the basic cadre) of community development activities;

-- Small-scale projects designed to improve the planning and management of rural activities;

-- Priority rural development projects of multilateral donors. (Certain multilateral projects would not be included: projects in Port-au-Prince, main trunk roads, operating costs of schools built by foreign donors).

In projecting future PL 480 Title I requirements, we have taken into account the pipeline of local currency which is developing: Approximately $17 million will be generated by agreements which have been signed and less than $5 million of this amount has been firmly committed. (The Haitian Government is aware, however, that it has promised to supply approximately $10 million to the Integrated Agricultural Development project as well as substantial amounts to other projects, e.g., Agricultural Feeder Roads.)

The investment program financed by Title I sales proceeds will be increasing rapidly over the next two years but we believe these investments can be financed through FY 1979 by the pipeline which is developing and the funds generated by the Core Program. Ideally, this Core Program should be denominated in dollar terms -- $6.5 million -- and the quantities of commodities adjusted to meet this Core amount. Under current procedures, the Core is denominated in term of quantities of foods -- 30,000 metric tons of wheat and 5,000 metric tons of vegetable oil -- and the dollar amount varies with changes in commodity prices.

By 1980, however, the buildup of the investment program and the consequent drawdown of the pipeline will require an expansion in the size of the PL 480 Title I program. We project that the program should increase by $3 million per year starting with FY 1980 through FY 1983.

VII. OTHER DONOR ASSISTANCE PROGRAMS

Multilateral and Bilateral Assistance Programs

Haiti receives development assistance multilaterally from

- -- Inter-American Development Bank (IDB),
- -- World Bank,
- -- United Nations,
- -- Organization of American States (OAS),
- -- Inter-American Institute of Agricultural Sciences (IICA),

and bilaterally from five countries other than the United States:

- -- France,
- -- Canada,
- -- Federal Republic of Germany,
- -- Republic of China,
- -- Israel.

The coordination of these multilateral and bilateral programs is one of several functions of the Joint Commission for the Implementation of Foreign Assistance Programs in Haiti. The Joint Commission was established in 1976 at the request of the Ministry of Finance; the Inter-American Economic and Social Council (CEPCIES) of the OAS serves as its Secretariat. Its members consist of two representatives of the Haitian government (CONADEP and the National Bank of Haiti), and one representative each of the IDB, World Bank, UNDP, OAS, IMF, and of the American, French, and Canadian bilateral assistance programs. The Joint Commission is also responsible for estimating the amount of counterpart funds required for each externally financed project and for helping the Ministries and CONADEP formulate the projects which the government considers of first importance to Haiti's development.

Foreign assistance to Haiti increased rapidly during the period of the 1971 - 1976 five year plan. The Joint Commission in its 1976 assessment of this assistance reports that disbursements increased from $8 million in 1972 to $36 million in 1975 -- an increase of 350 percent. In 1976, approximately 70 percent of the public investment program was externally financed.

As is evident from the following outline of the current and proposed programs of multilateral organizations and of other donors, assistance to Haiti continues to increase.

Inter-American Development Bank (IDB)

Currently, the IDB is disbursing loans totalling $83.4 million. By sector, they are as follows:

	Amount of Loan	Amount Disbursed
	(In $ million)	
Transportation		
Construction of 123-mi road network Port-au-Prince-Les Cayes	47.2	19.4
Renovation and expansion of Port facilities, Port-au-Prince	17.5	9.6
Health and Sanitation		
Potable water supply system, Port-au-Prince	7.4	7.2
Reservoirs		
Distribution system		
Repumping stations		
Hydrants		
Rural health services	6.3	0.63
36 dispensaries		
23 health centers		
1 health and training center		
Agriculture		
Rural agricultural development Artibonite	5.0	0.50
Reconstruction 230 km irrigation canals and 70 km drainage canals		
Soil conservation		
Agricultural extension		
Agricultural credit		
Cadastral survey 40,000 hectares		

The IBD has two loans scheduled for first disbursement in 1977:

A loan of $4 million to $6 million to the Institute for Agricultural and and Industrial Development (IDAI) to promote

-- investment in small to medium private sector enterprises;

-- production on small- to medium-size farms;

-- expansion of industrial services of the Societe d'Equipement National (SEN); e.g., a quality control laboratory, local industries in the Industrial Park, Port-au-Prince.

A loan of $10 million to $12 million for rural education for the construction of

-- 12 Education Centers for Rural Development;

-- 44 Vocational Agricultural Schools;

-- 239 Community schools for basic education.

The IDB leads in financial assistance to Haiti. Its current rate of disbursement is twice that of other agencies. It is also an important donor of technical assistance. As of February 28, 1977, the IDB was providing $2.4 million for technical assistance in transportation, health, and agriculture.

World Bank

The World Bank through the International Development Association (IDA) currently has $51.5 million in projects underway with an additional $30 to $40 million under consideration for financing by the end of 1978.

	Amount	Amount Disbursed
	($ million)	
Transportation		
Road reconstruction, Port-au-Prince-Cap Haitien	30.0	9.4
Energy		
Power Project I Diesel power station, transmission lines, sub-stations, Port-au-Prince	16.0	
Education		
Education Project I, construction of community learning centers, primary schools, teachers' colleges	5.5	0.5

IDA has under consideration four other loans for financing by the end of 1978 and one additional loan for 1979. For 1978, IDA is considering the following projects:

Electric Power II

A project to provide additional electric power. Based on analysis of the lignite deposit for thermo power and the Canadian study of resources for hydroelectric power, the project may require cofinancing from other donors. $ 15 million

Rural Potable Water

To provide potable water systems for 10-11 provincial towns. UN capital development funds are also being used. $ 7 million

Education II

To improve the quality of primary education, establish urban vocational training, community development through ONAAC, radio education, and possibly agricultural secondary schools. $ 10 million

Rural Development II

Proposed for northern Haiti $ 10 million

For 1979, IDA is considering Transport V, a project to improve 175 km of road and possibly three ports other than Port-au-Prince for coastal shipping.

United Nations

During the period of the 1972 - 1976 five year plan, the United Nations Development Program (UNDP) together with other UN-affiliated agencies contributed a total of $27.2 million in technical assistance to Haiti.

	($ million)
UNDP	9.5
World Food Program	6.0
World Health Organization	
Pan-American Health Organization	3.9
UN Fund for Population Activities	2.5
UNICEF	1.6
UN	0.9
UN Emergency Operations	2.8
Total	27.2

UNDP resources and the percentage of those resources allocated by sector through 1976 are

Agriculture	41%
Transportation and communications	24%
Education and training	10%
Mining, energy, industry, commerce, public health, emergency relief	25%

The 1977-1981 five year plan provides the framework for the UNDP program as it is now being formulated. During the five year plan period the UNDP proposes to provide an estimated $18.8 million in assistance to Haiti. Added to this amount are the contributions of other UN agencies -- WFP, WHO and PAHO, FAO, UNICEF, UNFPA, UNESCO, UNEO, ILO and the UN Capital Development Fund. The total amount of UN assistance over the next five years is estimated at $50 million.

The UNDP proposes to allocate its resources among the following five sectors:

Food Production

Introduction of new and appropriate agricultural techniques:

-- cooperatives,
-- extension training centers,
-- seed production centers,
-- animal husbandry,
-- small machinery works.

Natural Resources

-- resource inventory,
-- estimates of demand for water and energy and development of optimal solutions for meeting demand.

The UNDP is cooperating with the World Bank in an investigation of methods of developing electrical energy by the most economical means.

Human Resources

Adaptation of educational system to development needs:

-- extension of educational services in rural regions;
-- increase in number of technicians and specialists;
-- promotion of employment.

Infrastructure

Improving communication services:

-- postal system,
-- civil aviation,
-- coastal shipping.

Planning

Assistance in economic and statistical planning:

-- CONADEP,
-- Haitian Institute of Statistics.

Organization of American States (OAS)

The OAS National Program for Technical Cooperation for 1977 continues already existing projects. These are

Coordination of External Assistance	Allocation of Funds 1977
Advisory services to the Division of External Assistance, CONADEP	$27,000
Integrated Regional Development	
Technical assistance in developing cooperatives and introducing modern agricultural methods, Cul-de-Sac. This is a joint project under the title of "Islands of Development" with the Inter-American Institute of Agricultural Sciences (IICA) and Israel	$55,000
National Institute for Mineral Resources	
Assistance in evaluating mining concession agreements, and mining legislation and policy	$15,000
Fiscal Policy and Administration	
In cooperation with CIDA, this project emphasizes increasing revenues from customs, income, sales, and property taxes	$12,000

Labor Statistics and Port Statistics

Training in statistical methods	$ 5,000

Housing Bank

Training for five officials who will work in a future Department of Housing	$15,000

Inter-American Institute of Agricultural Sciences (IICA)

IICA, an OAS agency specializing in the agricultural sciences, began work in Haiti in 1972. IICA studies and projects are concerned with increasing agricultural production and productivity, encouraging rural participation in development, and promoting a more equitable distribution of the revenues of the agricultural sector. Two of its current projects are carried out in cooperation with CIDA and are concerned with the commercialization of agriculture.

National Agricultural Marketing Service (SENACA)	IICA Funding 1977-1981
Organized within the Ministry of Agriculture, Natural Resources, and Rural Development (DARNDR), this project is being formulated to improve the internal marketing system of agricultural commodities	$465,000
Planning Unit, DARNDR	
Assistance in developing a five year plan for agriculture, formulating projects in the agriculture sector and training	$152,994

Other IICA projects are

"Islands of Development"	
Established within DARNDR, this project seeks to utilize traditional peasant organizations in rural development. IICA is providing a policy expert in peasant community enterprises.	$260,000
National Center for Seed Improvement (CENASAM)	
A project to establish a national seed center to produce varieties of seed which will increase agricultural production.	$260,000

Rural Education

In cooperation with the IDB, a project to provide formal and nonformal education which encompasses problems of rural development, occupational opportunities, and cultural values of the peasants $150,000

Agricultural Studies, Promotion of Production and Administration of Agricultural Policy

A comprehensive investigation of the agricultural sector -- agricultural economics, credit, management, planning, extension, irrigation, peasant organization $727,612

Preparation and Evaluation of Agricultural Projects

Training and formation of groups specialized in project development and evaluation $ 60,000

France

France is assisting Haiti through two organizations:

-- Fonds d'Aide et de Cooperation (FAC)
-- Service Culturelle et de Cooperation Technique (SCCT)

Current FAC programs are in the fields of agriculture, transportation, and health.

	Total Amount	1976 Disbursement
	(In $ thousands)	
Agriculture		
Agricultural development, Jacmel	180	20
Assistance to Ministry of Agriculture	50	10
National Seed Center	340	20
Transportation		
Civil aviation Runway Cap Haitien Training airport personnel	234	30
Training program for National Laboratory, Public Works	100	12
Port-au-Prince to Jacmel highway	7,000	4,900

Health

Intensive care unit, Port-au-Prince hospital	100	8

FAC has approved two projects for which agreements are scheduled for signature in mid-1977:

-- aerial mapping survey to photograph the entire country at a scale of 1/40,000;

-- provision of three technicians to work with the World Bank project for rural development in northern Haiti.

The following projects are under consideration: Assistance in

-- developing a school of geology;

-- establishing an office of geohydrological research in the National Institute of Mineral Resources (INAREM);

-- improving facilities for data collection at the Haitian Institute of Statistics.

FAC also plans to finance one of two road studies:

-- improvement of the southern exit route from Port-au-Prince;

-- route to Jeremie, an important town in southern Haiti which is presently inaccessible by road.

SCCT provides assistance in public administration and primarily in education. A French pedagogic mission works with the National Institute of Pedagogy in

-- retraining primary and secondary school teachers;

-- developing administrative and teaching specialists;

-- research and experiment in adult literacy and educational radio.

France provided approximately $1 million to construct the National Institute of Pedagogy which is concerned primarily with methods of primary instruction. There are seven provincial centers of instruction: Hinche, Saint Marc, Cap-Haitien, Les Cayes, Jacmel, Jeremie, Port-de-Paix.

Canadian International Development Agency (CIDA)

Canadian development assistance falls into four categories: agriculture, regional development, education and training, energy.

	CIDA Contribution ($ thousand)
Agriculture	
Agricultural planning and project implementation	280
National Service for the Commercialization of Agriculture (SENACA)	465
Integrated Regional Development	
Regional development program, Petit Goave	
Study	1,800
Cartography	308
Soil Conservation	952
Offices and housing	575
Community development projects	500
Acqueduct rehabilitation	225
Rodent control	75
Education and Training	
Public administration, CONADEP	650
Vocational training	3,000
Assistance to National Institute of Administration and Management (INAG)	335
Faculty of Agronomy and Veterinary Medicine (FAVM)	3,606
Energy	
Inventory of hydraulic resources	2,075

CIDA expenditures for 1976 incurred in carrying out these projects totalled $3.1 million.

The Canadian government plans to provide $5 million in 1977 for the purchase of Canadian equipment; the amount includes a service contract for equipment maintenance.

Federal Republic of Germany

Technical cooperation between the Federal Republic of Germany and Haiti began in 1964 with an irrigation well drilling project. The work in irrigation continues and has expanded to include agricultural technology, development of cooperatives, industrial promotion, and installation of hydroelectric facilities. Current projects include

- -- well drilling on the Plain of Gonaives. Twenty wells have been drilled; 2,400 hectares are to be under irrigation when the project is complete;
- -- development of cooperatives on the Plain of Gonaives;
- -- pilot cadastral survey on the Plain of Gonaives;
- -- maintenance shop for pumping stations in the Cul-de-Sac where the Federal Republic's assistance program began in 1964 with irrigation and pump installation;
- -- inauguration of a Bureau of Industrial Promotion and Technological Transfer to promote European investment in Haiti. The project began in January 1977; it is estimated to cost $390,000;
- -- Food for Work, material and supplies for 9 irrigation projects, road construction, and agricultural production in the Northwest at a cost of $920,000 in 1976; in 1977, $286,000 are budgeted.

The Federal Republic initiated a capital assistance program in 1976 with a proposal for the construction of

- -- a hydroelectric center with a capacity of 2,600 kw, Drouet,
- -- two irrigation pumping stations, Estere,
- -- electrical network improvement, Gonaives.

The Federal Republic's financial contribution to the three projects in 1977 is estimated at $3.8 million.

Republic of China

The Chinese agricultural technical mission began its work in Haiti in 1971. The mission has concentrated on increasing rice and other crop production by training, demonstration, experiment, and extension work. Current projects include

-- fertilizer experiments in rice culture, production of new varieties of rice, a rice planting extension project in cooperation with USAID, and experiments with mountain rice;

-- experiment and extension work in soya bean production.

Approximately 250 farm families are participating in the rice production program in cultivating some 250 hectares.

Israel

An Israeli technical cooperation mission has been working in agriculture in the Cul de Sac since 1974. One agricultural specialist is presently assigned there at Bas-Boen; he also works with seven other nearby villages. A second is assigned to the "islands of development" near Leogane and Jacmel; a third will work on dryland crops at Gonaives and Port-de-Paix.

Private and Voluntary Organizations

In 1975, somewhere between 100 and 150 private and voluntary organizations (PVOs) were registered with the Ministry of Foreign Affairs and Cults. Many more agencies, however, remain unregistered or work through intermediaries.

The total impact of the PVO input is not known but the UN estimates that through 1973 the contributions of these nongovernmental organizations (NGOs) exceeded that provided by all multilateral and bilateral donors combined. In 1975, the UN estimated that 85 of the known agencies contributed in excess of $12 million to development purposes, an amount which includes $4 million of PL 480 commodities. This figure would undoubtedly increase significantly if the contributions of all agencies were known.

Despite the fact that most of the PVOs working in Haiti have their origin in the United States, there is little coordination and relatively little cooperation - either with each other, other international donors, or the host government. The result is a situation characterized by inefficiency of operation. Further, an "every man for himself" mentality has developed which has detrimentally affected cooperation and joint problem solving.

Many of these agencies are coming to realize that this situation must be corrected if resources are to be efficiently used and common problems resolved. Cautious steps are being taken to organize. The Council of Evangelical Churches of Haiti (CEEH) is the most advanced with an organization of 13 councils and approximately 400,000 members. In January, CEEH sponsored the first of what is expected to be a number of meetings with external donors. More than 20 international PVOs attended; they included Concern, MAP International, and World Vision. Many of these donors have had direct program or operational program grants from A.I.D. Many of them do not have and are not interested in having resident personnel in Haiti but prefer working through local indigenous structures such as CEEH. Many of the large Methodist organizations in Haiti are not, however, members of CEEH but belong to a parallel coordinating body Haitian Churches for Development (CHED). Unfortunately, this organization is not active having been rendered ineffective by internal differences. Even here, however, there is recognition among certain members of CHED of the need to revitalize their coordinating structure.

On the Catholic side, CARITAS is moving to coordinate the activities and requirements of the many dioceses for economic development

work. While this effort is still in its infancy, its impact is beginning to be visible.

The nonmissionary, nongovernmental, international organizations such as Save the Children, Foster Parents, CARE, CRS, and CWS are reforming into a PVO council in Port-au-Prince. This council has already begun to discuss common problems and aims.

The Government of Haiti, for its part, lacks a cohesive plan or strategy for coordinating the activities of the PVOs. With the development of its new five year development plan the government has expressed its interest in a better coordination of donor assistance. To date, however, this interest has not substantially affected the PVOs. Long ignored, they have rarely attempted to integrate their activities with those of the government. Likewise, the government's attitude has varied from enthusiasm and support to disinterest and nonsupport.

With the development of the five year plan, however, the desires of the government are becoming clear: Coordinate. Also, for the first time, the PVOs are able to develop their plans around rational government objectives as expressed in the plan.

It is in this environment that A.I.D. intends to expand its program of support to the PVOs. Building upon the solid PVO base already established, A.I.D. intends to expand its number of operational program grants.

Particular attention will be directed to the support of the coordinating councils and agencies. We envision the development of operational program grants designed to strengthen the coordinating, planning, and programming facility of these coordinating councils. A.I.D. will also encourage the strengthening of the technical capabilities of the PVOs. At present, trained Haitian personnel are not always available and only the largest of the PVOs can afford to hire engineers, agronomists or other specialists. As a result, efforts often suffer or fail due to faulty or weak analysis and design. A.I.D. envisions the possibility of using operational program grant support to build and/or strengthen a centralized PVO technical competence. Lastly, attention will also be directed to the identification and support of indigenous PVO organizations.

In the immediate future, A.I.D. will focus on the development of innovative and worthwhile PVO efforts. Discussions are already underway with PVOs in such areas as nutrition, education, community development, and potable water development.

In total, A.I.D. sees an expansion in the intermediate future of six to eight active PVO projects: Two or possibly three of these projects will be directed toward strengthening the administrative planning, programming, and implementing capabilities of the PVO coordinating councils.

VIII. PL-480 TITLE II

The three largest U. S. voluntary agencies, -- CARE, Church World Services (CWS), and Catholic Relief Services (CRS) -- carry out PL-480 Title II programs in Haiti. The basic objective for these Title II programs is to feed hungry people.

This objective, in our opinion, should be viewed in a long-range perspective. We are urging the PVOs, therefore, to place their Title II activities in a developmental context and to avoid a "hand out" approach during nondisaster periods. Disaster assistance is the highest priority use of Title II foods. Haiti has had two serious droughts during the past two years and Title II foods have played a vital role in keeping alive thousands of the rural poor in the drought-stricken areas. These disaster programs have been part of a cooperative international effort to minimize suffering and death in the country.

During disasters, such as the Haiti drought of 1977, Title II foods have been distributed by the PVOs on both a direct distribution basis and on a food-for-work basis. The majority of food-for-work projects, during disaster and nondisaster times, have tended to involve construction and improvement of rural roads or long term agricultural infrastructure such as terracing.

We intend to alter the focus of food-for-work activities so that they help meet both developmental and disaster oriented objectives. For example, we envision more food-for-work projects committed to irrigation systems and the construction of community development projects and rudimentary storage facilities. In so doing, we will help build up an infrastructure which is of benefit to the Haitian poor in times of relative prosperity and of famine.

Priority is given to food-for-work (FFW) activities. Out of the proposed FY 1979 Title II program, $2 million, or 42% of the total $4.7 million, will provide food for FFW projects.

Our strong support for FFW activities reflects a number of factors:

-- FFW projects are usually organized through community councils and thus reinforce our basic strategy of encouraging the formation of voluntary organizations as a way of strengthening local social cohesion. The community councils formed by the PVOs to carry out FFW projects can be used for other development activities, e. g., these councils will be able to participate in the Integrated Community Development project.

-- The FFW projects consist of developmental activities such as the improvement or construction of agricultural penetration roads and soil conservation work. These projects therefore result in both a distribution of foods to satisfy the immediate needs of the rural poor and the creation of basic infrastructure which will improve medium- and long-term conditions of the rural poor.

-- Title II commodities can be targeted to reach the poorest regions of the country through the choice of the locale of the projects. Thus, significant amounts of FFW foods have gone to the northwest area of Haiti served by HACHO.

Our proposed policy is to expand the role of the PVOs including their FFW activities. However, any major expansion of the PVO role will require a readjustment in the relationship between the PVOs and the Haitian government, including improved coordination mechanisms. At the moment, the Haitian government is distressed by the uncoordinated nature of the various private efforts and the alleged slowness of several of the PVOs in expanding the number of Haitian professional personnel. Our strategy, therefore, is to help establish a coordinating council which would provide the Haitian government the necessary assurances that PVO efforts are integrated into the government's overall development effort while not placing restrictions on the PVOs which they feel are incompatible with their private nature.

To expand their efforts, the PVOs will also require greater technical expertise. To solve these two issues, we are proposing a PVO Development Support project for FY 1979 to provide a cadre of technical experts to assist the PVOs to identify, plan, and implement community development projects. It is expected that these experts will be Haitians. In a related PVO project, funds will be given to strengthen the coordinating council of the Evangelical Churches in Haiti (CEEH) -- a purely Haitian organization -- under the title Development Support - CEEH. With the proposed changes, it should be possible to increase the size of the FFW program significantly starting in FY 1980.

In theory, the maternal/child Title II Program would be a good method of getting food to needy young children, who are extremely vulnerable to fatal diseases when they are malnourished, and to pregnant women and lactating mothers. In line with our developmental orientation for Title II, this distribution should be part of an educational health program or should involve food as medicine as part of a health program for the badly undernourished population.

Some food is made available to nutrition centers and it is eaten at the center by the malnourished child. However, there is only a limited number of institutions where mothers and infants can be fed directly in this manner. When food is given to mothers in bulk for consumption at home, there is no way of determining whether the vulnerable young children get the food or whether it goes to older members of the family. Primarily because of this problem, the Maternal/Child Title II Program is relatively small ($833,000 in FY 1979 or 18% of the value of the total Title II program.)

In Haiti, historically the PVOs have given major attention to the school feeding program. In view of the effect of poor diets on the vitality of students and their ability to benefit from their education, and considering the high priority the government gives to education, we propose that Title II school feeding programs be maintained in Haiti. In FY 1979 the school feeding program will total approximately $1.9 million, or 40% of the total Title II program.

With the expected major increase in the FFW program and some increases in the two other programs, we expect the Title II program to increase by approximately $1 million a year beginning in FY 1980.

Role of Other Donors

The European Economic Council (EEC) is providing food assistance to Haiti in 1977 valued at approximately $3.3 million. At the present time the consignee and categories of recipients are not known. However, the EEC is being requested to provide further details. It is assumed that this type of assistance will continue for the foreseeable future.

The West German Committee for the Struggle Against Hunger is providing an economist and an agronomist to implement a Food-for-Work program in close cooperation with HACHO and FAO. Nine projects have been implemented in irrigation, road construction, and agriculture production in northwestern Haiti. Part of the food used as wage payments on these projects was imported from Europe and part was purchased locally. The German Committee financed $920,000 worth of foods in 1976. It is expected that this assistance will continue; however, monetary levels are not yet known.

Present and Future World Food Program (WFP) Assistance to Haiti

Project 2008 "Literacy Campaign and Adult Education" will run through March 1979. The cost of WFP amounts to $600,000 per year.

Project 785 "Land Development in the Northwest" will terminate around August 1977. Its cost in 1977 will amount to about $130,000.

Project 2104 "Mother and Child Health Clinics and Family Planning" will terminate at the end of 1977. Its cost during 1977 will amount to $540,000.

Project 2105 "Infrastructure Works for Land and Water Development and Reforestation and Erosion Control in Selected Areas" will also terminate around August 1977 and its cost during 1977 will amount to about $200,000.

Additional assistance of $2,000,000 is scheduled to be given to Haiti by the World Food Program for the following activities:

-- Economic and Social Development of the Plain of Estère,

-- Economic and Social Development of the Northern Plain (World Bank),

-- Soil Conservation and Forestry activities in the Limbé area (support to an FAO project),

-- Economic and Social Development of the Northwest (expanded activities in and around Port-de-Paix).

It is expected that a new request for expansion of the present project 2104, Mother and Child Health Clinics and Family Planning, will be submitted for approval by WFP in the fall of 1977. It is estimated that if approved this project could provide approximately $4.9 million in aid per year for three years starting in January 1978.

A request has been submitted to the WFP for feeding of hospital patients and children in nutrition centers. No cost estimates are available at the present time.

IX. RURAL SECTOR

Agriculture and Agro-Industry

Agriculture is the largest sector of the Haitian economy, accounting for about 45% of the GDP and employing more than 80% of the active population. It is also the most important source of foreign exchange, accounting for about 65% of the country's export earnings during the past 10 years. The growth of the agricultural sector was negative during the 1960s but reached a positive 1.2% per year in 1971 - 75. But, with population growth in rural areas at 1.1% per year, there has been practically no increase in per capita income in rural Haiti.

The statistical base for appraising the growth of the agricultural sector is weak. Government of Haiti calculations are based on the assumption that at least 75% of agricultural growth is geared to the maintenance of per capita consumption of food in rural areas; therefore, the growth of agricultural production is smoothed out in statistical series. In real life, however, agricultural growth has been subjected to violent fluctuations. Hence, statistics on the agricultural sector must be used with caution.

Domestic Food and Export Crops

Haiti has a total land area of 2,770,000 hectares, of which only 870,000 hectares are suitable for cultivation. Of the latter amount, 500,000 hectares are mountainous and not well suited to intertilled crops. These lands suffer from severe erosion. Of the 370,000 hectares suitable for annual crops, 125,000 to 150,000 hectares have been classed as irrigable; 70,000 hectares are now served by irrigation systems operating at varying degrees of efficiency.

Basic food crops -- corn, grain sorghum, beans, bananas, and rice -- are planted on 57% of the cultivated land and account for 44% of the value of agricultural production. Corn and grain sorghum together are planted on 40% of the cultivated land.

Basic food crops are particularly important when considered in the context of the nutritional levels of the people. Per capita caloric intake is reported at 1,850 calories per day or below the 2,200 calories considered as a standard. Protein intake is estimated to be 70% of requirements.

Export crops are grown on 20% of the cultivated land and account for about the same proportion of the value of agricultural production. The principal export crops are coffee and sugar. Essential oils derived from lime and vetiver rival sugar in importance. Minor exports include cocoa, fruits, and vegetables. Sisal exports, which were significant in the past, declined over the last five years with deterioration in world market prices. Other industrial crops produced for local processing and consumption are cotton and tobacco.

Coffee is the most important export crop produced in Haiti. It is the major source of income for 1.5 million people in rural Haiti; it accounted for 25% of merchandise exports in 1975. There are approximately 389,000 coffee producing units covering some 132,000 hectares, or 16% of all cultivated land. The downtrend in coffee production is cause for concern. Although it has increased in the last two years, production in 1975 was still 18% below its 1960 level. This decline is attributable to four factors:

-- poor cultural practices which result in declining yields;

-- imperfect competition in the marketing system, where large numbers of sellers deal with a few large buyers to the detriment of producer interests;

-- high export taxes on coffee, which, combined with deteriorating world prices in the 1960s depressed growers' income;

-- several severe hurricanes which destroyed many coffee trees in the 1960s and caused farmers to switch to subsistence crops.

Sugar cane, planted on 82,600 hectares, or 10% of all cultivated land, is the second most important industrial crop after coffee and has been one of the major sources of foreign exchange earnings. Only about 19,000 hectares are used for production of industrial sugar. The remaining production is channelled into small mills and distilleries producing brown sugar and alcohol for local consumption. Sugar production and exports have shown a long-term decline. Producer prices of cane are fixed by the Government at levels below those of other Caribbean countries. Taxes are levied on the local sale of sugar as well as on export. These policies and rising demographic pressure on the local food supply have resulted in the shift of some land from sugar to other basic foodstuffs which yield higher returns.

Agricultural development strategies for increasing production of export crops should emphasize those crops for which Haiti has a proven comparative advantage, namely, coffee and sugar. These crops are widely grown and will benefit large numbers of low-income farm people. While many fresh fruits and vegetables can be produced in Haiti, increasing production for export requires more complicated marketing infrastructure and technical expertise. Trade barriers are also frequently limiting factors in the United States and other markets.

Livestock, Forestry, and Fishing

Livestock is rarely held primarily as a production enterprise in Haiti. Most livestock is tethered on noncultivable lands within cultivated areas. Feed and forage are brought to the animal in the more intensified production operations. Livestock often represents a repository of savings second only to land for the rural population.

The World Bank report on Haiti in 1972 expressed serious concern for the sharp decline in the number of cattle. This decline was attributed to imperfect market structure. Farmers who generally own very few head each sell their best cattle to the Haitian American Meat Company, which has a monopoly for export. The IBRD report indicated that producer prices are very low and should be raised to the level of those for similar cattle in other countries to enable producers to sell fewer head to meet cash requirements. Although cattle produced on grazing lands can be an important source of income for Haitian farmers, it is doubtful that intensified livestock production through feed grains should be given high priority as a development strategy because of limited local feed grain production. Feed grains in developed countries, such as corn and grain sorghums, are food grains in Haiti.

About 200,000 hectares of land are classified as forestry acreage and include pine and hardwood forest. "Slash-and-burn" agriculture, production of 4 million cubic meters of charcoal per year, and timber harvesting have resulted in rapidly shrinking forest areas. This complicates an already severe erosion problem. Accelerated public investment in reforestation could absorb unemployed and underemployed labor, reduce erosion, and maintain the basis for handicraft and woodworking industries.

Little information is available on the contribution of fishing to Haiti's economy. The small, uncontrolled marine fisheries produce about 4,000 tons annually; since there are no facilities for preserving fish, the catch must be sold fresh. A small amount of lobster is exported. Some 8,000 families are engaged in fishing, and their small boats and primitive gear confine operations largely to shallow waters. A Japanese study found no large fishing grounds of commercial interest, but additional studies are to be carried out under an IDB grant. Some experiments have been conducted with family fish ponds to provide much needed protein to rural dwellers. To-date there has been no evaluation of these experiments. Potential problems include thievery, lack of management skills, and technical difficulties. Given the uncertain possibilities for family fish ponds, and the limited resources of the Department of Agriculture and Natural Resources and Rural Development (DARNDR), it is premature to recommend a project in this area. However, additional experiments with both fish ponds and marine fishing could be conducted in community development programs.

Foreign Agricultural Trade

Agricultural exports as a group have stagnated since 1971. Coffee exports, which traditionally have accounted for one-third of export earnings, declined from $24 million in 1973 - 74 to $19 million in 1974 - 75, and export volume fell by 17% from 1970 - 71 to 1974 - 75. Higher coffee prices in 1975 - 76 led to an increase in export volume of nearly 50% and a rise in export value to $46 million. Part of this increase in exports represented a reduction in stocks, but there is also evidence of more intensive cultivation. Also promising is the undertaking by the Haitian Government, with A.I.D. assistance, of a program to expand coffee production.

After an extended decline, sugar exports rose substantially in FY 1975 when world sugar prices attained record levels. World prices have since declined and sugar exports have fallen to the point that sporadic imports have been made to alleviate temporary shortages. It is unlikely that sugar exports will increase in the immediate future unless there are advances in production technology and improvements in irrigation systems. Government tax and price policies will also have to be changed. It is possible that a large amount of land in the central highlands could be brought into sugar production, but this possibility would have to be confirmed by a feasibility study.

Sisal exports, which once were very important, have declined substantially since 1960. Synthetics made rapid inroads into the sisal string market until 1973 - 74 when high petroleum prices reversed this trend. The prospects for expansion of sisal exports are not favorable. The cost of synthetic string will act as a ceiling for prices. Also, Haiti must compete with other countries such as Mexico and Brazil which have support programs for sisal producers.

Essential oils are the only traditional export for which foreign exchange earnings have shown a consistent increase. This is largely the result of rising world prices. But processing equipment is antiquated and must be modernized if exports are to be expanded consistently with increases in world demand.

Food imports in Haiti have accounted for a rising proportion of total imports; they have increased from 21% of the total in 1970 to 24% in 1974. Imports of food reached a record $39 million in 1975, accounting for 29% of total imports in that year. The large increase in the last two years reflects the drought which has necessitated emergency food imports, such as wheat, financed largely through foreign donations. Rapidly rising food imports point out the importance of increasing basic food production in Haiti. Emphasis should be placed on indigenous staples such as corn, sorghum, rice, and beans. Projects designed to increase production of basic food crops, particularly corn and beans, offer the advantages of

- -- improving the diet and increasing the income of the poorest Haitian farmers;
- -- concentrating on crops with which farmers have had experience.

Some food imports represent nonessential foods such as fresh meat, canned fruits and vegetables and confectionary items. These have grown rapidly to an estimated $4.4 million in 1975. The ad valorem duties of 30% or less on these items could be raised without creating a hardship.

Food fats and oils constitute one of Haiti's historic basic food imports. Although some advisors have advocated increased coconut and dairy production, these commodities should be given low priority relative to indigenous food crops, which means that imports of fats and oils are likely to increase.

Land Tenure, Land Distribution, and Landless Labor

According to the 1971 census, 60% of all farm plots were owned, 14% were rented, and 14% were sharecropped. Area surveys show that many farmers are both owners and renters or sharecroppers; perhaps two-thirds or more own at least some land. Relatively few farmers, though, have clear land titles. In the future, when investment in hillside terraces and walls is under consideration or when farmers are ready to absorb larger amounts of credit, this could become an important issue.

In 1971, Haiti had 615,710 farm units whose average size was 1.4 hectares. The concentration of landholdings was remarkably low by Latin American standards, with the largest 3% of landholders controlling less than 20% of the farm land. Fragmented holdings are common, with the census reporting 1.8 plots per farmer and more recent surveys showing 2.6 to 3.4 plots in some areas. Frequently, a farmer will have both hillside and lowland irrigated plots. While fragmentation can be disadvantageous for commercial farmers specialising in one cash crop, it provides subsistence farmers with security against crop failure in specific locales. Extreme fragmentation, with small holders having 10 to 20 plots or more is, of course, undesirable under any circumstances; it can become an even greater problem than it presently is in Haiti.

Small plots and relatively low concentration of landholdings have characterized Haitian agriculture since independence when large plantations were broken up and distributed to former slaves and soldiers. Inheritance laws and population growth have resulted in further subdivision of holdings and the resulting pressure on the land has contributed to soil erosion. Since redistribution of land is not at present an issue in Haiti and alternative employment opportunities are unlikely to increase spectacularly, programs of assistance to Haitian agriculture must accept smallholdings as a basic fact. While cooperative forms of farming can theoretically permit greater choice of crops and technology, the Haitian farmer's strong feelings for land ownership and his suspicion of government efforts to regulate land tenure, severely limit the chances of success of this type of farming.

Little is known about the number or status of landless laborers, although according to one estimate, up to 10% of the rural labor force may be in this category. The demand for hired labor is limited largely to sugar and sisal. Some 20,000 laborers are employed in the Haitian sugar harvest (and an unknown number in the harvest across the border in the Dominican Republic), but how many of these are landless is not known. It is quite likely that most of those not able to obtain a plot of their own simply migrate to Port-au-Prince or to smaller urban areas. This aspect of rural life requires further research.

Income Distribution and Employment

Notwithstanding the extremes of poverty and affluence evident to the casual observer in Port-au-Prince, income distribution in Haiti is not as unequal as in other countries in the Western Hemisphere. A 1970 survey indicated that only 3,900 persons had wage and salary incomes (including earnings from professions) of $2,160 or more; the most affluent 5% received 26% of labor income compared with a Latin American average of more than 30%. In rural areas, the share of the wealthiest 5% was even less, about 21%.

Given Haiti's low level of development, these figures are not surprising. A look at the other end of the income scale shows that what is shared more equally than elsewhere is an existence close to the margin of survival. In rural areas, 92% of all income earners received less than $240 annually in 1970 and per capita labor income in this group averaged only $40. For all rural residents per capita labor income was only $55 compared with $90 in urban areas. Per capita GDP figures were about 40% higher.

Since 1970, the urban-rural income differential has widened as urban economic activity has expanded faster than the agricultural sector. Real per capita consumption in Port-au-Prince increased by 61% between 1970 and 1975; but in rural areas, it was unchanged. The urban-rural consumption differential thus increased from 2:1 to 3.2:1.

While real private consumption increased by 16% nationally (and by 60% in Port-au-Prince) between 1971 and 1975, import duties and excise taxes on consumption items actually declined slightly in real terms. But even if nonessential private consumption (or high incomes) could be heavily taxed, the small size of the high-income group means that the well-being of lower-income families could not be improved significantly by using the tax-transfer mechanism to redistribute income. What is needed instead are programs to raise the productivity of agriculture, on which most of the poor depend for their livelihood. Heavier taxation of higher-income groups is desirable to help finance the required investments, but substantial foreign resources are necessary if there is to be a significant long-run impact on rural incomes.

Unemployment figures are also cause for concern. Open unemployment in 1971 was estimated to be 16% in Port-au-Prince and 12% nationwide; unemployment-equivalent estimates for rural areas (including various forms of underemployment) range from 50% to 75%. These latter figures, however, should be regarded with skepticism: they tend to ignore time spent in general farm management, household operation, marketing, and nonfarm activities; they do not take into account peak season labor requirements; some overestimate work time available by failing to exclude persons not in the labor force or by assuming equal work capacity for all available labor; i. e., ignoring differences attributable to age, sex, health, and nutrition status or other factors. With existing technological practices, production would decline sharply if 50% to 75% of the rural labor force were to leave the land.

This is not to deny that serious underemployment exists in Haiti. External migration of perhaps 0.4% of the population argues to the contrary and there is good reason to believe that family labor can provide most of the estimated 100 - 200 workdays per hectare required to construct hillside terraces and walls to prevent soil erosion. But to set one's policy focus too sharply on employment can be dangerous. Many of those who are fully employed have standards of living no higher than the unemployed or underemployed. The problem is not so much an employment problem as it is one of productivity and thus of income. Putting people to work -- while important for human dignity -- is not enough. The emphasis should instead be on production and productivity, to provide employment that permits steadily rising income and does not simply feed empty stomachs for a few months. If these programs are labor-intensive -- and nothing else makes sense in Haiti -- they will provide the means for helping to solve the unemployment problem. Income from coffee production, for example, could be significantly increased if labor were used more intensively than in the past. This seems to have happened in 1976 when coffee prices began to climb rapidly.

Agricultural Production Technology

Crop yields in Haiti are among the lowest in the world, indicating an extremely primitive level of production technology. Crops are planted, cultivated, and harvested almost entirely by hand, with hoes and machetes as the principal tools.

The use of improved seeds is very limited. Agricultural research services have not introduced, tested, or developed improved varieties. Some progress is now being made with improved corn varieties under USAID sponsorship. A limited amount of improved cotton and rice seeds have been imported. The Institute for Agricultural and Industrial Development (IDAI) has also imported small amounts of seed corn and beans. Neither the Government nor the private sector has produced seeds of improved varieties for distribution.

The use of fertilizer is very low and limited to a few hundred tons each on rice, sugarcane, coffee, cotton, and vegetables.

While 70,000 hectares of land are included in irrigation systems, many of the irrigation networks are ineffective because of inadequate maintenance, insufficient water supplies, and poor drainage.

Improved production technology could substantially increase crop yields in Haiti. Adaptive research to improve seed stocks should be emphasized as well as extension services to assure their use by farmers. The intensity of land use in the country could also be increased. Crop rotations and multiple cropping require more research. More intensive use of water through

the rehabilitation of old irrigation systems should also be emphasized. In addition, credit to assure that optimal packages of production inputs, including seeds, fertilizers, and pesticides are available to those farmers capable of effectively utilizing such packages.

Agro-Industry

Agriculture provides raw materials for numerous processing industries which account for about 30% of the total value derived from manufacturing.

-- Sugarcane is grown for three large mills and refineries which produce about 75,000 tons of sugar. In addition, there are numerous small plants producing crude raw sugar and alcoholic beverages for local consumption.

-- Production of upland cotton supplies most of the raw materials for a ginning, oil extraction, and spinning complex which processes over 3,000 tons of seed cotton per year.

-- Vetiver and lime production provide raw material for some 45 essential oil distilleries. Processing equipment in this industry is antiquated.

-- Beef is produced for local slaughter and consumption as well as for sale to the Haitian American Meat Company (HAMPCO). HAMPCO operates a modern slaughterhouse and exports beef to the United States where it is sold to Gerber Products, Inc., for making baby food and to a distributor in the Midwest.

-- Tobacco production provides about 30% of the raw materials for cigarette manufacture and about one million pounds of tobacco per year. An American tobacco company with a plant in Haiti has a tobacco production specialist in the country who is achieving some success with an integrated tobacco production program.

Another important agro-industry operated with imported raw material is wheat flour milling. Production of flour has grown rapidly since 1971. Wheat imports come mainly from Canada and the flour mill is a joint venture between the Governments of Haiti and Canada. Its capacity has been increased in the last five years; a further expansion which would double its capacity is now contemplated.

Transportation and Marketing

One of the most important constraints to Haiti's agricultural development is the lack of infrastructure. The nonexistence of trunk roads and agricultural feeder roads have resulted in at least five or six separate agricultural production and marketing regions with little interrelationship among them. It is difficult to visualize the development of Haiti's agriculture without a better road system and the installation of road maintenance capabilities. The lack of roads and poor condition of roads that do exist have several important economic consequences:

-- Transportation costs are raised, thus reducing prices to producers and increasing prices paid by consumers for basic foodstuffs;

-- In periods when roads are impassable, surpluses in one region cannot be shipped to deficit areas;

-- Costs of inputs used by small farmers are increased to almost prohibitive levels.

Inadequate roads are often the main reason for the continuance of subsistence farming in many areas and the slow rate of development in others where the rural population is cut off from outside supplies and markets. Hence, agricultural development can be accelerated and marketing of agricultural products facilitated through simple rural roads which are passable all year.

Practically no information is available on prices of agricultural commodities in different regions of the country or in different months over the crop year. The systematic collection of data on agricultural prices should be undertaken. The analysis of price data is a principal means of gauging the efficiency of agricultural marketing systems.

Basic food grains are usually bought and sold in country markets on a volume rather than a weight basis. This practice can be a major source of exploitation by local middlemen. Small farmers are not paid for sugar on the basis of its sugar content, hence they have little incentive to produce improved, high-sugar content varieties. Grades and standards for basic food grains are rudimentary or nonexistent. Other marketing problems, such as the adequacy of farm and off-farm storage facilities and physical losses in storage, merit further study. In tropical climates, food grain losses in storage are frequently substantial because of fungi, insect, and rodent infestation. Loss estimates of up to 30% to 40% have been reported in Haiti.

Government Institutional Structure

The principal government institution concerned with agricultural development is the Ministry of Agriculture and Natural Resources and Rural Development (DARNDR). Its three principal divisions are:

-- Agriculture and Livestock, with responsibility for all activities related to crop and livestock production, including export crops;

-- Natural Resources, concerned with irrigation development, flood control, soil conservation, hydrology, geology, meteorology, and mines;

-- Rural Development, with responsibilities for higher and middle-level agricultural education, rural education, and vocational agricultural education.

Several semiautonomous agencies under the Ministry of Agriculture also have important responsibilities in agriculture:

-- National Coffee Institute (IHPCADE), which is responsible for promotion, extension, and control over coffee and other export commodities;

-- Bureau of Agricultural Credit (BCA);

-- Artibonite Development Organization (ODVA);

-- Gonaives Plain Development Organization (ODPG).

The effectiveness of DARNDR in agricultural development has been severely restricted by:

-- personnel with inadequate technical, administrative, and managerial training;

-- a limited budget, only 10% of which is available for operations after salaries;

-- concentration of personnel in Port-au-Prince;

-- fragmentation of rural development programs through many agencies with overlapping functions.

Many of the better-trained personnel left DARNDR during the past decade for employment with other agencies where salary benefits were more attractive. For example, a number went to IDAI, after it was created in 1962 through a loan from the IDB. It provides credit for agro-industries such as those processing cotton, oilseeds, and dairy products. It also owns and operates several such plants -- at a loss. In addition, IDAI extends credit to farmers for production of cotton and food crops such as corn and beans.

A planning unit has recently been created in DARNDR with assistance from Inter-American Institute of Agricultural Sciences (IICA) and Canada. This organization will have the responsibility for developing agricultural plans for submission to the national planning organization (CONADEP). Sector analysis capabilities of both organizations are limited partly because of the lack of an adequate statistical base.

The research base for agricultural development planning -- both technical and economic -- is almost totally lacking. The current research effort is headed by an agronome (agronomist) with a staff of two technicians with limited training in agricultural economic analysis. This program should be strengthened to gradually accumulate a better research base for agricultural sector analysis and planning. Technical research on agricultural production should also be strengthened. It is currently limited to a staff of ten professionals with small operating budgets. Research has been limited to variety testing and fertilizer trials.

There has been a tendency for foreign aid donors to concentrate their assistance in different agricultural regions of the country. One central government agency should have the capacity to coordinate and support these regional development efforts. The logical unit to provide such coordination is DARNDR, whose administrative capabilities should be strengthened.

Fragmentation of agricultural development programs in different government agencies has some advantages, in that decentralized agencies tend to have less complicated administrative structures, greater ability to focus on specific objectives, and often an ability to attract well-trained technicians by paying salaries significantly higher than those in the central government. However, as development agencies become more numerous, the problems of overlapping functions and interagency rivalries become more formidable. And, to the extent that these agencies have budget autonomy, resources can be seriously misallocated from a sector standpoint. This creates a need for a strong overall coordinating agency in agricultural development -- an issue which foreign assistance donors should consider carefully at this time.

Agricultural education is also the responsibility of DARNDR at three levels:

-- the Faculty of Agronomy and Veterinary Medicine provides four years of post-secondary training with a capacity for enrolling 48 students;

-- an agricultural technical school provides technical education at the secondary level with a capacity to enroll 40 students every two years;

-- three agricultural vocational schools have a capacity to enroll 90 students every three years.

The agricultural technical school is the principal source of qualified extension agents. Requirements for these graduates will increase relative to those for agronomes in the immediate future.

Strategies for Overcoming Constraints to Agricultural Sector Development

Choice of Technology

Haiti's land tenure structure, based on small, individually-operated farm units, restricts the range of agricultural technology in the near future. It also complicates the management of technologically appropriate projects in soil conservation and irrigation. Illiteracy makes difficult the formation of large credit unions or viable production or marketing cooperatives capable of obtaining and effectively using bank credit. Small credit groups have been successfully formed, but the administrative costs of lending to them have been high, requiring subsidies, and their repayment record has been poor. Moreover, the administrative capacity of Haitian credit institutions will have to be significantly improved before they can effectively administer large amounts of credit.

Under these circumstances, the use of significant amounts of credit for the purchase of fertilizer, pesticides, machinery, and equipment will tend to be limited for small farmers. For basic food crops, where it is argued the main thrust of Haiti's agricultural development should be, strategies which are not completely dependent on production credit will have to be emphasized. These strategies include improved cultural practices, crop rotation, use of improved adapted seed varieties, and rehabilitation of irrigation systems as part of a comprehensive watershed management system. Feasibility of using purchased inputs will require farm-land economic analysis for all projects.

Transportation

The IBRD has financed the repair and rebuilding of the northern road from Port-au-Prince to Cap-Haitien. The IDB has provided funds for the reconstruction of the southern road to Les Cayes. The French have rebuilt the southern road to Jacmel.

The bad condition of most roads that prevailed until recently was the result of inadequate or nonexistent maintenance. Under its road maintenance project, A.I.D. is providing funds and technical assistance to the Haitian National Highway Maintenance Service (SEPRRN) to establish operating procedures and to train personnel.

Improvements in the network of agricultural feeder roads have also been urgently needed in Haiti because many of the very small farm holdings have no access to primary or secondary roads. A.I.D. is also providing technical and financial assistance for the construction of a network of agricultural feeder roads.

Commodity Taxes, Market Structure, and Produce Prices

A gradual decline in the production of important export crops such as coffee, sugar, and cocoa has occurred in Haiti over the years. This is attributable in part to heavy export or excise taxes on these commodities which constitute a sizable share of public revenue. Only a small portion of these revenues has been returned to the rural sector.

Because of these tax policies, Haitian farmers have received a smaller share of the world price of these export crops than producers in other countries. They have shifted production from export or industrial crops to staple food crops which are traded in local markets and escape government control. The results have been lower producer incomes and a loss to the economy in foreign exchange earnings. Tax policy in Haiti has in effect been a principal determinant of producer prices. The Haitian Government has not recognized the important role that higher producer prices can play as incentives to increasing production.

Modifications are needed in Haiti's tax structure which would gradually shift the taxes from domestically produced commodities to imports of luxury items, nonessential foods, income, and property. There is encouraging evidence that the government is beginning to recognize the need for such basic reform. Recent changes in the export tax on coffee, for example, put the tax on an ad valorem basis to replace the previous fixed tax.

Imperfectly competitive market structures also are cause for serious concern in the marketing of export and industrial crops. These markets are characterized by either a single buyer such as the Haitian American Meat Company, or a small number of large buyers, as for example in coffee, who have the market

power to fix prices to the detriment of producers. Prices lower than perfectly competitive prices tend to discourage production. The Haitian Government should encourage the establishment of competitive marketing firms handling export and industrial crops. It is currently pursuing this objective in encouraging the development of cooperatives and a "parallel market" for coffee with A.I.D. assistance under a Small Farmer Marketing project.

Credit

The amount of agricultural credit in Haiti is still very small, despite a rapid rate of increase since 1972 by the two agricultural lending institutions: the Institute for Agricultural and Industrial Development (IDAI) and the Agricultural Credit Bureau.

IDAI is a budding development bank which also directly operates several agro-industrial enterprises. Its loan volume in 1972 was a mere $200,000 of which 87% was channeled into supervised credit programs for cotton, corn, beans, peanuts, and rice in the five areas served by IDAI's branch offices. Approximately 2,500 farmers received credit from IDAI, making the average loan amount about $80. Administrative costs of the supervised credit program were reported to be $17 for each $1 loan and the repayment rate as of August 1970 was less than 70%. By 1975, loan volume had expanded to $522,000, a significant increase even after taking inflation into account (73 percent from FY 1971 - 72 to FY 1974 - 75). Administrative capabilities had improved but were still weak.

If IDAI's record in the early 1970s was poor, that of BCA was far worse. Established in 1962 as a dependency of DARNDR, the BCA was to provide credit to individual farmers and groups of farmers who could not meet IDAI's requirements. Its loan volume in 1972 was about $81,000 and the average loan was approximately $110. Most of the BCA's portfolio, however, was uncollectable, and loan volume had fallen by 25% by 1968. Between 1972 and 1976, however, loan volume doubled to $165,000; this increase was not so spectacular in real terms but still was rapid.

Total agricultural credit in 1975 represented just 0.3% of total net domestic credit. While lack of credit may thus appear to be a major constraint to Haiti's agricultural development, other constraints are much more important at this time. Considerable attention should be given in the short run to strengthening the administrative capacity of the BCA; but to channel additional loans through this institution beyond those currently being negotiated would quickly exceed its absorptive capacity.

Research

Given the weakness of agricultural research in Haiti, major emphasis in the short- and medium-term should be placed on institution building. For a number of years to come, external assistance will have to be available to an agricultural research program if relatively quick results are to be achieved in response to an urgent need. At the same time, some Haitians should be sent abroad for Master Degree training as researchers and assured of adequate salaries once they finish their programs of study. Much of the training, however, could be done incountry by combining on-the-job experience with courses conducted by foreign technicians.

Given the limited human and financial resources available for research, efforts should be concentrated on a relatively few basic food crops. The temptation to work with a large number of commercial crops of minor importance should be resisted because all of the resources likely to be available in the near future will be needed for research on the principal food crops.

Extension

Two factors must be kept in mind when discussing extension as a tool in agricultural development: first, the extension service must have the organization and resources to accomplish its tasks within its own particular environment. Secondly, extension alone is a necessary but not sufficient vehicle for accomplishing agricultural development. Equally important are adaptive research, availability of new inputs, an efficient marketing system including price incentives. All must work together.

An agricultural extension service exists within the Ministry of Agriculture staffed by seven technical and six administrative personnel in the headquarters at Damien and some 131 agents in the field. In general, the headquarters staff is well-trained and competent. Only 27 of the field agents, however, have received certificates from the "middle school" in agriculture at Damien; the others have been trained on the job. Agents in the field work under the supervision and direction of the district agronome.

The extension service has been rated generally low in effectiveness despite the motivation of many of its personnel. One of the main problems in addition to the low level of training is an almost total lack of operating budget. Another serious problem for the extension service results from donor-assisted projects which acquire the most competent extension personnel without providing specific inputs to strengthen the service.

The FAO has recently completed an indepth study of the extension service, making recommendations for its organization, training, field structure, and operational financing. Although the FAO report has not yet been released, it is known that its recommendations have been well received by the Ministry of Agriculture. One of these recommendations is that the extension service develop techniques which will enable it to achieve agricultural development through the use of community organizations.

A.I.D. has attempted to reinforce the extension service, using its development projects as the major vehicle. For example, the Integrated Agricultural Development project calls for nearly $1 million for the extension service in technical assistance, training, and equipment. The project also calls for over $1 million in Haitian Government contributions. In addition, the project will provide those inputs essential to effective extension work -- adaptive research, new techniques, credit. The extension service will carry out its work through community organizations.

This formula for helping the Ministry of Agriculture upgrade its extension service will be followed in future A.I.D. agricultural development projects; e. g., Environmental Preservation (FY 1979) and Intensive Agriculture on Irrigable Lands (FY 1980).

Strengthening the Institutional Structure

It will be many years before Haiti has agricultural sector institutions capable of dealing adequately with the wide range of problems the country faces. A common requirement for strengthening all agricultural institutions is greater government support as manifested in greatly increased budget allocations. Although some of these financial resources can be provided by foreigners, what the government does with its own resources is the key to how it ranks agriculture in its list of priorities. It is no secret that the government could devote more of its existing resources to agriculture. In addition, there exists considerable potential for increasing budget revenues through greater taxation of the consumption and/or income of upper- and middle-income groups. In short, the problem is not so much one of resource limitations, as it is one of political will.

Even the most development-oriented political will, of course, can go only so far given the country's very real financial and technical resources. For example, salary increases for agricultural technicians may be difficult to provide unless given also to similar technicians in other government ministries and agencies. The Haitian Government has nevertheless indicated its willingness to raise salaries in the DARNDR. A fully developed institutional structure is not going to be in place even in 15 to 20 years, but a significant step in that direction can still be a great help. If government policies are not based on a strong commitment to agricultural development, they can easily work at cross-purposes; present conditions not only will not improve but very probably will get worse.

To the extent that the Government of Haiti commitment is present, A.I.D. should be willing to respond to requests for assistance in institutional development. Some assistance is currently being provided by Canada and France, but these programs do not deal with all aspects of the institutional structure in agriculture.

One way in which A.I.D. could effectively strengthen the institutional structure is to assist in developing a greater capacity for agricultural economic research. Better statistics, of course, are part of the answer, but the collection of statistics cannot be allowed to become an end in itself. Agricultural economists must be able to relate production costs and benefits; they must be able to analyze and forecast supply and demand conditions in the markets for major crops. All too often, research and extension agencies in developing countries have pushed the adoption of new crops or new inputs with unfavorable benefit-cost ratios. Small farmers are sometimes talked into adopting such recommendations, although their own rough or intuitive calculations often lead them rightly to reject what outsiders are advocating. Poor recommendations can be very costly not only from both private and social standpoints, they also lead farmers to assign higher-risk factors to future changes which are suggested to them.

Another important part of the institutional structure which needs strengthening is the base-level organizational structure. Both formal and informal rural organizations are still relatively weak despite strong gains in recent years. Although the prospects for forming multipurpose cooperatives will be limited until literacy becomes more widespread and credit can be readily attained, less sophisticated organizations such as the community councils and the Agricultural Credit Societies can perform useful development functions. It has already been suggested that extension activity be channeled through such institutions; but at the same time it is important to note that community leaders themselves have much to tell government officials and voluntary agency representatives about obstacles to agricultural development in their own particular areas.

Soil Conservation and Other Environmental Measures

Soil erosion in Haiti has forced many hillside plots to go out of crop production and threatens the viability of those still being cultivated. Hillside erosion has also adversely affected lowland farming by causing flash-flooding and clogging reservoirs, streams, and irrigation works with sediments.

Rehabilitation of existing irrigation works, fewer than half of which are effectively operating, should be a priority strategy for increasing production of basic food crops. Productivity on these relatively good lands can be increased significantly at lower cost and more quickly than through construction of new irrigation works. The long-run failure of the last rehabilitation effort, however, makes it clear that unclogging waterways and reconstructing walls deal with the symptoms, not the disease. These rehabilitation efforts must be accompanied by a program of total watershed protection involving revegetation of land already out of production and the construction of terraces and walls on presently cultivated slopes. Although it can be argued that these slopes should never have been cultivated to begin with, population pressures will continue to make steep hillside cultivation a fact of life.

Population pressures have also reduced the amount of time land has been placed in fallow; this has been another source of declining soil fertility. Crop rotation is advisable to help combat this problem; however, this will require technical assistance as well as policies and programs in prices and marketing to ensure that new cropping patterns provide significantly positive economic returns to farmers.

Watershed protection and management programs, including provisions for water spreading in lowland areas adjacent to hillsides, have especially high priority. But, since watershed areas are dominated by smallholdings, formidable obstacles to organization and management must be overcome. The chances of failure are great, but the predictable consequences of doing nothing justify the undertaking of risks. One positive factor in this general grim outlook is that many farmers have both hillside and lowland plots; they may be able to see that a total watershed program is in their own self-interest.

It is anticipated that construction of hillside terraces and walls will require from less than 100 to more than 200 work-days per hectare. In some cases, underemployed family workers can provide all the required labor, but nonfamily labor will sometimes have to be employed. A combination of food and cash payments will probably be necessary for both family and nonfamily labor. If farmers are to participate actively in such projects and maintain terraces and walls over time, they must be actively involved in the decision-making process; otherwise the projects may be viewed only as a temporary means of acquiring off-farm food.

Specific Projects and Programs

During the next three to five years, A.I.D. will concentrate on consolidating and extending existing programs. Given the absorptive capacity problems it is important to minimize placing additional burdens on the Haitian Government. It will be difficult enough for the government to meet the manpower requirements for the next five years required by existing or soon-to-be-signed agreements even if resources devoted to manpower development and training are significantly increased in the next year or two.

A.I.D., other bilateral donors, and international leading agencies are currently providing financial and technical assistance to the following programs in Haiti's agricultural sector:

Improvement in Technology are being financed under A.I.D. grant programs in Rural Community Development (improved cultural practices, irrigation systems), Agricultural Development Support (irrigation, rice seed multiplication), and Water Resources Development. A.I.D.'s integrated Agricultural Development loan will help rehabilitate small irrigation works, promote soil conservation, and finance improved cultural practices.

Among other donor agencies, the IDB has made a loan to finance agricultural development in the Artibonite Valley which includes funds for reconstruction of irrigation and drainage canals; the French government is providing assistance to the National Seed Center; the Federal Government of Germany has been financing well drilling for irrigation water; and the Republic of China with A.I.D. assistance has been working on improved technology for rice production.

Transportation networks are being improved by highway construction and maintenance loans from A.I.D., IDB, IBRD, France, and Germany. A.I.D. grant and loan projects (Rural Community Development, Small Farmer Development, and Agricultural Feeder Roads) are also financing the construction and improvement of feeder roads.

Marketing research and assistance is provided principally by IICA (transportation of produce, domestic marketing systems, price mechanisms, agro-industrial enterprises) and Canada. The recently approved A.I.D. project in Small Farmer Marketing will also provide technical assistance in this area.

Credit for small farmers is provided under A.I.D.'s loans for Small Farmer Development and Integrated Agricultural Development. Credit is also being made available under the IDB's Artibonite Valley loan.

Agricultural Research assistance has been provided under an A.I.D. grant for adaptive research on corn varieties, and there is a research component in the Integrated Agricultural Development loan. Canada has a major program of assistance, which includes research, to the Faculty of Agronomy and Veterinary Medicine. The Republic of China is conducting research on rice and soybeans.

Agricultural Extension is being financed under A.I.D.'s Small Farmer Development and Integrated Agricultural Development loans. Extension work is also being provided by HACHO under A.I.D.'s grant project for Rural Community Development. Among other donors, the IDB is financing extension work under its Artibonite Valley loan, and there is an extension component in the Republic of China's work with rice and soybeans. The recently completed FAO study of the existing extension system may result in important changes in the organization of extension work and the structure of the Department of Agriculture in the field.

Haiti's agricultural institutional structure is being strengthened through assistance provided DARNDR by Canada and France. The Canadians also have a large public administration project with CONADEP. Assistance to base-level institutions is provided under A.I.D. and IICA grant programs and by numerous private and voluntary organizations.

Soil Conservation is a component of A.I.D.'s Integrated Agricultural Development loan and the IDB's Artibonite Valley loan. In addition, the UN is initiating a five-year watershed management project which seeks to develop erosion control systems on 1,000 hectares in the Limbé area. The experience gained from this intensive work is to be extended to up to 30,000 hectares in that area.

This summary shows that A.I.D. and other donor agencies are attempting to alleviate the major constraints to Haitian agricultural development. The amount of overseas donor resources has increased significantly over the past five years; this increase is already placing a severe strain on the absorptive capacity of Haitian institutions. Donor agencies should be in closer consultation with each other so that each is aware of the claims on Government resources made by the other's projects. The tendency for various donor agencies to concentrate their efforts in specific geographic areas must be examined to determine whether further concentration is desirable. The question of donor specialization at the national policy or program level should also be addressed.

Agricultural Development Strategy

In view of the conditions that prevail in the agricultural sector, a rationale for the agricultural development of Haiti may be outlined in this manner:

-- development of intensive agriculture, including irrigation, on those lands adapted to such cultivation;

-- development of agricultural systems which will enable highland farmers an improved -- and better than subsistence -- standard of living without destroying the resource base;

-- development of off-farm employment opportunities in rural areas which will decrease population pressure on the land resource, particularly in the highland areas.

A.I.D.'s overall agricultural development objectives are increasing food production and improving the income and standard of living of small farmers. Growing food deficits and the omnipresence of small farmers in Haitian agriculture result in the Government of Haiti's expression of these same priority objectives within the tripartite context expressed above. A.I.D. has underway or in the planning stage specific projects in all three of these general areas. In the elaboration of projects and in the selection of future projects -- i. e., in the implementation of an agricultural development strategy -- A.I.D. will use the following criteria:

-- overriding priority to increased food production and improved levels of living of small farmers;

-- program balance among the generalized development areas expressed above;

-- focus within projects on income-generating objectives, both as a source of motivation to farmers and as a basis for sustained long-term development;

-- inclusion within projects as required of all supporting or ancillary efforts which are necessary to project success. These may include, but are not necessarily limited to

  -- provision of adequate infrastructure, e. g., feeder roads, buildings, warehouses;

  -- adequate research base;

  -- functioning and efficient government services;

  -- agricultural inputs, e. g., fertilizer, seed;

  -- functioning market system;

-- in new or untried project areas, implementation of pilot actions in order to develop experience upon which to base large-scale efforts;

-- integration of project structure into existing governmental structure, and strengthening of that structure as needed to insure project success;

-- project design which maximizes the use of local community organizations as the project vehicle and the strengthening of those organizations as required to achieve project objectives.

In its project development, A.I.D. will pay especially close attention to

-- the implications of the project with respect to Haitian absorptive capacity;

-- the joint elaboration of projects in full collaboration with interested entities of the Haitian government;

-- close cooperation with other aid organizations.

A.I.D. has implemented a number of projects following the above guidelines. These include Agriculture Development Support I, Small Farmer Improvement, and Integrated Agricultural Development.

Agriculture Development Support I was the first agricultural project to be initiated and consisted of a number of pilot actions in soil and forest conservation, irrigation, and adaptive research in food crops, particularly corn.

The Small Farmer Development project, now underway for two years, seeks to improve the income of small coffee farmers in the highlands through a program of new inputs, credit, and extension and the provision of infrastructure such as training centers and penetration roads. A recent evaluation indicates the need to reinforce the project in several areas -- adaptive research, level of technology, and suitability of inputs as well as in training extension agents and in the organization of the project. The project will be redesigned for its final two years and will be followed with a four-year project, Small Farmer Development II.

Integrated Agricultural Development combines a group of subprojects including adaptive research, managerial capacity within the Ministry of Agriculture, strengthened agent formation, extension through community organizations, and soil conservation, with the development of irrigated agriculture in four geographically separated perimeters. All subprojects in Integrated Agricultural Development are essential elements for the achievement of the project objectives of improved levels of living for small farmers through increased food production.

For the selection, planning, and design of future projects, we consider it essential at this point to carry out an agricultural sector assessment. As parts of the sector assessment are completed, the agricultural section of the DAP will be revised to include policy and planning implications which develop.

The agricultural sector assessment will be undertaken in two stages. The first, a "Level A" assessment is based on existing data. The Level A assessment will focus on

-- special studies in the areas of marketing of domestic food crops and export crops;

-- income, consumption, employment, and other level-of-living indicators;

-- agricultural technology;

-- absorptive capacity;

-- resource conservation and other environmental measures.

These studies will complement other studies which are already available.

Valid statistical data on Haitian agriculture is practically nonexistent, and before a "Level D" assessment can be attempted, attention must be given to establishing a capacity within the Planning Unit, Department of Agriculture, for the collection, elaboration, and analysis of agricultural statistics. A relatively uncomplicated system is possible using techniques developed by the Statistical Reporting Service of the U. S. Department of Agriculture. Assistance on a three-year period will be given for this effort as a subproject within a FY 1978 project, Agricultural Development Support II.

As a functioning agricultural statistics system comes into being, further assistance will be given to enable the Government of Haiti to achieve a "Level D" agricultural sector assessment. An office has been established within the Department of Agriculture with IICA and Canadian aid to do this type of work. If additional aid appears necessary, it will be programmed in FY 1980.

A Small Farmer Marketing project will be implemented in FY 1977 to develop a parallel marketing network of local agricultural marketing coops and a national coffee processing center to improve small farmers' social and economic well-being. This project is viewed as complementary to the ongoing Small Farmer Improvement project. In view of the plan to reorganize the latter during its final two years, it will also be necessary to reexamine certain aspects of the marketing project design. This will not prevent its implementation in FY 1977.

Agricultural Development Support II will be implemented in FY 1978. Like its predecessor, this project emphasizes reinforcement of specific institutions within the Ministry of Agriculture which are key to the project areas with which we are concerned. Agricultural Support II will carry forward the corn and soil conservation research and pilot projects started in the earlier program. It will also concentrate on improving the administrative, management, and planning capacity within the Ministry of Agriculture through technical assistance in personnel planning and in statistical analysis.

Also to be implemented in FY 1978 will be a project to introduce appropriate technology into the development process. This project will not only consider the introduction of specific tools into ongoing production processes (e. g., simple corn shellers), but will attempt to discover opportunities for a combination of resources and develop systems of appropriate technology for their exploitation. Small-scale rural and market town industries and low-cost energy sources are to be identified and developed, if feasible.

In FY 1979, programming in the field of agricultural and rural development will consist of the three following projects:

Environmental Preservation -- an integrated effort to effect resource conservation through the development of a rational highland agriculture which preserves the natural resource base while improving the living standard of the peasant farmer in the hills. Intensive field actions in three perimeters are planned, as well as strengthening research and conservation design and implementation ability in relevant Ministry agencies. This project builds on experience gained in Agricultural Development Support I, Integrated Agricultural Development, and FAO and Canadian projects now underway.

Rural Small Enterprise Development -- a project designed to increase incomes in rural areas through job creation in appropriate agribusiness enterprises. This type of project is considered as a necessary complement to efforts to increase agricultural production.

Integrated Community Development -- an effort concentrating on strengthening community organizations and the institutions charged with their development. All agricultural projects working with farmers will be designed to work through community organizations. Although there is a history of this use of community organizations in Haiti, the organizations will need substantial improvement before they can be effective.

Programming in the period FY 1980 - FY 1983 is tentatively planned as follows subject to redirection which may result from completed agricultural sector assessments:

Agriculture Feeder and Penetration Roads -- follow-on of an ongoing feeder road project to open up additional agricultural areas now isolated from other areas;

Phase III Highway Maintenance Project -- to assure the continued development and equipping of an effective highway maintenance organization and the continued use of the road network;

Intensive Irrigated Agriculture -- an expansion into other areas of the intensive agriculture under irrigation of the Integrated Agricultural Project;

Adaptive Agricultural Research -- a follow-on of initial research efforts under Agricultural Development Support I and II, Small Farmer Production, and Integrated Agricultural Development. The experience gained in these projects will be synthesized and assistance will be given to development of an integrated agricultural research program adapted to Haiti's needs and resources. Emphasis will be placed on adaptive research.

Agricultural Management Improvement and Training -- a follow-on of the administration and management inputs of the Integrated Agricultural Development project will emphasize strengthening management of agricultural development agencies at local, district, and regional levels as well as the national level. Heavy training input is anticipated.

X. ENVIRONMENTAL SECTOR

Soil Erosion and Prospects for Land Reforestation

The Issue

Haiti's massive soil erosion problems constitute the worst case of widespread land abuse in the Western hemisphere. The countrywide population density of more than 160 inhabitants per square kilometer (more than 400 people per square mile) may already be greater than the carrying capacity of the land. The amount of land appropriate for intensive food production (less that 25% slope, adequate soil depth and fertility, adequate rainfall or irrigable) is extremely limited, so most of the over 600,000 farm holdings in the nation are on slopes which are really suited only for grazing, forestry, and watershed protection.

Soil erosion is not a new problem in Haiti. Warnings have been issued for decades, but no effective nationwide control programs have been implemented. There is a dedicated Soil Conservation unit within the Haitian Department of Agriculture, Natural Resources and Rural Development (DARNDR), but they do not have enough operating funds or trained personnel to mount more than the most limited sort of program. The Food and Agriculture Organization (FAO) of the United Nations has had a reforestation and erosion control effort in conjunction with DARNDR for several years, but their efforts have been restricted to a few areas. The Haitian American Community Help Organization (HACHO), working in conjunction with CARE, has an erosion control program in the northern part of the country, while Church World Services (CWS) has had locally active and effective programs underway for many years. None of the existing erosion control programs, however, is both effective and national in scope, yet severe soil erosion is a countrywide problem.

Soil erosion manifests itself as a problem for Haitian agriculture in several ways. First, and most crucial for assistance programs, are its impacts on the millions of people who practice subsistence agriculture in the hills. One might expect that the subsistence farmers would be the first to note the impact of soil erosion through its effect on loss of fertility and decreased crop yields. In most deeply weathered tropical soils, however, the nutrients essential for plant growth are concentrated in the uppermost soil layers: Frenquently, 90% of the total nutrient supply is found in the top 10 centimeters of soil. Depletion of this topsoil by cropping and erosion is a very rapid process in mountainous areas of the tropics. The underlying subsoil, however, is of relatively uniform low fertility. As the subsoil continues to erode away, yields decline not so much because of decreased fertility, but because of decreased moisture-holding capacity and increased rockiness. The drop in the ratio of soil-to-rock per unit area increases the difficulty of farming and effectively reduces the food-yielding fraction of each mountainous hectare. Later, the soil is almost completely eroded away and the land must be abandoned. Land pressures in Haiti thus push from two ends. First, the

population is still growing, thus requiring more land. Second, because of soil loss through erosion, the total amount of land available for cultivation is less each year. The status of the subsistence farmer in the mountains, therefore, is not getting any better nor staying the same: it is becoming worse each year and shows no sign of improvement.

In addition to the loss of cultivable soil, erosion also produces pseudo-droughts, i.e., drought conditions which result from a decrease in the waterholding capacity of the soil rather than from decreased rainfall. Soil can be thought of as a sponge capable of holding a certain amount of water -- the deeper the soil, the greater its waterholding capacity. Between rains plants use the water stored in the soil. If, however, the waterholding capacity of the soil is greatly reduced (as by soil erosion) then the water stored in the soil cannot satisfy the requirements of the vegetation. The net result is drought-like conditions, both for agricultural crops and for natural vegetation. Much of the natural vegetation in Haiti reflects much drier conditions than would normally be expected considering the amount of rainfall received. This form of desertification is difficult to deal with and can only be rectified by restoring the soil with its sponge-like moisture holding properties. It is not, however, a problem which is completely impossible to remedy, as is the case with desertification due to long-term decreases in rainfall. Most of upland Haiti, in fact, receives adequate rainfall to support agriculture without irrigation; what is lacking is an adequate soil layer to hold that water for crops.

Soil erosion not only has important implications for subsistence farmers in the mountains, but also for the small areas of flat land suitable for intensive agriculture. There are about six such large areas and many small ones. Together they account for less that 10% of Haiti's total area. Successful agriculture in the irrigated flat land, however, is dependent upon the surrounding mountains as a source of high-quality water. If erosion occurs in the hills, lowland agriculture suffers in two ways. First, the water delivered from the hills to the valleys occurs in bursts following each storm, rather than in a more desirable even flow. Second, the eroded mountain soil shows up as sediments which clog reservoirs, streams, and irrigation works. Irrigation systems which are blocked with sediments are key items of concern to Haitian agriculture today. Almost all of the systems are operating at a fraction of their potential efficiency. Yet irrigation system renovation without watershed protection can only be the most shortsighted kind of remedy -- a cure for the symptoms but not for the disease. Because of its effect on the irrigated farmlands, however, attention has finally been drawn to the severe erosion problem. A 1954 FAO report pointed out that it was widely recognized that watershed protection was essential for the survival of the Artibonite River dam and irrigation system. If protection was not afforded, the report warned, "the efficiency of the reservoir will... be reduced 40% over the next 30 years." Now, 23 years later, that warning proves to have been conservative. The efficiency of the reservoir has already been reduced by much more than the amount predicted and Port-au-Prince (which receives its electricity

from the Artibonite River dam) had power for only five hours each day until emergency generators were received from the United States. Thus, the erosion problem in Haiti not only affects the poorest of the poor -- the subsistence farmers in the uplands -- but has also had an important impact on the intensively cultivated, irrigated lowlands, as well as on the daily commercial and industrial activities in the capital.

The problem is not primarily one of ignorant rural subsistence farmers destroying their lands because they don't know any better. Rather, they have no alternatives. Their caloric intake is deficient, and agriculture coupled with charcoal production is their only means of survival. The key to the success of any soil conservation programs implemented in Haiti will center on the ability to provide short-term and long-term subsistence alternatives to the people forced to farm lands which are inappropriate for agriculture. No one, regardless of their socio-cultural background, farms 100% slopes because they like to. Rather, they are forced onto these lands for lack of alternative means of subsistence. Soil conservation efforts must, therefore, proceed along one of two lines: Either provide subsistence alternatives on lands appropriate for sustained agriculture or mesh closely with the agricultural systems currently practiced so that the farmers can at least maintain their present levels of food consumption during and after the implementation of the soil conservation efforts. The first option (subsistence alternatives) is probably not possible under Haiti's current socio-political status and population density. The second option (soil conservation without concomitant reduction in yields from hill farms) may have promise, but will be extremely difficult to achieve. It will require a delicate simultaneous union of farming and soil conservation practices and/or an outside subsidy (money, food, or employment) to permit farmers to survive during the period when erosion control is established.

Possible Action

Several courses of action may be open but two points must be kept in mind when considering any of them. First, no program will be able to provide a short-term (five-to-ten year) nationwide solution. Second, the probability of failure of any program which is broad and bold enough to achieve large-scale progress toward erosion control and land restoration is not only going to be finite; it is, in fact, going to be quite large. The distasteful alternative, however, would be to do nothing. No action might well spell the end for the only means of subsistence available to the vast majority of Haiti's rural poor.

In the sections which follow, some of the difficulties which will be encountered in developing and implementing an erosion control program are described; some of the data gaps which must be filled before wide-scale restoration projects can be initiated are identified; and some points which might be considered in developing an integrated, watershed-level land restoration and agricultural improvement program are mentioned.

Risks and Problems

The ecological and logistical problems associated with a land recuperation program are going to be difficult. They include the advanced state of erosion over much of upland Haiti; the absence or degraded state of natural vegetation which might serve as a source of propagules for revegetation; and difficulties in transportation and communication in rural areas. Nevertheless, these kinds of problems, no matter how complex, are more or less surmountable. Far more crucial than the ecological and logistical problems, however, are the suite of social-cultural-political problems which will be encountered.

Assistance programs are designed, insofar as possible, to aid the poorest of the poor, or at least the poorest group for which meaningful assistance can be provided. One important design constraint, however, is that assistance must be provided in close conjunction with, and under the auspices of, existing national agencies. The goal -- help the poor -- and the constraint -- work through local government agencies -- may not be compatible. In the case of erosion control the obvious candidate for a local collaborative agency would be the Soil Conservation Service of DARNDR. There is no question concerning the genuine sincerity, dedication, knowledge, and honest concern regarding the country's soil conservation problems on the part of the technical staff of this unit. Yet the personnel facilities, and operating budget provided them (as is the case with most, if not all, of the units within DARNDR) is pitifully inadequate. An assistance program thrust upon this unit would, under present conditions, receive no response. They would be unable to respond with counterpart personnel because none is available and there is no local budget with which to pay them even if they were. Current salaries within DARNDR are too low to attract top personnel, except for that handful of proud, dedicated (and frustrated) individuals who hope to be able someday to solve some of Haiti's agricultural problems.

The solution to this difficult problem must come from top Haitian government officials--those responsible for making budgetary decisions to and within DARNDR. They can be influenced from two directions. First, they can be approached from the bottom up. This will involve development of appropriate project(s) in continuous, close collaboration with DARNDR technical staff. If it is to a great extent <u>their project</u>, they are likely to be most effective in selling its merits to higher government officials. Second, the highest officials possible must be approached from the top and convinced of the absolute necessity for maintaining a viable agriculture. It can, and must, be clearly demonstrated that land is the life blood of Haiti: not only for the subsistence farmers of the mountains but also for the cash crops which are the mainstay of Haiti's economy.

In addition to problems associated with government support and infrastructure, the socio-cultural attitudes and pressures of the rural poor will increase the difficulty of the land-restoration task. These problems might be grouped into three overlapping categories: land tenure, subsistence farmer conservatism, and population pressure. The unusual or lack of a land tenure system of rural Haiti has long been decried as one of the key obstacles to agricultural development. It might be an obstacle to orderly agricultural development, but perhaps orderliness is not a luxury that subsistence agriculture in Haiti can afford. Rather, an assistance program might get further faster by recognizing that the current system -- a complex one involving multiple small plots in different ecological zones, intricate family relationships, land loan and rental, mobile husbands and sedentary, produce-marketing wives, and an inheritance scheme which covers all offspring -- has evolved over the past 170 years. It apparently works well enough for its practitioners and land restoration projects are likely to be more successful by working in the context of the present scheme rather than by attempting to change it.

As is the case with almost all subsistence people everywhere mountain farmers of Haiti will undoubtedly be reluctant to change their land use practices unless they are certain that any changes instituted will be to their advantage. Furthermore, they must be absolutely convinced that the risk associated with any possible change for the better does not increase substantially. Low risk -- not high yield -- is the name of the game in subsistence agriculture. Low inputs, diverse crops, multiple plots, dooryard gardens, nearly self-sustaining poultry and livestock, and low but certain-to-get-something yields--these are all reflections of the harsh fact that the subsistence farmer cannot absorb a single failure. All agricultural assistance programs, including soil conservation efforts, must recognize the adaptive reasons why rural poor are often reluctant to immediately employ the latest "improvements" that technology has to offer.

The issues of land tenure and farmer conservatism are tightly tied to, and accentuated by, Haiti's high population density. This means that lands which should be removed from cultivation will be under great pressure for return to farming; that lands which are reforested will be subjected to grazing, burning, and premature cutting for charcoal; and that farmers will be reluctant to remove any of their limited land holdings from cultivation while terraces and retaining walls are constructed. To meet this intense pressure for land will require the close collaboration of the local community. Some of this cooperation might be achieved by law enforcement and some by short-term incentive programs which subsidize the farmers affected (with food, money, or agricultural products and services) for the production losses incurred as a result of the implementation of soil conservation measures. But the most important -- and the only long-term -- solution will come from working closely with the local community and demonstrating to the people that land protection is in their own best interests. This will not be an easy idea to sell, but if it is not accomplished the soil restoration effort is certain to fail.

A final problem associated with soil conservation efforts in Haiti concerns the choice between proceeding slowly, carefully, one-step-at-a-time and developing small-scale pilot programs where the imperfections can be worked out of the system or forging ahead full-blast and running the risk of relatively large-scale failure. Any prudent assistance program would select the first alternative: any assistance program, that is, which had any sort of reasonable timeframe in which to operate. But the Haitian situation is too critical for that. The time for proper action is now past and any action taken, to have any recuperative affect at all, must be instituted on a relatively large scale as quickly as possible. Such a large-scale effort risks failure because of the government's extremely limited absorptive capacity and a lack of fundamental data; however, the alternative -- no action at all -- would be irresponsible.

Data Gaps

One kind of information which need not be gathered prior to design and implementation of a soil conservation and restoration program for Haiti is a survey of the extent and severity of the problem. Soil erosion is a nationwide problem and its severity is obvious to even the most casual, untrained observer. However, because of the constraints on any program that might be undertaken, it will be impossible to cover the whole country. Therefore, it will be necessary to identify target areas for first-priority action. It is this accurate assessment and identification of appropriate target areas which constitutes the major research effort needed before a major soil conservation program can get underway.

Soil erosion is not the sort of problem which is amenable to small-scale (e.g., single farm) solutions. To be effective it must be practiced over larger natural units. The logical choice for a natural, functional unit for erosion control is the watershed or catchment basin of a stream. It may be a very large unit as, for example, the entire drainage basin of a large river, or it may be a small unit of only a few hectares encompassing the entire watershed of a small feeder stream. In either case a watershed is a natural unit and the downhill flow of a common supply of water through it is the thread that holds it together. Actions upstream inevitably affect processes downstream, thus treatment is more effective if applied throughout an entire watershed. Conservation efforts on 100 contiguous farms on a single watershed will inevitably produce better results than if the same effort is spread haphazardly across a landscape and includes several watersheds.

How should the watersheds be selected? In Haiti, that question is difficult to answer because of the severity of the erosion problem. First of all, two classes of watersheds can be eliminated from consideration. One of these includes those watersheds which have already been selected for conservation measures by other agencies such as FAO, HACHO, and CWS.

The other includes those watersheds which have already been subjected to such severe erosion that little soil remains to be saved. In these extreme cases -- and there are many such watersheds in Haiti -- little is to be gained by spending efforts on land which is incapable of supporting subsistence agriculture and which constitutes no real sedimentation danger for downstream irrigation systems.

In addition to the research necessary to choose appropriate watersheds, it will also be imperative to provide a monitoring program to evaluate successes and failures as erosion control measures are implemented. This monitoring should include ecological variables such as quantity and quality of runoff, post-treatment erosion, and rates of vegetation regrowth. Simultaneously, the impact on the socio-economic status of the subsistence farmers who participate in the program should be carefully observed. Their long-term well-being is the single overwhelming criterion for determining the success or failure of any land restoration efforts.

Integrated Program

Any watersheds selected for restoration, together with their subsistence-level inhabitants, should be treated as an integrated functional unit. The people of the land should do the restoration work and reap the benefits. Each selected watershed will consist of a continous gradient of environments, encompassing a range of topography, soils, and vegetation. For purposes of preliminary (not site-specific) planning this continuum of environments can be broken down into three broad categories: steep eroded slopes of little or no agricultural productivity; cultivated, unirrigated hillsides; and irrigable alluvial valleys. Each watershed is certain to include at least two of these three environments, and in most watersheds it will probably be useful to consider a finer ecological breakdown than these three broad categories. In any case, watershed restoration should proceed from top to bottom. If it does not, the restoration works at lower elevation are likely to be undone by continued erosion of the steep slopes above. The kinds of programs which might be applied to each of the three broad categories of ecological units likely to be found within most watersheds -- steep eroded slopes, cultivated hillsides, and alluvial valleys -- are described below. This is followed by a statement of realistic, achievable program objectives.

Steep Eroded Slopes

The steepest, most erosion-susceptible slopes should never have been subjected to any land use other than possible forestry and limited, carefully controlled grazing. They were, however, deforested for charcoal production and agriculture, which was followed in many cases by erosion so severe that only bedrock, interspersed with small pockets of soil, remains. Land protection and erosion control through revegetation is called for on these areas.

In most tropical and subtropical areas of moderate rainfall (such as most of upland Haiti) the natural vegetation regrows quickly once the stresses of cutting, grazing, and burning are removed. Haiti has an additional problem, however. Because deforestation has been going on for so long and has been so widespread, the seed sources which would normally be the agents of vegetation recovery have been severely depleted. Loss of seed sources, coupled with the severe erosion which has occurred has three important implications for the expected regrowth of natural vegetation. First, it will undoubtedly be slower than might be expected in other tropical and subtropical areas of equivalent rainfall. Second, the species which initially recolonize these sites will be more typical of drier sites (and therefore may be less valuable and slower growing) that would normally be expected. Third, some of the best quality tree species which might be expected to occur naturally among the natural regrowth may be very scarce or absent because they have been preferentially exploited for so long.

Natural regeneration is, of course, not the only way (though it is usually by far the cheapest and fastest) to reforest steep slopes. Artificial regeneration, both through direct seeding and tree-seedling planting, is another alternative. Direct seeding (scattering large amounts of seeds of desirable species over the landscape by hand or from an airplane) is fast and can be relatively inexpensive, but it has two drawbacks. First, a large supply of seeds must be readily available. The seed of most desirable tropical and subtropical trees is currently under such great worldwide demand that the cost is high and supplies are limited. Second, direct seeding, especially of desirable timber species, is very risky. In most attempts the probability of failure exceeds that of success; most foresters prefer seedling planting to direct seeding as a means of reforestation.

Although it is more expensive (perhaps $100-$200 per hectare) than natural regeneration or direct seeding, tree planting is a less risky way to insure establishment of a forest of desirable species. Tropical foresters frequently jump on the wonder-species bandwagons (e.g., Gmelina, Anthocephalus, various pines, numerous Eucalyptus), but these fast-growing glamour trees may not be best suited for the degraded sites in need of reforestation in Haiti. The issue here is not so much one of a crucial need for wood (although the demand is extremely high and, if it can be met through reforestation, so much the better) as it is a need for immediate soil protection. Thus, native species which are culturally acceptable to rural people and which are known to grow naturally in the forests being reconstructed would be wise first choices for reforestation.

Because of the advanced state of site deterioration which has occurred, it may be necessary to use more stress-tolerant species than would normally be the case. These are likely to be relatively slow-growing and will probably not be of the best form. The rapid growth rates reported for plantations in other tropical and subtropical areas are unlikely to be achieved on Haiti's eroded uplands, so predictions concerning rates of wood production should be made carefully and conservatively.

Haiti's native pine (Pinus Occidentalis) may be an appropriate candidate for reforestation on extensive areas which it once occupied in upland Haiti. It tolerates relatively poor sites; the knowledge of how to mass-produce it in nurseries is available; it is a valuable species; and, unlike some exotics such as Eucalyptus, which are often thought to consume excessive amounts of water, it is respected by the rural people.

Cultivated Hillsides

Many, if not most, of the cultivated mountainsides of Haiti are technically too steep to sustain permanent clean cultivation of annual crops. They cannot be removed from cultivation, however, because they are the main source of food for Haiti's poor.

Cultivation must be continuous; structures such as dams, terraces, and barriers have to be used rather than permanent revegetation of the cultivated hillsides. Crude barriers constructed from twigs, stones, and debris are, in fact, commonly used in cultivated fields in many parts of Haiti. Thus, convincing the people of the usefulness of such structures will not be an impossible task. The difficulty will come in devising a way to enable them to fit the construction of erosion control structures into their present life styles. For one thing, doing something new involves taking a risk; it must be clearly demonstrated to subsistence farmers that this is a change worth making. Second, construction of erosion control structures will sometimes mean that land currently cultivated will be occupied by a structure. The net yield off the terraced land must increase enough to compensate for this. Finally, time spent in erosion control will often mean time away from tending fields. There must be some short-term incentive to follow this course: wages, food, or agricultural assistance.

Erosion control structures are time consuming and expensive to build, but they can be made with locally available materials -- primarily rock. abundant in most, but not all, eroded watersheds. Furthermore, the technical skills required to build adequate structures is minimal. Subsistence farmers could probably do everything except the initial design and structure layout once they were shown the basic process of construction. Typical labor requirements to restore steep eroded land might run from less than 100 to more than 200 person-days per hectare.

Alluvial Valleys

The alluvial valleys, even the very short, narrow ones associated with the smallest watersheds, are the best agricultural sites in the mountainous areas of Haiti. They are the sites where some soil (often that which was eroded from the surrounding slopes) accumulates and where the availability of water permits dry-season agriculture. The productive alluvial areas, however, also suffer from the erosion problem. They are subject to uneven water availability, flash floods, and washouts. Thus, revegetation and erosion control structures on the surrounding slopes directly benefit the best agricultural land as well.

On the steep hillsides, the subsistence farmer is the resident expert agronomist and it is doubtful that modern agricultural research can add greatly to the existing level of productivity, given the soil and water constraints of those poor sites. But, because of the availability of both soil and water in the valleys, it is possible to obtain greater increases in agricultural yields through introduction of improved practices to these sites than is the case on the soil-and-water-impoverished slopes. Therefore, any efforts toward land restoration and erosion control should be concerned with simultaneous delivery of two technological packages: land renovation and improved, intensive agriculture on the best soils. The two are symbionts: Each permits the survival of the other. Erosion control in the hills means that agriculture in the valleys can be improved, while improved agriculture in the valleys will take some of the pressure off the need to again deforest the slopes. Neither of these technological packages can stand alone; each requires the other for its success. To be most effective, an assistance program should deliver both programs -- erosion control and agricultural improvement -- to the same group of people. Interest in, and benefits received from, either one of the programs will lead to the success of the other.

Reasonable Expectations

A truly integrated program will encompass an entire watershed and involve the same group of people throughout. It will involve three closely linked aspects: -- revegetation on the most severely eroded slopes -- erosion control structures on the cultivated hillsides -- improved, intensive agriculture on the alluvium. This integration of people, lands, and programs will be necessary for its success; elimination of any component would mean failure of the whole. What might such an integrated assistance program hope -- and reasonably expect -- to accomplish?

Successes and failures of assistance programs are usually evaluated in economic terms: changes in per capita income, cash flows, and even national balance of payments. Most of these are irrelevant to the life of the average Haitian subsistence farmer. They operate an intensely active internal economy -- one of buying, selling, bartering, and lending -- but one which has relatively weak links in terms of inputs and outputs to the national economy. Thus, it is not fair to evaluate their condition or performance in terms of the performance of a money economy with which they are only superficially associated.

A more realistic measure of success or failure of a program might be its impact on a person's net energy budget: food energy in minus work energy out. To achieve a minimum level of subsistence, without any excess for economic consumption, does not at first sound like a very noble goal for an assistance program. But, to the rural poor who presently barely survive at subminimum levels of food intake, adequate subsistence does not sound too bad. Any Haitian assistance program which provides a stable, sustained food yield for the rural poor involved in their own food production can consider itself successful.

XI. POPULATION, NUTRITION, HEALTH

Overpopulation, malnutrition, and ill health constitute a vicious cycle in Haiti. The cycle has been perpetuated by lack of effective intervention. Large families with insufficient income for food and health care become victims of disease. Closely spaced and numerous pregnancies which are common in Haiti result not only in poor health and poor nutrition among women but also contribute significantly to the high rate of infant deaths -- 149 per 1,000. The child is exposed to infectious disease and malnutrition during the early years of life. If it survives these first critical years, the child grows up under unsanitary conditions, consumes an inadequate amount of food, lives in a home environment with minimal social stimuli that fail to contribute to its intellectual development.

The child grows up retaining the health and nutrition beliefs and nutrition beliefs and practices of its parents which further limit its ability to cope with the environment. The child attends school for a few years if it is fortunate enough. The extent to which early poor health and poor nutrition prevent the child from maximizing the benefits of an education has not been documented in Haiti. But, factors such as these limit the effectiveness of an educational system.

Similarly, it is unclear to what extent ill health during childhood and adolescence affect productivity during adult life. But, an adult in a state of poor health and poor nutrition cannot physically achieve his or her full potential.

Overpopulation, malnutrition and ill health constitute a barrier to economic and social development. The interrelated nature of the causes and effects of the problems in population, nutrition and health emphasizes the need for an integrated approach to find solutions.

Prime considerations in the development of a population, nutrition, and health strategy are manpower availability and budgetary resources. These two factors are closely related since manpower development can proceed only if budgetary support is assured. The usual foreign assistance program consisting of projects limited to three to five years is not a viable approach. Since Haiti will have limited resources for population, health, and nutrition services in the short- or mid-term, all donors must either focus on very limited objectives and goals or continue support in the long term.

The fact that approximately 14% of the national operating budget has been allocated to the population, nutrition,and health sector indicates a degree of commitment by the Covernment of Haiti to address the problems of this sector. However, in absolute terms the allocation amounts to approximately $1.20 per capita per year, which raises the question of how effective a commitment it is.

The high illiteracy rate in Haiti also represents a serious obstacle in attacking problems in this sector. Socio-cultural attitudes and practices play a major role in the etiology of the problems; only through education can this specific causality factor be addressed. In addition to the questionable government commitment and high illiteracy rates, the existing institutional capability poses limitations in implementing a sector strategy.

A.I.D. overall strategy in population, nutrition, and health is to:

-- develop a population policy and program which will have a significant demographic impact in a time-limited context; e. g. five years;

-- provide basic preventive and limited curative services to the rural and urban poor;

-- reduce malnutrition in the under-five population and improve both the quality and quantity of the diet of the general population.

A major objective of the A.I.D. strategy will be to integrate population, health, and nutrition activities at both the national (planning) and field (operational) level and, similarly, to integrate these activities with activities in other development sectors.

Population

Although the data that exist may be unreliable, 4.6 million is a generally accepted estimate of the total population. The crude rate of growth is estimated at 2.1% based on estimated crude birth rate of 36 per 1,000 and a crude death rate of 15 per 1,000. The crude death rate reflects the very high infant and childhood mortality rates: 149 per 1,000 and 48 per 1,000, respectively. More ominous, perhaps, is the fact that even if couples merely reproduce themselves and, assuming that there is no increase in overall mortality, the size of the total population will increase by 35% in 15 years; the number of woman of reproductive age will increase by 70%.

These projections are based on the fact that 42% of the population is under 14 years of age. Analysis of this age group shows that there are 1.1 million females. Among the present population, there are 380,000 women between the ages of 30 and 45 years. By 1986, the 1.1 million 0 - 14 age group will have moved into the reproductive age group and less than 400,000 will have moved out. There will be 1.7 million fertile women or an increase of 70% in women of reproductive age.

The Government of Haiti has not expressed any interest in issuing an explicit population policy statement or of earmarking significant amounts of funds for family planning. This is reflected in last year's budget allocation for the family planning component of the MCH/FP program: $21,000 out of a total budget of $6.85 million.

In its three-year MCH/FP project proposal to the donors, the Division of Family Hygiene (DHF) specified the 1979 target group for family planning at 395,000 fertile females, the majority of whom are in the areas served by the DHF. This is an increase in target group coverage of almost 50% from the base year of 1976. During each year of the project, the DHF expects the number of new acceptors to increase by 20%. By the end of 1979, between 40% and 50% of fertile females in the DHF project areas are expected to be users of contraceptives.

Funding for population planning programs in Haiti is provided by the United Nations Fund for Population Activities (UNFPA) A.I.D., Family Planning International Assistance (FPIA), Pathfinder, and Association for Voluntary Sterilization (AVS).

UNFPA leads in financial support, providing about $1.1 million a year for technical advisors, salaries, and training of local personnel, contraceptives, pharmaceuticals, and other expendable commodities. PAHO is the executing agency for UNFPA and provides a resident advisor.

FPIA has supplied about $54,000 a year for pills used in the program and is about to embark on a project of voluntary sterilization.

AID contributed $144,000 in 1975 and $250,000 in 1976 which includes $93,000 for the procurement of contraceptives. These funds were used for

-- constructing, renovating and equipping two training centers and family planning clinics;
-- training local personnel and conducting seminars for opinion leaders.

Personnel training ranged from orientation seminars for doctors to intensive training of community workers with other programs for middle-level workers such as clinic supervisors and auxiliary nurses.

Community workers are considered a pivotal point in the hierarchy as they are the interface with the community. They provide basic preventive and curative services to the population and are the means by which outreach work in family planning will be accomplished. Other outreach components include radio broadcasts, posters, pamphlets, theatrical skits and films, and curriculum development for the school systems.

Seminars for opinion leaders have been used to promote family planning. The DHF with help from Columbia University has established a statistics and evaluation section. Four statisticians and two assistants at the central level compile and analyze data from areas where staff members formally trained in data collection are located. Reports are submitted on a yearly and quarterly basis. The quality of the data submitted for measurement of effectiveness is far superior to that of the Ministry as a whole.

Constraints

The fact that the Government has no formal population policy has implications for the funding of a population program in Haiti. Furthermore, the Government is currently more interested in the MCH and health components of the program than in family planning. One can only assume that given the lack of explicit policy and the modest interest in population planning, that a greater proportion of the budget will not be assumed by the Government and reliance on foreign donors for support of a population program will remain high. It remains to be seen if the political interest in population as a constraint to economic development will find expression in increased funding for family planning.

The Ministry of Public Health and Population has serious deficiencies in its administrative and planning capabilities. The DHF on the other hand is better administered than the Ministry as a whole and on occasion has demonstrated aggressiveness and initiative in its programs. However, there are some policy matters to be worked out between A.I.D. and the DHF. The DHF has expressed the opinion that the A.I.D. position on future funding tends to be slightly presumptive in regard to the timing of surgical sterilization and distribution of contraceptives without prescription. However, the DHF has agreed with AID on the need for a population growth policy; a mutually satisfactory program is expected to be worked out.

Coordination and cooperation between departments and bureaus are poor. Competition between departments and between department heads inhibits the establishment of a functional integrated rural health system and an effective family planning program. For example, the Bureau of Nutrition and the DHF have disagreed on the relative roles of their departments in an integrated health system; however, they have recently agreed that contraceptives will be provided through the nutrition centers -- an auspicious development which may permit greater cooperation in the future.

The DHF bias in the past toward the clinic-based approach to family planning has been a limiting factor in achieving coverage of an appropriate percentage of the population. However, the DHF has exhibited willingness to consider alternatives; agreement has been reached in principle with the donors on the necessity of expansion from the clinic-based model to a community-oriented focus.

Socio-Economic Constraints

Limits on fertility and family size in rural Haiti relate to the peculiar characteristics of the Haitian conjugal union. Formal marriage is beyond the means of most Haitians in rural Haiti. Consensual unions of various degrees of permanence are common. These unions, known as placage, are often unstable, lasting an average of four years; polygamy is widespread.

In a 1975 study of rural Haiti, it was noted that women who reach their last reproductive year could expect to have had an average of 5.9 children. However, further analysis indicated two patterns of fertility: one for women in stable unions and one for those with more than one union. A women who is with one partner throughout her reproductive life has an average of 11 children, but those with more than one union or who are separated from their partner have an average of three children. The wide variation between these fertility patterns is attributable in part to lack of opportunity or abstinence on the part of women in unstable relationships; it is a major factor in the Haitian total fertility rate, which is relatively low in comparison with many other developing countries.

Strategy

Family planning should be an integral part of development activities not only because of the current serious population problem, but also because development in other sectors may contribute to an even higher growth rate than at present. At an operational level, the Haitian government has not until recently considered the implications of unbridled population growth on agriculture and land availability nor on education and infrastructure utilization.

A.I.D., UNFPA, FPIA and other organizations have agreed that significantly greater family planning coverage can be achieved by

-- using community workers in areas not served by clinics;
-- subsidizing distribution of contraceptives;
-- using PVOs for family planning activities;
-- expanding voluntary sterilization services;
-- promulgating a policy at the national level.

Programs

A.I.D. envisions that the MCH/FP program will reach the majority of the population with less reliance on clinical facilities and professional providers. The community agent and the sanitary agent are crucial to the diffusion of family planning information and services. Decentralization of the provision of health services through A.I.D.'s Rural Health Delivery Service (RHDS) project will help expand family planning services. Community-level workers in the course of providing basic preventive and curative health and nutrition services will also promote the concept of family planning.

Community Distribution of Contraceptives

Given the universal nature of the population problem and the prevalence of poverty, contraceptives -- primarily condoms and oral contraceptives -- should be made available free or at very low cost to the community in a non-clinical setting. The DHF has agreed to a research project, which A.I.D. will fund,to test the feasibility of this idea. Essentially, the project calls for the local distribution of pharmaceuticals to see if this will promote greater acceptance of contraceptives. Three localities each with 2,500 households have been chosen -- two with little or no access to family planning and health services and one with access. Two localities will receive distribution of contraceptives only, and one will receive a mix of contraceptives and pharmaceuticals to determine receptivity of the target population and feasibility of the method.

The exigency of the population problem calls for an earlier action which will not run counter to nor duplicate the operational research project but rather function independently of the project. A.I.D. proposes to distribute contraceptives, particularly condoms and oral contraceptives at a national level in a non-clinical setting. Logical distribution points include factories and army barracks. To create an awareness of the availability of the products, radio and television spots will be taped. The most important aspect of this concept is the non-clinical nature of the distribution. People who could never before attend a clinic because of cost, access, or simply fear would now have none of these inhibiting factors holding them back.

Private and Voluntary Organizations (PVOs)

PVOs are numerous in Haiti, accounting for approximately 40% of all health facilities. In many rural areas they are virtually the only providers of medical care. In the decentralized RHDS*, PVO facilities might be incorporated as secondary and tertiary referral points in the regions where government facilities are not available. Since health, nutrition and population are to be integral parts of the system, these PVO facilities are logical points for the dissemination of contraceptives at the community level.

Expansion of Voluntary Sterilization Services

Until now, both male and female sterilization procedures have been available only from private practitioners. FPIA and AVS are introducing sterilization services in two maternity hospitals in Port-au-Prince in 1977. The primary objective of this project is to provide training and services and to perform 500 sterilizations in the first year of operation.

Nutrition

Malnutrition constitutes perhaps the major health problem in Haiti. Between 20% to 25% of Haitian children under five years of age suffer from second- and third-degree malnutrition. In some parts of Haiti, the prevalence of severe protein-calorie malnutrition (kwashiorkor and marasmus) has been estimated to be as high as 10% to 15%. In addition, more than 60% of the child population is judged to be underweight and suffering from first-degree malnutrition. Malnutrition contributes significantly to Haiti's high mortality rates as a primary or secondary cause of most infant and child deaths. The synergistic relationship between infectious disease and nutritional deficiency also gives rise to high morbidity rates in the under-five population.

In addition to childhood malnutrition, undernutrition and specific nutritional deficiencies are highly prevalent in the general population. Best estimates of food availability (based on food consumption data) suggest a daily per capita caloric deficit in the range of 400-800 calories. Hospital cases of adult kwashiorkor with corroborative biochemical data and isolated clinical cases identified in nutrition centers suggest the possibility of a protein deficiency problem in the adult population. Vitamin A deficiency, goiter, ariboflavinosis, and nutritional anemias are also serious problems in specific regions and population subgroups. In particular, the poor nutritional status of pregnant women is largely responsible for infant death and low birth weights. Lactating women, whose nutritional needs are also different in quality and quantity

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* Rural Health Delivery Systems

from the general population, constitute another at-risk group. Migration of the rural poor to the urban areas has created another vulnerable population group whose nutritional and health problems, while similar, are based on a different etiology and may be greater in magnitude than that found in the rural areas.

Haiti's major effort in nutrition to-date carried out through the Bureau of Nutrition has been directed toward the eradication of kwashiorkor and marasmus in the under-five population and the education of mothers of these malnourished children through the mothers' participation in the rehabilitation of their own children. The mothercraft center approach seems to have been successful in Haiti in reducing the level of malnutrition in several communities and the prevalence of malnutrition in the siblings of recuperated children. Operation of these centers has enabled the Bureau of Nutrition to gain experience and to develop expertise in data collection and management and field supervision and training; the result is the creation of a small but technically competent staff and a cadre of trained field workers. Distribution of Vitamin A tablets in nutrition centers and health clinics (a project of the American Foundation for the Overseas Blind funded by AID) is another activity in which the Bureau is involved. Under the supervision of the two agronomists on the Bureau staff, a pilot project aimed at improved nutritional status of the community via nutrition education of fathers through agricultural production is currently underway. However, the impact of these activities on the nutritional problems in the country has been and is likely to be extremely limited relative to the magnitude and diversity of the problems.

In addition to the activities of the Bureau of Nutrition, other nutrition projects and programs are being undertaken in Haiti. The private voluntary agencies, CARE, Catholic Relief Service, and Church World Services, or Service Chretien d'Haiti (SCH) are the sole distributors of PL-480 Title II foodstuffs in schools, food-for-work projects, and MCH centers. Projections for 1978 indicate that approximately 350,000 beneficiaries, or 7% of the total population will receive Title II foodstuffs with more than 50% being distributed in school-feeding programs. CARE is just completing a three-year project which provided nutrition education to 240 primary school teachers in 82 schools combined with school feeding. The establishment of 65 "home economics" centers to be coordinated with a World Bank project for the construction of 65 new rural schools is currently being planned by CARE. CWS/SCH supervises approximately five under-five clinics in Bellevue and on the island of La Gonave. HACHO operates between 10 to 15 mothercraft centers in the Northwest. The Albert Schweitzer Hospital at Deschapelles has nutrition clinics and under-five clinics which serve a community of approximately 90,000 people. Integrated rural health and nutrition delivery projects are underway in the Petit-Goave area under the supervision of the Division of Family Hygiene.

PAHO has been involved in incorporating nutrition into the curriculum for auxiliary nurses and other health personnel; PAHO recently completed a nine-month advanced training course for auxiliary nutrition supervisors whose function will be to supervise nutrition activities at the district level. PAHO/UNICEF is also involved in the establishment and functioning of a national nutritional planning and coordinating body in CONADEP.

For the most part, all of these projects are operating independently of each other and of the Bureau of Nutrition. And, the impact of these individual efforts on Haiti's nutrition problems is likely to be marginal in view of the limited population coverage and the limited scope of activities.

Constraints

The constraints to improved nutritional status are numerous and diverse and reflect the multicausal nature of the malnutrition problem Sheer poverty limits the amount of income available to spend on food. Lack of food availability limits food purchasing power. Lack of basic nutrition knowledge prevents maximum utilization of what little resources are available for food and promotes the prevalence of malnutrition in the form of social habits and customs which have a negative impact on health and nutrition. Unsanitary health and personal hygiene practices combined with an unsanitary environment perpetuate the vicious malnutrition-infection cycle. The high starch and hence high-bulk nature of the Haitian diet alone poses a constraint. The limited size of a young child's stomach prevents his ingesting sufficient bulky foods to meet his nutrient requirements if he is fed only at regular mealtimes. For adults, a high-bulk, low-cost food, like plantains satiates hunger more readily than does a high-protein, high-cost food like eggs. While the constraints to nutritional improvement are multiple, they are interrelated and emphasize the need to address the nutrition problems in Haiti on a multisectoral front.

There are also several major constraints at the administrative level to the development and execution of a nutrition sector program. The Bureau of Nutrition is extremely limited in its orientation and experience in nutrition programming and planning. Integration of Bureau activities with activities in other sectors either at the planning (national) or operational (field) level is virtually non-existent and poses a serious obstacle to the implementation of intersectoral development projects which can have a nutrition impact. The Bureau's history of working in isolation for the past 15 years is partly responsible for this. In addition, there is the overall lack of coordination and integration of nutrition activities by other agencies in the country; organizations involved in nutrition activities in Haiti for the most part have divided the country and are working independently.

An insufficient data and information base in not only nutrition but also such areas as agriculture, health, economics, anthropology, sociology, and water resource management represents another major constraint to planning and implementing intersectoral development projects.

Strategy

The urgent need to broaden the scope of nutrition activities in Haiti includes requirements to

-- focus on nutrition programs which have broader coverage than currently exists and which address specific nutritional problems in the population;
-- develop intersectoral development programs which can have a significant positive nutritional impact;
-- coordinate and integrate national level nutrition programs with expanded community-level programs.

Within this context, A.I.D. nutrition strategy for Haiti will focus on two major issues:

-- reduction of existing and prevention of further cases of malnutrition in the under-five population;
-- improvement in the overall quantity and quality of the diet of the general population.

This strategy has three components:

-- We will continue to strengthen the technical and administrative capability of the Bureau of Nutrition, support its ongoing activities, and broaden the scope of its nutrition programs.

-- We will provide resources to support preliminary investigative studies needed to plan, design, and implement intersectoral development projects.

-- We will assist the Government in fostering intersectoral coordination and cooperation at the ministerial and operational level, in incorporating nutrition goals in agricultural and health planning activities, and in designing and executing integrated programs which may have a significant positive nutritional impact on the general population.

Programs

In order to implement the above strategy, A.I.D. will focus on three types of overall programming categories:

Programs for which feasibility and need have been established. There are four projects or program areas suggested for consideration.

Integration of mothercraft centers with health clinics and dispensaries. This approach has the advantage of providing combined health, nutrition and family planning services in a more efficient manner and to a larger population than would be possible if the centers were operating in isolation of each other. Once chronic cases of malnutrition have recuperated in the mothercraft center, they could be transferred to the health clinics and thus allow other children to be admitted to the mothercraft centers. Health personnel in the clinics could provide the children in the mothercraft centers the medical treatment and supervision which is currently provided monthly by the physicians on the staff of the Bureau of Nutrition. Supervision of the overall program would be conducted by district health personnel in collaboration with district auxiliary nutritionists, which would also allow Bureau of Nutrition staff to devote their talents to other activities. While some mothercraft centers have been established in conjunction with health clinics, the number is exceedingly small. This integrated approach should be established for all centers and clinics and should be extended to provide wider coverage.

Extension of the under-five nutrition clinic system. Under-five clinics represent a relatively inexpensive means of providing a fairly large number of women with educational sessions on nutrition, personal hygiene, family planning, providing children with basic health care, providing "take-home" food (PL-480) for children, pregnant and lactating women, and "demonstration education" to mothers by having them monitor the progress of their children's health on growth charts. Such clinics meet on a weekly basis and are generally run by a trained nutrition auxiliary who is assisted by women from the community. Such a network of clinics would be desirable especially in communities which have no other rural health and nutrition delivery services.

Expansion of Food-for-Work Projects. The distribution of PL-480 foods in schools and MCH centers is limited by the number of these institutions in the country. While Food-for-Work Projects are more explicitly income subsidy rather than nutrition projects, they should be the priority mechanism for distribution of PL-480 foods in Haiti. This is primarily because they can serve as a development vehicle by supporting much needed development and infrastructure projects such as roads, reforestation, irrigation, and potable water projects. These projects foster community participation and coordination and can serve as a catalyst for other community-based rural development projects.

Strengthen the technical and administrative capability of the Bureau of Nutrition. Our efforts will be directed toward fostering integration and coordination of Bureau activities with the health and agricultural sector and with other organizations and individuals involved in nutrition activities in Haiti. A first step would be to transfer field supervision of centers from Bureau staff to district-level medical and nutrition personnel and thereby allow the technically qualified Bureau staff to concentrate its efforts on planning, designing, and executing other projects. Although the Bureau has two agronomists on its staff, the input of the Bureau in agricultural activities is marginal. We recommend that major efforts be made to strengthen the relationship between the Bureau and the Ministry of Agriculture at both the planning and operational level; nutrition education of agricultural extension agents might be considered as a potential vehicle of integration.

In addition, we recommend that the Bureau itself undertake an inventory of all existing nutrition data and provide a documentation and critical analysis of the data to identify weaknesses and gaps and investigate projects needed to strengthen the information and data base. A.I.D. will also assist the Bureau in strengthening and expanding its capability and activities in nutrition education; specifically, teaching nutrition education to a sufficient number of health and nutrition auxiliaries, home economists, and literacy training personnel to permit nutrition education to be taught in all service centers in the country.

Programs for which diagnostic or feasibility studies are warranted. These programs are suggested to broaden the scope of nutrition activities in Haiti. All the projects will require a preliminary feasibility study before decisions regarding implementation can be made.

Vitamin A fortification of sugar. Since the rural poor consume large quantities of sugar in the form of coarse brown sugar, or rapadou, it will be necessary to investigate the technical feasibility of fortifying rapadou in addition to fortifying refined sugar with Vitamin A. The feasibility of working with large numbers of artisan rapadou plants will be investigated. Sugar consumption patterns, vitamin A intake data by age groups, and production and marketing patterns for sugar must also be studied.

Iodization of salt. Epidemiological data on the prevalence of iodine deficiency in Haiti should be documented and the feasibility of reaching the target population by salt iodization investigated.

Mass Media Education. The feasibility of mass media education should be examined including identification of the audience with radios who would benefit from this approach, the types of messages which could be used, and the most efficient and effective way to complement the mass media approach with nutrition education projects which use home economists, nutrition and medical auxiliaries, and school teachers. A review of the effectiveness of the current Radio Docteur program of the DHF should be useful in this connection.

Acamil (AK-1000) production. The feasibility of promoting acamil (corn-bean mixture) production in mills at the local community level should be investigated. In addition, the question of supplying pre-packaged acamil for distribution in nutrition, health, and literacy centers to substitute for PL-480 foods and for selling acamil in the market should be examined. This review should, of course, carefully examine the financial issues; e. g. who would pay for the costs of this operation? The project requires close collaboration of the nutrition, health, and agriculture sector.

Fortification of wheat flour. Since all wheat imported in Haiti is processed in one flour mill in the country and since bread appears to be widely consumed in both rural and urban areas, this project has potential in improving the quality of the local diet. The possibility of developing a composite wheat/sorghum flour which could be fortified with vitamins and minerals should be examined.

Fish ponds. The feasibility of developing fish ponds for consumption of fish at the community level should be investigated. Feasibility might be tested by establishing several pilot fish ponds.

Rural Sanitation. The feasibility of increasing the availability of water on a large scale to the rural poor for personal use, irrigation, and possibly fish ponds should be examined. Education would be a major component of such a program. While the provision of water alone cannot be assumed to have a positive measurable impact on nutrition and health, water availability is certainly one precondition for good health. We also are proposing a study of the benefits and costs of a ground water survey of selected parts of the country where studies have not been made of underground water resources. The activity would complement the Canadian study of surface water availabilities.

Food Storage. An integrated agriculture-nutrition approach to improving food storage and handling at the home and market level should be studied in an attempt to determine the amount of food wastage in the country and possible ways of reducing this wastage.

Integrated community development approach. Many villages in Haiti have community councils composed of members of the community. In addition, several communities have extension agents (health, nutrition, home economists, agriculture) working in isolation of each other. An attempt should be made on a pilot basis to coordinate more effectively the activities of all extension agents in a community as a means of fostering integrated community development in the rural areas. This will require the collaboration and coordination of all sectors at the national as well as local level.

Investigative Studies. The following areas in the nutrition sector have been identified as requiring refinements or additional information to strengthen the data base for project identification and implementation.

-- breast-feeding trends, attitudes, and practices;
-- child-rearing trends, attitudes, and practices;
-- food consumption patterns especially in children, including seasonal and regional food-intake data and food attitudes and beliefs;
-- effectiveness of the current nutrition education program in the country;
-- effect of fluctuations in food prices and farmer income on food purchasing patterns;
-- effect of increased farmer income on nutritional status of the family;
-- nutritional status of mothers participating in mothercraft centers;
-- quantification of time spent and number of women engaged in occupations in the agricultural sector and relationship to nutritional status of the women's children;
-- diagnostic profile of the extent and causality of malnutrition in the urban areas.

The information data base for the selection and design of intersectoral development programs which can impact on nutrition in Haiti is extremely weak and limited. This includes such information as:

-- agricultural production statistics by region, including acres under cultivation for different crops;
-- yields per acre;
-- estimate of harvest and post-harvest losses;
-- estimate of number and location of subsistence farmers, cash crop farmers, mixed cash and food crop farmers;
-- food marketing and distribution patterns and interregional trade statistics;
-- income data;
-- fertility and mortality rates;
-- description of private health sector activities;
-- amount and types of food produced by farmers which are sold;
-- household budget survey information, including amount of income spent on food, food purchased, food prices.

Until such basic information is available, we will be limited in our ability to effectively incorporate nutrition goals in other sectoral programs and to promote the development of integrated programs.

Health Development

The high rates of mortality and morbidity evidence the poor health status of the people of Haiti. Communicable diseases compounded by malnutrition and undernutrition are the principal factors influencing these rates. In the rural areas, parasitic and communicable diseases of childhood are prevalent and, in already malnourished infants and children, increase the risk of mortality from otherwise low-risk diseases. Gastroenteritis , particularly in conjunction with protein-caloric deficiency, is a major killer of children. Estimates of the infant mortality rate place the figure at 149 per 1,000. Hookworm infection is widespread in rural areas and an important contributing cause of anemia.

Tuberculosis causes mortality and morbidity in persons of all ages. Government of Haiti and PAHO estimates range from 1.8% to 3% of the population with tuberculosis. 1976 data indicate that 20% of the population under 15 have positive tuberculosis reactions and overall mortality runs at about 82 per 100,000.

Influenza and bronchopneumonia contribute to the ill health of the population. No reliable data exist but hospital records in governmental institutions show a high (35% to 50%) death rate for those admitted with pneumonia, which probably reflects a reluctance to seek care until advanced stages.

Unsanitary health and personal hygiene practices together with an unsanitary environment and overpopulation are all major health problems. They are responsible for the poor health and nutritional status of mothers with closely spaced births and the consequent poor health and nutritional status of children born with low birth weight.

Multilateral, bilateral, and PVO agencies are providing health services in Haiti. Of the multilateral agencies, PAHO is a significant contributor. Operating under an agreement with the Government of Haiti, PAHO is providing technical and financial assistance in health services, family planning and population, health manpower development, and communicable disease prevention and control.

Currently, PAHO is assisting the Government of Haiti in its regionalization plan establishing the complete administrative structure for health services in the regions of Cap-Haitien and Les Cayes. PAHO has projects in latrine construction and improving water supply systems in both rural and urban areas. In manpower development, PAHO is helping to improve the curriculum of the faculty of medicine, upgrade the examination system, and refurbish physical facilities. Teaching in nursing schools, sanitary

engineer education, and training of auxiliary nurses are other fields in which PAHO is involved.

PAHO also provides the major technical input to the SNEM malaria control program, which is currently funded in large part by A.I.D. The program began its operations in 1961 to eradicate malaria from Haiti through the use of intradomiciliary spraying; it appeared to have achieved its goal in 1968 when the slide positivity rate dropped to .2%. However, the rate went no lower and the extensive network of SNEM workers was utilized to introduce antimalarial chemotherapy nationwide. This did not eliminate malaria and the slide positivity rate increased; morbidity rates remain high.

Constraints

The Ministry of Public Health and Population is a single authority with responsibility for coordination of health activities. But, unified long-range planning is virtually nonexistent. The delivery of health care to the rural areas is fragmented -- offered by diverse and uncoordinated organizations. No provisions exist for supervision and evaluation of programs and personnel. The infrastructure of health delivery is inadequate. Transportation outside Port-au-Prince is difficult and slow because of lack of roads. Each organization has its own transportation system which leads to duplication and inefficiency. Medical supplies are also inadequate and facilities for storage and distribution are poor. Accountability for drugs is at a minimum and it is not uncommon for medications to disappear.

There is a massive shortage of personnel in all categories of health workers. Traditionally, the Ministry's emphasis has been on curative services rather than on preventive. This, together with financial constraints has restricted care to a small well-off minority in urban areas. Rural areas suffer acute shortages because difficult working conditions do not attract professional personnel. The basic health worker trained with an emphasis on rural health would alleviate the inequitable geographic distribution, but this category of health worker is scarce.

Strategy

A.I.D. strategy in health is to provide basic preventive and curative services to the rural and urban poor through a rural health delivery system (RHDS). This strategy has three components:

-- Work will continue at the central level with the Ministry in strengthening its planning and administrative capability.
-- Assistance will be given to the government in developing the infrastructure and logistics system needed to support the RHDS.

-- Resources will be provided in an initial phase for the design and testing of a health delivery system adapted to the rural nature of the target population and, in a second phase, expand the system to give broad coverage to up to 70% of the population.

Programs

To strengthen the planning and administrative structure of the Ministry, A.I.D. has entered into a contract with Westinghouse Health Systems to

-- improve the personnel system of the Ministry;
-- establish linkage of the financial system with the outlying health posts;
-- create an information and data collection system through the newly-created Bureau of Planning in the Ministry.

This initial phase will be followed by

-- manpower development and training, including task definition analysis for the RHDS;
-- technical equipment to support the information system;
-- operational cost support to the Ministry.

A.I.D. also sees the need to continue its present support in FY 1977 prototype phase through the FY 1978 nationwide implementation phase. This entails continuation of the health planning contract to provide guidance and supervision during the transition phase and to diagnose and deal with specific problems as they arise

Logistics

The areas that merit particular attention for a functional RHDS are

-- transportation,
-- supply and distribution,
-- maintenance and communications.

A.I.D. will provide vehicles for the transportation of supplies, personnel, and patients. A simple but adequate medical supply system will be developed to distribute basic medicines to all levels of the operational hierarchy. Coordination will be required with other existing private and governmental institutions to reduce waste and duplication. As maintenance of government facilities and equipment is virtually nonexistent, a basic preventive maintenance program (simplified by the low level of technology required for the RHDS) will be established. Standardized equipment and supply lists will further reduce maintenance requirements. As communication systems are nonexistent or inadequate in the areas where the RHDS will be operating, a network of two-way radios may be needed to ensure flexibility

and smooth functioning of the RHDS; the system depends on rapid communication. In the current phase, technical assistance for the final design and plan of an RHDS will be funded by A.I.D. in coordination with IDB, PAHO, and the Government of Haiti.

Design of the RHDS

To plan, develop, and implement an integrated rural health system which will eventually result in the extension of services to an estimated 60% to 70% of the population, a steady growth in both quantity and quality of the services must be realized over the life of the project. The services must be located as close to the patients' homes as possible; adaptability to local cultural norms must be taken into account to insure maximum acceptance and usage.

The RHDS fits into the Government's regionalization plan. Each of Haiti's five health regions has a high degree of autonomy for operational decision-making. Within each region there will be a hierarchy with the hospital as the regional center for complex care and administration, the health centers as foci for intermediate care, and the dispensaries as the primary care centers. The interface between this hierarchy and the community is the basic-level health worker who is the key to effective delivery of rural health care. Special training programs will be developed for health worker supervisors who will in turn take part in training the basic-level workers. Health services will be integrated which means that MCH, family planning, nutrition will be provided in the same clinic or by the same health worker. This approach addresses the multicausal nature of health problems in Haiti much more adequately than the present system of separate health care delivery.

Malaria Control

The increase in malaria from a low slide positivity rate of .2% in 1968 to 8% in 1972 is a result of administrative and technical factors combined with policy conflict. Administrative and technical cooperation between donor agencies and within the SNEM was poor and the policy conflicts that arose hampered eradication efforts. A multiplicity of advisors with conflicting advice reduced the effectiveness of eradication activities. In 1975, a policy was adopted which divided the duties of the donor agencies. A.I.D. is providing technical assistance in administration and management of the program and PAHO supplies the technical backstopping with five resident technicians. A.I.D. has requested assignment of a resident entomologist to work with the PAHO technical team and agreement has been reached. Since

reorganization, SNEM's effectiveness has improved markedly, if somewhat slowly.

Although A.I.D. does not usually support funding for solely vertical programs, it does recognize the importance of reducing the incidence of malaria to a point at which it is no longer a public health problem. Since Haiti has shown commitment to the program by steadily increasing its share of the contribution, A.I.D. support for the program within the context of improving overall health is justified. In the future, when the Ministry is sufficiently well organized, SNEM can be incorporated into the Ministry and its workers used to extend coverage by the RHDS.

A.I.D. strategy is to implement the recently completed five-year plan of operations for the malaria control program which uses all available control methods. This comprehensive approach is being used for the first time in Haiti because of vector resistance to DDT. More stress will be placed on source reduction and water management in vector control with a more selective emphasis on traditional intradomiciliary spraying and antimalarial chemotherapy. Used properly, these measures will help to reduce morbidity to the point where it is negligible as a public health problem.

XII. EDUCATION AND HUMAN RESOURCES DEVELOPMENT

Education and human resources development is reviewed in this DAP because of our concern about

-- the Haitian government's capacity to absorb assistance and to implement programs in rural areas;

-- the target population's capacity to adopt, modify, and retain the innovations needed.

Manpower training builds the first capacity. Non-formal education related to assistance priorities builds the second. In the long run, a national system of formal education builds both.

Analysis of the Sector

Learning Needs of the Target Population

There are two priorities: first is information on how to increase the production of basic food crops or cash crops which will permit a rural family to increase its purchase and consumption of basic foodstuffs; for example, information on erosion control, irrigation and drainage, water supply, improved seeds, improved tools, crop rotations, inter-planting, crop storage, alternative energy sources for cooking. Second is basic education about nutrition, health and family planning; for example, education about symptoms of malnutrition in infants, supplemental feeding of infants and young children, food preparation, vaccination, inoculation , waste disposal, family planning techniques.

Both priorities require programs which reach rural men and women, which convey information and change attitudes and behaviour with respect to their roles as parents and prime producers of family subsistence. Both priorities also require development of social competence, the ability to work collectively in community organizations on problems of community scale, such as erosion control, water supply, irrigation and drainage.

Rural Haiti is insulated in large degree from the national life which centers on Port-au-Prince. In a broader sense, there is a need for education which works both ways: first, an education of private and government leaders in Port-au-Prince that Haiti's rural poor must be brought into the main stream of national life; and, second, programs for rural men and women so they can participate in the national life as opportunity is afforded them.

Profile of Learning Systems

Haiti's investment in education and human resource development is almost exclusively in formal education. The system is a variation of the French education system brought to the country by French religious teachers after the signing of the Concordat in the 1860s. Fundamentals of grammar, mathematics, and literature are taught with a heavy emphasis on rote learning. The goal is to equip the student to attain a University education.

Administrative responsibility for public education is divided among five ministries. The two principal ones are the Ministry of Education (DEN) which is responsible for urban primary and secondary education, urban normal, vocational, and technical schools, and university faculties of ethnology, public administration, economics, education and sciences; and the Ministry of Agriculture (DARNDR) which is responsible for rural primary education, rural normal and agricultural vocational schools, a "middle school" of agriculture, and a university faculty of agronomy and veterinary medicine. The Ministry of Health (DSPP) is responsible for a school of nursing, a university faculty of medicine and a university faculty of dentistry. The Ministry of Social Affairs is responsible for social work training and the Ministry of Foreign Affairs for a hotel school.

There are also private primary, secondary, and vocational schools run by religious groups and other organizations, which accounted for about one-quarter of primary school enrollment in 1973-74 in both rural and urban areas, and 40 percent of secondary and vocational enrollment, almost all of it in urban areas.

Overall, national enrollment in primary education was 39% of age group 6 - 12 in 1973 - 74; 44% of the enrollment was either under or over the official school-age cohorts of 6 - 11 for urban schools and 6 - 12 for rural schools. Many rural children enter primary schools at age 10 or older.

Female enrollment was approximately 43% of the total, a figure which drops to 32% in secondary schools and 24% in higher education, but which reflects comparatively low barriers based on sex alone.

The main difference is between opportunities in rural areas and in the cities. In 1973 - 74, 89% of the urban age group was enrolled in primary schools but only 26% of the rural age group was enrolled. Retention and graduation rates in rural areas are disastrously low. Complete cohort data are not available to distinguish repeaters and dropouts or calculate costs per graduate, but available estimates are that 70% of rural children who begin primary school complete only the first year, that less than 17% com-

plete 3 years (which is considered the minimum for literacy attainment), and that only 3.4% of children who started school in 1966 completed the full 7 years of the rural primary cycle. (Some, however, may have completed their primary studies in urban schools; successful children are sometime sent by rural parents to stay with relatives in the city in order to have better access to education.) The estimated completion rate for the 6-year urban cycle is 50%.

For the system as a whole, of 1,000 students who begin primary school, no more than 50 go on to secondary education and 7 to higher education. Low retention is in part the result of low levels of expenditure and quality, and high student-teacher ratios. Public and private expenditure on education is equal to 2.5% of GDP. Government expenditure is equal to 1% and has declined in real terms since 1971. Rural public primary schools, which in 1973 - 74 enrolled more than one-half the national public enrollment, received only a third of the national budget for primary education. Budgets go mainly for teachers' salaries; there are almost no funds for teaching materials or instructional aids.

Expenditures per pupil in primary schools in 1973 - 74 were 102 gourdes ($20.40) per year in urban schools and 50 gourdes ($10.00) per year in rural schools. "Qualified teachers" accounted for only 35% of teachers in urban primary schools and 25% in rural schools. The national primary student-teacher ratio was 32. In rural schools it was 53, and in rural public schools it was 73 -- up from 62.4 in 1968 - 69.

But, low retention is mainly the result of economic and language barriers. Rural families must purchase books and materials and pay a "school cooperative" fee of 17.50 gourdes ($3.50) per year per child. Leaving aside the cost of books and materials for which no estimates are available, the annual fee for one child of a rural family is higher than the average annual rural per capita expenditure for clothing; and the fee for two children is higher than the average annual per capita expenditure for clothing, lighting, transport, and home repairs combined.

The greatest barrier is that the target population speaks only Creole while all formal education is in French. In its education system, as in all other aspects of public life, Haiti has been steadfast in upholding French language and culture. The intellectual tradition is strong and Haiti is proud of its University graduates and its writers -- nearly all of whom have written in French. Education and culture for nearly all Haitians means the ability to read, write, and speak French and to appreciate French intellectual life.

The goal of the current education system is to expand the number of persons who can utilize effectively the official language of the country. Rural primary schools teach in French, require lengthy examinations at the end of each year in French and special language examinations every two years. Children in rural schools must also pass a primary certificate test of the Ministry of Education and the rural curriculum consequently differs relatively little from the curriculum of the city schools. The official position appears to be that a program designed to meet rural needs would amount to discrimination against the rural areas since rural students would be at a disadvantage with urban students in competing for the limited number of places in the Government High Schools (Lycées).

It is probably true that most rural parents want their children to learn French, succeed in school, and escape subsistence agriculture. Yet French is spoken with varying degrees of competence by up to possibly 15% of the population. Probably no more than 5% of the population can speak French fluently. Under these circumstances, there is ample evidence that Créole must be used in the early years of primary school to teach French as a foreign language before any significant or lasting education in French can take place. This has been done only in small-scale experiments to-date.

Under the auspices of the Ministry of Education, there is an adult Créole literacy program operated by the National Office of Literacy and Community Action (ONAAC). There are also programs of church groups -- particularly Protestants groups -- to teach their members Créole so that they can read the Bible in Créole.

ONAAC has had few funds for its literacy work and there is very little Créole written material available except for religiously oriented material. Thus, it is unlikely that any significant percentage of non-French speaking adults are literate in Créole. The overall literacy rate in French and/or Créole in 1971 was reported to be 10%.

At secondary, technical, and higher education levels -- which directly affect the country's capacity to absorb assistance and implement programs for the target population -- the situation is mixed. On the positive side, the number of students and graduates is increasing. The number enrolled in all secondary and technical education increased from 28,600 to 34,780 between 1969 and 1974 and the number in higher education from 1,530 to 2,028. Expenditures per student, ranging between 190 and 620 gourdes ($38 and $124) per year, are comparatively low. On the negative side, fields of specialization offered, the quality of some programs, the fields chosen by students and the career patterns of graduates do not fit the development needs of the poor majority, nor increase as much as they might the capacity of the Government of Haiti to development and to implement the programs the poor majority need.

Technical education at the upper secondary level prepares graduates for work in urban private sector activities such as automotive mechanics, electronics, and electricity. There is no technical training at the subprofessional level in engineering fields related to rural development such as erosion control, soil conservation, water supply, irrigation and drainage, road construction and maintenance, or rural sanitation. Enrollment at the subprofessional level in agriculture and agronomy is low.

Academic secondary schools prepare students for higher education and half of those enrolled in higher education are studying medicine, pharmacy, or dentistry in spite of limited employment possibilities in Haiti for graduates with these skills. A significant percentage will undoubtedly continue to emigrate. The number of civil engineers and agronomists graduated to-date could have met the requirements of the economy if there had not been a brain drain. Quality, however, has not been adequate and training related to problems of rural development has been insufficient. It is not at all clear that there will be enough engineering and agronomy graduates in the future to staff the new development projects even if all graduates stay in the country.

Because of salary differentials, most graduates of higher education seek employment in the private sector. Multiple job holding within the public sector or between the public and private sectors is common as well.

Summary of Human Resources Development Problems

The current system is not meeting the learning needs of the target population or doing as much as it could to build the Haitian Government's capacity to make use of external assistance.

The unintended consequences of formal education are that at the lower levels it promotes migration from the countryside to the cities and at the upper levels facilitates emigration to the United States and to Europe.

Review of Country Goals, Plans, and Programs

Haiti's education goals involve ideas for reform outlined in the five-year plan and a greater emphasis on rural education under projects financed by the IDB and the World Bank. In fact, education and professional training is the third priority of the plan, coming just after agriculture and a program of decentralized industrial infrastructure. But funding problems and an underlying reluctance to modify the current system raise doubts as to whether there will in fact be any significant reform of Haiti's education system. The general education goal of the five year plan is to create an education system which not only will integrate the Haitian child into his economic-social environment and into a productive work situation but will also form a human being with the capability and sense of responsibility for accelerating the economic and social development of all Haitians. The education objectives are the following:

-- provide primary education to the largest possible number of school-age children without discrimination because of sex, economic status, or geographic location;

-- include in the system a large percentage of children who are too old to be included in the regular schools;

-- prepare a secondary education system better adapted to the realities of the country with students included to the largest extent possible on the basis of their merits rather than the social status or geographical location of their parents;

-- make technical and professional education one of the pillars of the Haitian system;

-- develop the Haitian University so that it engages in more research and is more oriented to forming technical and scientific cadres needed by the country than to producing literary and law graduates;

-- accord an essential place to nonformal education;

-- improve the effectiveness of all levels of education by a better adaptation of the school programs to local conditions and a more rational use of resources;

-- upgrade the level of administration and prevent a concentration of resources in any one region (i. e., Port-au-Prince).

The plan then reemphasizes that the Haitian Government must play the essential role in all education programs and innovations and underlines that there must be a single base for education programs everywhere, i. e., in both rural and urban areas, and a single strategy.

The strategy of the education plan is not to concentrate on increasing the numbers of students but to improve the quality of education. This approach is expected to reduce the drop-out rate described above. In quantitive terms, the plan provides for an annual increase of roughly 5% per year in the student body.

Constraints

The constraints are of two types: those which affect the target population directly and those which limit the Haitian government's capacity to use external assistance to reach the target population.

For the target population, the main constraints are malnutrition, language, the urban bias of the primary school curriculum, and the literacy emphasis of

nonformal education programs. Malnutrition of the extent and types prevalent in Haiti limits capacity to learn. The impairment is reversible in children by intensive supplemental feeding of protein. Otherwise it is not. The language problem effectively excludes most rural youth from the schools which are available. The few who make it through are induced to migrate, in part by the nature of the curriculum.

ONAAC and the programs of the PVOs stress literacy. There is little evidence that literacy alone facilitates innovation in agriculture, public health, or nutrition. There is a great deal of evidence that literacy is not retained unless it is instrumental to other goals and reading material is available.

For the Government of Haiti, the main constraints are fiscal limits and absorptive capacity. Major improvements or expansion of formal education are beyond current fiscal capacity. For example, to improve existing rural primary schools by raising expenditures per pupil to the urban level would cost more than the total budget of DARNDR in 1973 - 74 without allowing for any increase in retention which an improvement in quality would produce. Alternatively, if the total budget were spent for expansion of rural primary education at the 1973 - 74 rural cost per student (and if capital costs are excluded) the proportion of rural youth attaining literacy would still be less than 8% and the proportion graduating less than 2% of the age group because retention rates would undoubtedly stay nearly the same. Major expansion of rural formal secondary and vocational education with urban costs per student 4 to 13 times higher than rural primary schools seems even less likely.

Absorptive capacity is a problem because external assistance has increased and government capacity has not. By 1976, there were over one-third as many resident UN experts as top-level civil servants. Technical assistance activity equals 1% of GDP, the same amount spent on all public education.

Education and training components of most projects converge on four ministries and their related agencies: Agriculture, Transport, Public Health, and Education. Fiscal management impacts the Central Bank and the Ministry of Finance. The specific problems affecting education and training are the same as in other sectors: salaries are low. Capacity to gather data, undertake research, develop curricular materials, plan and administer programs, is limited. Counterparts for technical assistance advisors are not available. There is little coordination between the Ministries responsible for education and training or of private education. Autonomous agencies have been set up to get around the problems but according to at least one report have become excessively autonomous thus making overall coordination still more difficult.

Most donor projects now include support for building the capacity of the Ministry or agency in which they are located. The support includes training of additional professionals, technicians, and extension workers, as well as inservice training, public administration and management training, and building planning and research capabilities. These activities require still more counterparts, usually more than the capital investment components of the projects.

External assistance will continue to be a leading generator of demand for scientific and technical manpower at professional and subprofessional levels and for public administration and management skills. The aggregate manpower demand derived from external assistance has not been analyzed by any donor since 1973; it has never been analyzed with precision or with projections of future demand.

Alternatives and Programs of Other Donors

There are two possible strategies for meeting the needs of the target population: one chooses education or training as the instrumentality for advancing development; one attacks a development problem directly, then adds the training or extension program needed for implementation. Examples of both, with current donors are the following:

Instrumental Programs

School radio	UNICEF
School curriculum, teacher training, materials	UNDP
Community development, functional literacy	UNDP
National Pedagogical Institute	France
Rural Education	IDB, IBRD

Direct Investment Programs

Irrigation	Federal Republic of Germany, IDB
Erosion control	United Kingdom, FAC, A.I.D.
Potable Water	Federal Republic of Germany, IBRD
Health, maternal and child welfare, family planning, nutrition, communicable disease, regional medical centers	WHO, UNFPA, PAHO, A.I.D.

Direct Investment Programs

Nutrition	UNICEF, FAO
Charcoal energy alternatives	UNDP, A.I.D.
Environmental waste disposal	UNDP
Manufacture of agricultural implements and seed production	UNDP, ILO, France
Road building	A.I.D., France, UNDP, IDB
Integrated rural development	OAS, A.I.D., CIDA

In general, given conditions in Haiti, it is preferable to identify direct investment programs and then derive the education and training which are needed to implement them.

Formal education for the target population is not a direct investment priority, nor is it an efficient way of facilitating the direct investments which are of priority. World Bank, UNDP, IDB, and France have major programs in education and have proposed a simplified basic cycle of 4 years for rural children. If there are changes in syllabus, examinations, and use of Créole as the first language of literacy, then the priority assigned to formal education should increase. There would then be a need to build a sustainable capacity for educational research and development, materials production, planning, design and use of nonverbal assessment techniques, inservice training of teachers, and educational administration.

For now and the immediate future any education intervention for the rural poor should have the following characteristics:

-- It should be outside the formal education system;

-- It should support direct investment programs;

-- It should be sufficiently concentrated geographically and in number of people reached so that a real difference can be made;

-- It should be long term and underwritten by a long-term financial commitment;

-- It should be aimed at rural adults -- particularly, young adults;

-- Its media and pedagogy should be highly visual and oral with direct contact by extension workers and community council participation.

Both for organizational reasons (it should have its functional linkage with a noneducational program) and for pedagogic reasons (people should be motivated less by educational goals than by the need for content), the materials should be designed more for the transmission of information and stimulation of discussion related to the objectives of the direct investment than for the teaching of literacy; literacy should be only an instrumental goal.

Much of the major development programs -- irrigation, erosion and reforestation, selected seeds, feeder roads, health services, coastal transport, energy alternatives -- have interests in extension programs and consequent needs for materials development and training of extension workers. The first step in the design of educational intervention should be the assessment and synthesis of the content information: what is the agriculture message, the health information, the skill needed? If, as with the appropriate technology interest or the interest in agricultural implements, the information is not yet available or the research and development (R & D) remains to be done, no educational effort should be started and the emphasis for the present should be on the R & D.

When at least some of the content information is available, educational media can be used to acquire information and input from the potential users and receivers as to how they perceive their needs. The flow of information for materials design, utilization, and revision is then two ways, and part of the central effort or capability becomes one of synthesizing and redissemination.

There are two ideas here: the first is that design of materials should be determined both by project objectives and by perceptions of the target population about the problem the project addresses. For example, is malnutrition of infants and yound children perceived by parents? If not, materials which assume this perception will fail. The second idea is that nonformal educational interventions should focus upon areas of dissonance or tension in a culture in order to be effective.

Areas of dissonance or tension can be "mapped" in the following way: a stimulus related to project objectives is shown. This can be a photograph, a series of slides, a video tape. It is shown to groups of people in the target population and the conversations which follow are recorded on tape, video tape, or by observers. Themes which recur in the conversations within groups and across groups are areas of tension or dissonance with respect to the subject matter of the stimulus (as interpreted by those who see it). They are themes which repeat, the themes on which people will engage, and there is evidence such themes are the "way in" to the specific problem of concern.

Educational interventions which make use of these themes have been shown to be more effective than those that do not, even when the basic development message is the same. The themes reflect the particular points where a culture may be susceptible to change.

As an initial step in that direction, we propose that one person -- knowledgeable about nonformal education in developing countries and familiar with cognitive mapping, generative themes, and other techniques used for materials development and training of extension workers when two-way flows of information are systematically used -- review what has worked in rural Haiti and how current efforts might be improved.

To improve absorptive capacity, two approaches are needed: one is to upgrade people and to improve capacity already in place. The other is to develop education and training programs to meet manpower demands foreseeable in current external assistance priorities and programs.

Needs for inhouse upgrading are related to the design and implementation of nonformal education for the target population. The priority is to assist the key Ministries -- particularly DARNDR and DSPP -- with the following:

-- Design capacities for extension and information programs: sufficient inhouse ability to complement planning of all programs with analysis of human resources and information needs. (The attempt to establish such inhouse staff upgrading and support capacities presupposes parallel capacities to plan functional programs.);

-- Materials and media development capacities related to department's extension and information dissemination programs;

-- Short-course training in public administration and management at upper levels;

-- Short-course training of middle-level staff, particularly, program implementation staff, extension workers, subprofessionals, statisticians and technicians.

Some of the needs for improving, or developing new education and training programs at professional or subprofessional levels which are generated by external assistance, are being met or will be met by donor programs such as the CIDA and A.I.D. programs to build the Faculty of Agronomy and Veterinary Medicine.

In general, the level of investment in agricultural development, erosion control and infrastructure construction (roads, water systems, ports) will create a need for a large number of Haitians with technical skills at all levels who are willing to work in rural areas with a minimum of high-level technical supervision. It is not feasible to meet the expected need for

technical manpower if conventional training approaches and certifications are used because of the number of technicians and engineers required, length of time needed to train engineers to international standards, impossibility of providing international competitive salaries and other inducements sufficient to retain high-level workers in rural Haiti, and the need for technical skills specific to the unique and diverse physical context of rural Haiti. Too few people would be available when and where they are needed: few of them would have the specific skills and understanding required, and many of them would not remain in the country.

Programs are needed to prepare three categories of people for integrated rural development and infrastructure construction. These three categories are

-- professionally trained engineers with both general civil engineering and specialized training in the required subfields;

-- subprofessional engineers or "intermediate technologists" with engineering training less than professional certification and with specialized skills in adapting and implementing technical improvements at the community level;

-- community technicians who are functional members of the community but who have received intensive training in the skills required for implementing and maintaining the technical improvements being pursued in their community.

These three categories can be distinguished in terms of

-- length of time required to effect the necessary training;

-- expense of such training;

-- rapidity with which people could be produced by the respective training programs;

-- relative number of each which would be required to establish the mix of technical skills required by the rural development and infrastructure investment strategies.

However, it is not constructive to distinguish these categories on the basis of relative need or to consider one as more essential than another. Skills are required at all three levels and the absence of one will reduce the effectiveness of the others. Without adequate numbers of professionally trained engineers, it will prove impossible to accomplish the macroplanning and technical assessment, or to obtain the investment and implementation advice which the implementing agencies will require. External engineers can be recruited but will prove too expensive for use on a continuing basis. Haitian engineers must be trained and, whenever possible, Haitian engineers now working outside of Haiti should be induced to return.

However, even if the shortages of professional engineers can be overcome, there will be a need for sufficient technical skills and understanding at the community level for programs to work at that level. A program will be needed to develop the technical skills of selected people at the community level through intensive short courses and ongoing extension education. No programs of this kind exist at present. Because of the leadtime required, the most serious foreseeable need is for subprofessional engineering training for work in transport, water supply, drainage, and rural development which together are projected to receive a total of over $170 million in external assistance and $47 million in local financing between 1975 - 76 and 1979 - 80. Such technical personnel are expected to be the intermediating link between the high-level technical planning and decision making involving technical specialists and professional engineers and the actual implementation at the worksites and in the communities.

Specific Projects and Programs

Research

A full-scale sector assessment is not recommended. Basic data such as demographic and educational attainment data are not available. Most available data are unreliable. Precise analyses of formal education using markovian models, estimations of production functions, calculations of shadow prices per graduate, or models of resource allocation are not feasible without data collection which in turn requires survey research design, sampling frames, collection systems. More important, precise analysis of a system with obvious shortcomings is a waste of money and provides no basis for useful projections. Until there are structural and linguistic changes in formal education, A.I.D. does not propose a major involvement in the field except to help increase Haiti's capacity to absorb external assistance.

An analysis would also require considerable local participation and thus would involve investment to develop local capacity not only for analysis but for massive data collection. Again, it is recommended that the limited number of trained Haitians not be diverted from more pressing tasks and that the funds for such an effort be spent instead on three specific studies of immediate importance. These are

-- a limited manpower analysis;

-- an assessment of current and potential approaches to nonformal education;

-- an analysis of the language problem with an assessment of the experiments to-date.

Manpower Study

One specialist for up to 10 months should be based at CONADEP to analyze current and future manpower demand generated by external assistance. The study should analyze and forecast numbers, fields, and qualifications of trained people the projects will require, the occupational structure the projects assume, the degree to which substitutability is feasible, the output of existing education and training institutions, and cost effective ways of meeting predicted shortages. This kind of analysis should be a regular activity of the staff of CONADEP. Indeed, Haiti would be wise to insist that future projects fund all training needed to meet the manpower demands they generate. Thus, it would be desirable for the study to be done jointly by an outside specialist, and a Haitian co-author who could continue such work in the future.

Nonformal Education

A.I.D. activities in nonformal education for the target population are described in the agriculture and health sections of the DAP. These programs are derived from the direct investment objectives of the projects. Additional nonformal education separate from these projects is not recommended.

We recommend a review of experience to-date of A.I.D., the PVOs, and other donors to find out what works best -- whether a "preferred approach" to the development of materials, training of extension workers and interaction at the community level is emerging and what further improvements might be made. This analysis involves field observation and data gathering, perhaps the pilot testing of new interactive techniques for materials development. It could be done by a specialist on nonformal education and a Haitian co-author in 12 to 18 months. It would take 18 months if the pilot testing were done.

Language

There are four written versions of Créole. There have been small-scale experiments which have taught literacy in Créole then used Créole to teach French as a foreign language. The ONAAC version is supposed to facilitate the learning of French. But, without much written material available in Créole, the probability is that literacy in Créole is not retained. It would be useful for all work in education and human resources development in Haiti if the experience to-date could be assessed. In particular, what are the implications for education and training programs which A.I.D. currently supports or has under consideration? The senior author of such a study should be Haitian assisted by a specialist in bilingual education familiar with recent findings and innovations in the United States. Time estimate would be 12 months.

Projects

A.I.D. programs in agriculture, health, nutrition, and road construction include support to increase absorptive capacity. Two additional projects to build absorptive capacity are desirable. One -- already underway -- will improve public administration. The other -- which is recommended -- would create an institution to train subprofessional manpower in priority engineering fields.

Subprofessional Engineering Education

The investment anticipated in agricultural development, erosion control and infrastructure construction will require Haitians who are trained to work in rural areas without regular professional-level supervision, and who are able to elaborate designs and to plan, schedule, organize, supervise and inspect construction and other projects. The training needed is based on mathematics, physics, and chemistry, sequences of engineering courses, and management. It is less theoretical and shorter than first-degree programs for civil engineers. The emphasis is on practice and laboratories. There are periods of field experience during vacations and sometimes after completion of course work before the final certificate is awarded.

There are no institutions doing this kind of training in Haiti now. The engineering program of the Faculté de Sciences graduates 45 professional engineers a year with specialization in Civil, Sanitary, Electrical and Mechanical Engineering; it has been recommended that the number be increased to 100 per year. The ratio of subprofessional to professional -- particularly in a poor country -- could be as high as ten to one; costs per graduate are lower, subprofessionals are more likely to work in rural areas and less likely to emigrate. In modern sector, high technology industries where the preference is for highly trained people, the ratio can be as low as two to one.

The creation of an institution able initially to train 100 subprofessional engineers per year is recommended. This could be done in an intensive three-year program. Graduates would be trained for work in the following priority areas: erosion control, soil conservation, irrigation and drainage, water supply, road construction and maintenance, rural sanitation, and port construction and maintenance. (Other marine technologies; particularly boat building for improved cabotage and deep water fishing could be added later.)

The details of such an institution are given in a PID submitted with the ABS. These details are illustrative of what might be feasible in Haiti based on information available and on a series of assumptions. The next step would be a Phase I plan which at the start would gather the data necessary to confirm or modify the assumptions.

In brief, the institution will accept students who have completed at least three years of secondary education. The potential pool of applicants is apparently ample. The Centre Pilote de Formation Professionnelle, which offers technician training in automotive mechanics, electronics, and electricity received 1,000 applications for 100 places. All of the applicants had completed two or three years of secondary education, most had completed three years, and some had completed the Baccalauréat. Places in the University are scarce. Students who have gone a part of the way through secondary school are unwilling to do menial work but are unprepared for anything else.

The program would be intensive. The first year would be a remedial year. At the end of it, further screening would take place. The second year would be common for all students with no electives; the third year would include a few electives for students choosing marine structure, roads, earthworks, buildings. The goal for the institution is a solid practical curriculum which turns out graduates in the shortest possible time.

It is assumed that much of the instructional material would have to be developed or would require substantial adaptation. Haitian sources of materials -- particularly for the remedial year -- are the Centre Pilote and the Institut Canado-Haitien which is supported by CIDA. Extensive use would be made of audiovideo materials as well as laboratories.

The critical variables would be dropouts and screenouts from the remedial year and the quality of applicants. All are difficult to predict. Wastage during the second and third years should be low. A working assumption is that loss in the first year would be 50% and loss in the second and third years a total of 10%. To graduate 100 students per year would therefore require enrollment of 220 in the first year. A large applicant pool and sensitive selection instruments could reduce wastage and lower costs significantly.

Loan Scheme. To help offset some of the recurrent costs of the institution as well as create an incentive for graduates to work in rural areas and in public sector activities, the feasibility of a loan scheme should be investigated. For example, under such a scheme a student might be obligated to repay the recurrent cost of his education in full including an interest charge within a six-year period if he enters and stays in the private sector. If he enters the public sector, but stays in Port-au-Prince, then repayment might be interest free and spread over a longer period. And, for every year he works in public sector projects in rural areas, one-sixth of the debt might be cancelled. The feasibility of such a program -- and its possible contribution to offsetting some of the costs of the institute -- could be simulated with estimates of recurrent costs, income, interest rates, varying assumptions about the career patterns of graduates.

Faculty. To the maximum extent feasible, the faculty should be Haitian. Many expatriate Haitians have acquired the needed training and skills. A special effort could be made to recruit them for initial curriculum development work in the United States in the hope that this involvement -- together with adequate salaries -- would induce them to repatriate and become local members of the staff. Others would be available in Haiti either on a part-time or full-time basis. The possibility of involving technical personnel of the various Ministries as part-time instructors is an attractive possibility. A basic task of the Phase I plan would be to estimate the number of positions which could be filled by Haitians.

Role of an External Contractor. An external contractor would be needed for a period of at least five years. The role of the contractor would be to assist with planning and see the institution through full iteration of the curriculum and one year's work experience of the first class of graduates.

XIII. INTERSECTORAL ACTIVITIES

Public Administration

The A.I.D. strategy of helping the rural poor through the creation of development-oriented community organizations requires effective public administration. To achieve the goals established in this DAP, Haitian public administration must be able to formulate effective programs and administer them by forming and/or strengthening community organizations which will participate actively in the development program.

Constraints

The basic constraint to this strategy is the current weakness of Haitian public administration. A number of factors have contributed to this present weakness. In the late 1950s and early 1960s, the U.S. aid program worked through a series of semiautonomous Servicios, an approach which did not strengthen the Ministries. When U.S. aid was withdrawn these organizations became ineffective and most have disappeared.

Another contributing factor was the turmoil which occurred during the period when François Duvalier consolidated his power in the face of resistance at home and abroad. Purges during this period removed many civil servants from their positions. Loyalty to the regime became the prime consideration for judging civil servants. The economic stringency which resulted from the actions of the Government and the termination of aid reduced sharply the amount of funds available for the public sector. As a result there was no increase in the government salary scale, operating funds were restricted, few training programs were started, and relatively few young and well-qualified people were hired.

With salaries frozen, with few if any funds available to operate programs, and with promotion dependent primarily on loyalty rather than on effective performance, most civil servants began to put in relatively small numbers of hours of work per day in their principal job for the government and used their talents in second and third jobs. Despite some improvements, this pattern continues.

Favorable Factors

Despite these basic constraints, there are several factors which can be used to advantage in efforts to improve public administration:

First, there is a tradition of strong centralized leadership through which desirable changes can be imposed.

Second, Ministers of the Government and heads of quasi-government agencies who have the support of the President can readily make changes in their own organizational structures. Thus, the former Minister of Agriculture was authorized to hire expatriate Haitians to return to Haiti at salaries well above the average for similar positions in his Ministry -- in fact at salaries higher than the salary paid to the Minister himself.

Third, planning and programming units have been created in several Ministries. The incumbents in these units are usually very well trained and sincerely wish to get on with the job of development.

Fourth, in many sectors, a relatively large number of employees are on the payroll and with proper direction they could greatly increase the effectiveness of public administration.

Fifth, the importance of administrative reform has been recognized by the Government. The fourth priority of the five year plan is the reinforcement of institutional structures. The President in his speech of April 6, 1977 also called for a structural reform of the Government.

Sixth, a National Institute of Public Administration has been created as part of the university system to train a part of the manpower needed in the development process.

Seventh, the President has created an Administration Commission to provide leadership and direction to the public administration work of the government. This Commission is going about its task in a logical and methodical way.

A.I.D. Strategy

As part of our general strategy of increasing the absorptive capacity of the Haitian Government, we propose to give a high priority to increasing the public administration capability of Haiti. To reach this goal, we are recommending a two-level approach. First, to work in collaboration with other donors to improve the administrative effectiveness of Ministries which are responsible for improving the welfare of the rural poor, e.g., the Ministry of Agriculture and the Ministry of Health and Population. Second, to help the Haitian Government provide overall direction to public administration. Specifically, to strengthen the Administration Commission which has responsibility under the President for improving the performance of the public sector.

In our efforts, we will encourage the Government to consider a phased approach to administrative reform. Thus, because of financial constraints, it may not be possible to institute a salary reform in all parts of the government at the same time. One alternative would be to provide enough to keep pace with increases in the cost of living, while making a meaningful salary reform for Ministries which must play a key role in increasing the productivity of the rural sector, e.g., the Ministry of Agriculture. As a corollary, we plan to urge the government to give priority to using budget funds and administrative measures to increase the effectiveness of civil servants already on the payroll rather than to hire large numbers of additional personnel at current salaries which will not attract qualified and dedicated employees.

At the ministerial level, A.I.D. is providing advisory assistance to the planning unit of the Ministry of Health as well as help for improving the administrative effectiveness of the Ministry. This program will complement management improvement efforts of the Pan-American Health Organization undertaken as part of the IDB health project. A.I.D. is also helping to improve the administrative effectiveness of the Ministry of Public Works and SEPRRN, the semiautonomous agency responsible for maintaining roads.

In the agricultural field, A.I.D. is financing a four-man management implementation team under the Integrated Agricultural Development project. This four-man team will assist the Ministry in improving the administrative effectiveness of the agricultural programs. This work will be supplemented by assistance from the Inter-American Agricultural Science Institute (IICA) as well as agricultural planning help provided by FAO and IICA.

At the overall level, we are supporting the general administrative improvement effort launched by the President with his appointment of an Administrative Commission. This Commission is working on a program which includes:

-- creation of a basic public service law;

-- redefining the structures of public bodies and their attributes;

-- improving the knowledge, attitudes, and capabilities of public employees through education and training programs;

-- increasing the productivity of the public service through better use of existing manpower and institutions;

-- creating or strengthening management units within Ministries and other public bodies.

The Commission is engaged in training the cadre for this effort and intensive work will begin in October 1977 when the graduates of the training course will take up administrative positions within a number of different Ministries. In these positions, the administrators will identify areas where improvements are needed and will establish training programs.

A.I.D. will be supplying technical assistance to the Administrative Commission for an Organization and Methods Unit which will assist different Ministries in improving their operations. We will also help the Commission to arrange training programs, most of which are to involve incountry training. These initial activities are expected to lead to others of a similar constructive nature.

Research and Studies

Haiti needs a program of research and studies, including evaluation studies, to carry out a successful development program.

Problems

Haiti has at least three problems relating to research:

-- insufficient use is made of existing studies;

-- insufficient information is available describing the problems of the country, including the problems (and attitudes) of the rural poor;

-- inadequate plans have been made by the Haitian government to evaluate the many development activities which are being launched.

Constraints

There are several constraints to overcoming these problems:

-- the absence of an effective central repository for studies;

-- the absence of a strong institution to sponsor studies and provide general leadership in this field;

-- the failure of many foreign donors to associate Haitians with their research and evaluation efforts.

Proposed Solutions

Haiti needs a repository for studies. This repository should serve the needs of both government and the nongovernment groups. Thus, the repository should have a restricted section for documents on government activities which the Government does not wish to make available to the general public. There should also be a section open to the public to serve as a reference library. The Haitian Government has submitted a proposal to Canada for creating a library to be attached to CONADEP. If for any reason this project is not financed by Canada, we recommend that A.I.D. finance such an institution.

Haiti also needs an effective institution to sponsor studies. None of the existing institutions are fulfilling this role at present. At one time, the Haitian Center for Social Studies (CHISS), a private organization, seemed to offer promise as a research institution. However, following charges of financial mismanagement, the Ford Foundation withdrew support and the organization now is relatively inactive. The Center for Research in the Human and Social Sciences (CRESH), an organization linked to the Faculty of Ethnology, also sponsors research. Neither of these groups is currently meeting the research needs of the country. We are proposing, therefore, that A.I.D. work with the Haitian Government to create a research institution (or to strengthen an existing institution) with which we hope to link an

American university. The Haitian institution would then be in a position to attract American scholars interested in writing their PhD theses on a Haitian development subject. Most of the research, however, would be performed by Haitians -- usually Haitian university students and professors. Since many Haitian University students are born and raised in Port-au-Prince with very little exposure to the countryside, this project could contribute to breaking down the barriers between the elite of Port-au-Prince and the people living in the rural areas.

The project could also improve the evaluation capabilities of the Haitian Government. Problems have been relatively well defined in a number of areas and projects are being undertaken to resolve these problems. It will be important for the Haitian Government to have the ability to evaluate the effectiveness of these projects. The research project proposed in this DAP should help to meet this need for evaluation. We also will be providing specific help to the Ministries of Agriculture and Health in evaluation.

While our primary objective will be to create a Haitian research capability, there is a need for A.I.D. to sponsor directly a number of studies. In addition to the usual project preparation studies, funds are being proposed for additional studies on the rural poor and on nutrition problems.

Another research institution which merits support is the Haitian Institute of Statistics (IHS). Although not adequately financed, IHS has a good basic staff and has performed a number of useful studies. France has offered assistance which should meet the priority needs of the Institute: financing for a new building, equipment, a computer, vehicles, and technical assistance.

Baseline Data

Planning development projects to help the rural poor has been handicapped by a lack of geographical and demographic information. One of the most effective ways of gathering this information is through aerial photography. Part of this need will be met by aerial photographs to be taken at a 1/40,000 scale under the French aid program. However, large-scale aerial photography is essential to planning and implementing projects in soil conservation, irrigation, agricultural penetration roads, population, and nutrition -- all of which will be major components of the A.I.D. program in the future. Equally important will be the creation of a Haitian photo-interpretation capability. We are proposing a Baseline Data Aerial Photography project for FY 1979 to take aerial photographs at a scale of 1/10,000 as a mean of obtaining baseline data in the form of photomosaics and photomaps and to create a Haitian photo-interpretation unit.

DAP Documentation

Several studies served as a basis for the preparation of this DAP -- Rural Sector Assessment of the Republic of Haiti, Francis J. LeBeau, June 1974 and the update of this document Rural Sector Assessment of the Republic of Haiti Part II, Francis J. LeBeau, November 1, 1975, Haiti: Health Sector Analysis, Frank N. Beckles, M.D., 1975, and our analytical description of the poor majority entitled The Rural Poor in Haiti: A Social Analysis, Dr. David D. Gow, March 1977.

During the next six months we expect to prepare a new agricultural assessment (level A) and to begin a major effort to improve the ability of the Ministry of Agriculture to collect and analyze statistics as well as to revise as needed its five year plan, i.e., to prepare its own agricultural assessment. As part of our expanded environmental protection work, we will be undertaking studies of land tenure problems and the question of providing Haitian families with a source of energy for working which will minimize environmental damage.

During the next year we will be sponsoring additional work relating to the analytical description of the poor majority, such as field studies and/or a search of material already published on the rural poor.

In the health field, we will be undertaking a number of nutrition studies and this work will be followed by a full-scale nutrition assessment to be completed in November 1978.

A parallel population and health assessment is also scheduled for completion in November 1978.

These various studies could well call for revision of parts of the DAP. We would expect, for example, to revise at least the Rural Sector section of the DAP in the spring of 1978. A complete DAP revision will probably be undertaken no later than the spring of 1979.

Urban Sector

Port-au-Prince presents a dilemna for the economic planner.

On the positive side, Port-au-Prince has been the only geographical area where there has been significant economic progress. The main factor has been the dramatic growth during the past 20 years of the industrial sector. These industries, often owned by Haitians but dependent on marketing arrangements with U.S. firms, import basic components and transform them into finished products. The best known example is baseballs: working with imported components, Haitians sew the covers of a majority of all the baseballs produced in the world. These industries have provided employment and thus have helped to alleviate the population pressures in rural areas.

There is, however, a negative side. As Port-au-Prince has grown, the provincial towns have stagnated and many of the talented individuals from these towns have emigrated to Port-au-Prince. Thus, flourishing Port-au-Prince has left in its wake a series of dying, or at best, economically inactive provincial towns.

In terms of the A.I.D. mandate, there is an even more important negative aspect: the poorer social classes of Port-au-Prince suffer from poor housing and inadequate services. If one takes a monthly income of $40 as the definition of the poor (65% of Port-au-Prince) and an income of over $100 per month as the definition of the upper-income group (10% of the population of Port-au-Prince), a comparison of living conditions shows the following differences:

-- lower income, two square meters of living space per person;

-- upper income, 20 square meters.

Consumption of water,

-- lower income, 14 liters of water per person per day;

-- upper income, 250 liters.

The Haitian Government has recognized the problem and is taking limited action. Seeing the need for nonagricultural employment and the problems of concentrated growth in Port-au-Prince, the Government has assigned second highest priority in its five year plan to creating a decentralized industrial infrastructure. However, even though the theme of decentralization is constantly repeated in government pronouncements, there has been relatively little concrete action to date. Additional action is needed to create adequate

electric power and water facilities in towns which have the potential of attracting businesses and industries, e.g., Cap Haitien, Les Cayes. There is also a need to attract more industries to Haiti and to provide incentives to establish these industries outside of Port-au-Prince. The Germans have initiated a project to attract European industries to Haiti, but otherwise the foreign donor community has done relatively little to assist in this important area. We are proposing a project which will help create nonagricultural employment outside of Port-au-Prince. This Rural Small Enterprise Development project will help to create small business enterprises in the hamlets and towns of Haiti.

The problems of the poor of Port-au-Prince are receiving inadequate attention from the government and the foreign donor community. The UNDP has financed a study of the problems of Port-au-Prince. The government is taking a modest first step to improve the living conditions of the Port-au-Prince poor by using UN Capital Fund resources to provide better services to St. Martin, one of the poorer sections of the city. However, more is needed, e.g., sites and services programs; we intend to encourage other donors to finance projects which help the poor of Port-au-Prince.

In view of the enormous rural problems of the country, we are proposing that A.I.D. limit its programs at this time to projects which help the rural poor. We propose, however, to sponsor and/or encourage studies of urban problems; e.g., the problems of the unemployed urban youth. It is possible that based on these studies we may propose specific projects at a future date to deal with the problems of the poor of Port-au-Prince.

XIV. ALTERNATIVE STRATEGIES

A discussion of alternative strategies should logically begin with an analysis of possible weaknesses in the strategies which have been proposed. A brief critical analysis follows:

DAP Observation. Social cohesion is weak at the local level in Haiti.

DAP Observation. Only highly motivated and well-trained officials will be able to overcome this weak social cohesion by forming community councils, agriculture credit societies, and other local organizations.

DAP Assumption: Government officials can be motivated and trained to stimulate, develop, and guide community councils.

Alternative Assumption: It is unrealistic to expect any significant success from a strategy which requires Ministry officials to motivate peasants to form community councils and engage in self-help efforts.

If we follow this alternative train of thought, there are a number of options -- not all of which are mutually exclusive:

Option 1. Whenever possible, abandon the self-help concept and carry out development activities with workers who are paid to complete a task which they are not expected to maintain.

Discussion. Most activities, such as agricultural production, family planning, rural development, require understanding and a sense of commitment on the part of the individuals. However, it is technically feasible to build soil conservation structures with workers who have no understanding of the reasons for the activity. This approach is one possible outcome of the desire of foreign donors to get on with the massive job of stopping, or at least reducing, the erosion of Haiti's hillside farms. However, we believe this option has several fundamental drawbacks:

-- Soil conservation will be difficult to undertake unless the owners of the land have some appreciation of the need for soil erosion measures -- an appreciation which can come only from the work of reasonably dedicated government officials.

-- Anti-erosion work -- and particularly reforestation work -- requires the active support of the local population to repair the soil conservation structures and to protect the trees from animals or from persons who want the trees for fuel. The alternative is a massive government bureaucracy to arrange the continuing repair of structures and a large and dedicated police force to protect the reforestation efforts.

-- This option also requires the creation of a large and effective government bureaucracy to plan the work and to hire, supervise, and pay the workers.

Option 2.A. Pay minimum attention to the Ministries and support the creation of new semiautonomous government agencies for the development work of the country.

Discussion. This option has been widely practiced. A.I.D.'s oldest projects -- HACHO community development and SNEM antimalaria work -- have involved creating semiautonomous agencies for specialized tasks. Both the World Bank in its Northern Plains project and Canada in its project in the Petit Goave area have followed the HACHO example and have helped create semiautonomous agencies responsible for integrated development in specific geographic areas. The government itself has created recently a number of semiautonomous agencies -- INAREM for minerals development and an electricity institute for all matters pertaining to the development of electrical energy in the country. With a semiautonomous organization, one can bypass the frustration of reforming the old-line Ministries and hire qualified personnel by adopting an adequate salary scale.

We have not adopted this option. The basic thrust of our proposed strategy is to work through the regular Ministries and to strengthen them to carry out the development tasks. These Ministries contain the majority of government employees and receive the greatest share of the regular budget funds. To leave them in their present state is to miss a major opportunity for improving the condition of the rural poor. Strong Ministries are also needed to provide coordination within a sector and to coordinate all actions of the Government so that action in one sector complements the work of another sector -- and hopefully has a synergetic effect.

If the Government of Haiti should request assistance for creating a new semiautonomous agency, we would review this request with two basic factors in mind:

First, what effect would this action have on the strength of the regular Ministry (or other organization) which would otherwise carry out the activity?

Second, does it appear that the new organization will become viable, e. g., is there a plan for the Haitian Government to take over financing of the proposed new activity?

Option 2.B. Instead of helping the Government to create semiautonomous institutions, work with the Government on a policy of making private voluntary agencies -- both Haitian and foreign -- the main vehicles for the development effort.

Discussion. This policy is not a realistic option. The nationalist feeling of the government would not permit it to turn over major development responsibilities to voluntary organizations which would undoubtedly be primarily foreign. Apart from this factor, it does not appear realistic to assume that PVOs could take on such a great responsibility and maintain the virtues which, we believe, are related to their present small size. However, we are proposing a two-pronged strategy to facilitate a more active role for PVOs:

-- creation of a coordination mechanism which will be satisfactory to both the Haitian Government and the PVOs;

-- increased financial support for the PVOs to strengthen their project planning, implementation, and evaluation abilities and to permit them to hire larger numbers of professional Haitians who are currently in the country or living abroad.

Option 3. Abandon a rural development effort and support an urban-based (Singapore-type) development effort which would attempt to

-- attract greatly increased foreign investment;

-- provide minimum services (housing, water, sewerage, electricity, health facilities) to a rapidly growing urban population, with the capital Port-au-Prince probably registering the major population increases.

Discussion: On the positive side, such an option would take advantage of two basic factors -- Haiti's low-cost, hardworking labor force and Haiti's proximity to the United States. This option also would build upon Haiti's relatively successful efforts during the past 20 years to build up transformation industries for the export of goods to the U.S. market. It also might improve the possibility of a more effective limitation of population growth -- at least family planning seems to be generally accepted more readily by an urban population involved in the modern economy than by a rural population engaged in traditional agriculture.

On the negative side, this option flies directly in the face of the Congressional Mandate. The United States is firmly committed to the concept that the developing countries should not follow the traditional pattern of development based on uncontrolled urban growth or great differences in income, but should find an alternative solution which gives the rural poor an opportunity to participate as active members of the development process and share at an early date in the benefits of this development. Therefore, we oppose this option while recognizing that the government and some donors should take steps to encourage foreign investment and provide basic services to the urban poor of Port-au-Prince.

Options as to Size of Program

The other alternative strategies relate to the size of the proposed program: first, an alternative of sharply expanding U.S. assistance above the levels projected in this DAP; second, a sharp cutback of new obligations from the projected levels.

We have rejected, for the time being, the first alternative primarily because of the difficulties involved in rapidly expanding Haiti's absorptive capacity for using money effectively to improve the well-being of the rural poor.

We have rejected the second alternative because the rural poor desperately need additional assistance and we believe that we have designed projects which encompass the institution-strengthening aspects to assure that the assistance will benefit the rural poor.

XV. SUMMARY AND CONCLUSIONS

The rural population of Haiti -- as well as Haiti itself -- is faced with the most basic of all problems: pure physical survival. This fact is reflected in:

-- the low average per capita food consumption of approximately 1,850 calories per day;

-- an average annual income in the rural areas of $80 (1976 prices);

-- an infant mortality rate of 149 per 1,000;

-- a crude death rate of 15 per 1,000.

For all practical purposes, there are few rural Haitians who live above the poverty level. Thus, the target audience is basically all of rural Haiti.1/ The chief rural problems to be overcome are all closely related: poverty, malnutrition, and poor health, and the basic cause is clearly evident: the ever-mounting population pressure on Haiti's limited -- and dwindling -- natural resources.

The A.I.D. program has several basic thrusts worked out with the Haitian Government and implemented in collaboration with other donors:

-- raising agricultural production to provide an immediate increase in food production;

-- undertaking soil conservation efforts to preserve the productive potential of the country;

-- expanding nonagricultural employment;

-- reducing population growth;

-- providing basic health services;

-- increasing the government's capacity to support these and other programs.

To increase Haiti's limited capacity to absorb technical and capital assistance is a key aspect of the A.I.D. program.

1/ For programmatic reasons, we will concentrate on the problems of the rural poor for the next few years. However, we plan to sponsor some studies of the problems of the urban poor as a possible basis for pilot activities at a later date to help the poor of Port-au-Prince.

Constraints

In designing the strategy for the A.I.D. program, particular attention has been given to several basic constraints:

Pattern of Small Peasant Holdings

Haiti began its history in the days of slavery with a highly monetized economy based on large plantations producing for the world market. The early Haitian leaders, particularly in the North, tried through direct pressure to continue this plantation system after independence. However, the peasant could not be coerced to work for others and Haiti's leaders adopted a policy of distributing the land. With equal inheritance by all children from both parents the land of Haiti became more and more subdivided as the population grew. Except for a few large holdings, e.g., in the North, the land ownership of Haiti is less concentrated than in probably any other country in Latin America. However, holdings are small and it is extremely difficult to reach the peasants with traditional extension programs. (Even with this general pattern of small landholdings, there is a considerable amount of sharecropping,and sharecroppers are usually more difficult to reach with extension programs than farmers who are cultivating their own land.)

Weak Local Rural Social Cohesion

Having won his control of a small patch of land, the Haitian peasant evolved a style of life built around family units. Villages did not grow up. The largest social unit was an extended family: a man, his common-law wives, their children, and grandchildren, historically grouped together in a lacou (cluster of small buildings). Later, as land was fragmented, the man often placed his wives on different pieces of land, thus further breaking down the basic social unit. This social pattern was modified, of course, by certain patterns of social cooperation. The poorer peasants often felt obliged to accept a deferential relationship to a richer and more powerful person -- this patron relationship protected him in times of disaster by providing food or money for emergencies. In addition, a pattern of cooperation in work also developed. The richer peasants sponsored a coumbite -- a one-day work-fest where poorer neighbors helped to perform tasks in return for food and drink. There is also the escouade (squad), a temporary grouping of peasants who work as a team on each others' fields on a rotation basis or hire themselves out as a work group and divide their earnings. These patterns of cooperation, however, did not normally involve any permanent organizational structure.

Weak Local Government

There is no real system of local government to compensate for this weak social cohesion. The peasants in their day-to-day lives have been subjected to minimum government controls. A Chef de Section (a typical section may contain 10,000 persons) and possibly several assistants are responsible for maintaining law and order and keeping an eye out for potential troublemakers.

Elite

Haiti has been blessed -- and cursed -- with the existence of a cultured, well-educated elite. The origin of this elite goes back to the preindependence period when the mulatto offspring of French-slave unions were normally given their freedom. Even before independence, this mulatto group had become a powerful and generally well-educated land-owning class. The elite has been traditionally ashamed of the peasant: his pagan African religion of voodoo and his inability to speak French, and, thus, by definition, his basic intellectual weakness. The elite at an early stage established a basic pattern: the peasant would pay for running the country through a high tax on coffee, and the elite would run the country, leaving the peasant to his own devices. Although the mulatto elite lost political power in 1957, the developmental role of the government in the countryside has not changed significantly.

Role of Government

Throughout much of Haiti's history, "government" has been a prize to capture, with the victor gaining the spoils in terms of appointing friends and relatives to the payroll and using government positions for private profit. As in so many other countries, Haiti does not have a tradition of government as a servant of the people. The rural sector has suffered in particular from this tradition: more money has been taken out of the rural sector than has returned in the form of services.

Weak Public Administration

Haiti's public administration has never been too strong and the last 20 years have further weakened the ability of the government to carry out development programs. Faced with constant threats from its opponents, the Duvalier government stressed loyalty as a criterion for advancement and appointment. As the economic situation deteriorated, budget funds were not found for salary increases nor were significant operating funds available for programs. Salaries have been basically frozen for 20 years and the honest civil servants have reduced their hours of work and taken second jobs outside of government as inflation has reduced their real pay.

Byzantine Budget System

Haiti has a budgeting system of special accounts which makes it impossible for any planning or budgeting group to utilize Haiti's resources in a rational manner to meet changing priorities. General revenues (45% of total government revenue of $111 million in 1975) are used primarily for the current budget. In addition, special taxes have been levied for specified purposes, e.g., a part of a special tax on gasoline is earmarked for the repair of roads. These special taxes are estimated to account for 41% of government receipts. (In addition, taxes collected by the Régie du Tabac totalled over 14% of Government

receipts in 1975.) There is no public record of the names of the accounts, no publication of the receipts and expenditures of each account, and apparently there is no effective audit of these special accounts. The use of these funds is not subject to planning by CONADEP or any other coordinating group in the government. It appears that significant amounts of these funds are being used ineffectively or are being used for nondevelopmental purposes. The World Bank has hazarded the guess that a total of $21 million of these extrabudgetary expenditures could be considered as nonessential.

Inadequate Tax Structure

Haiti has a tax structure which places a disproportionate burden on the poor -- particularly the rural poor -- through heavy taxes on export crops such as coffee. Also, the system apparently does not even maintain the real value of tax resources collected by the government. Thus, if inflation in a typical year increases prices by 18%, the amount of taxes collected by the government increases by less than 18%.

Proposed Strategy to Overcome Constraints
Strengthen Social Cohesion via Local Organizations

Based on our analysis of the conditions of the rural poor, this DAP proposes that the point of entry, the point where constructive influence can best be brought to bear to assist the rural poor, is the area of increasing rural social cohesion. Specifically, to create and strengthen rural organizations of a permanent nature. While these organizations must be created in a conscious manner, they are compatible with the existing social patterns and the successes in forming them to date demonstrate that they can offer a viable approach to development.

Fortunately, there is broad intellectual agreement on this point. The Haitian government's five year plan and particularly the agricultural parts of the plan are based on the concept of developing and using local organizations -- variously called community councils, agricultural groupings, cooperatives, agricultural credit societies. The formation of such organizations appears to be a necessary condition for any cost-effective program to increase production in rural areas. These groupings have, however, one weakness. According to studies in the Northwest, the average income of persons who do not join community councils is significantly lower than the income of those who are members. This implies that the community councils attract a majority of the better-off peasants but not the poorer peasants. Thus, a part of our desired target audience will not be reached, at least directly, through our strategy of using local organizations.There is a spread effect of benefits to peasants who are not members of the local organization -- nonmembers are expected to copy the practice of members of local organizations and they will have access to knowledge, services, inputs and markets. Strengthening this spread effect should be a part of the design of each project.

The poorest of the poor live a very precarious life, e.g., a crop failure can lead to starvation of one or more family members. To provide a form of insurance, the poorest of the poor usually establish a subordinate relationship with a stronger member of the community. This patron is then expected to help the poor family in time of serious trouble and the poor family is expected to support the patron by contributing free labor and following his guidance on community issues. Because of this relationship, the poorest of the poor are not willing to organize themselves since such an action would be considered an unfriendly act by their patrons. Thus, it is not feasible at the moment to direct help exclusively, or even primarily, to the poorest of the poor since an organization of the poorest would be required and they are not willing to risk such an action which might deprive them of the future support of their patrons.

One of A.I.D.'s oldest projects, the HACHO Rural Community Development project (0061) has been based on the concept of community councils. The Integrated Agricultural Development project (0078) will create self-governing irrigation districts and will form peasant organizations for work on soil conservation. The Small Farmer Development project (0073) is based on small groupings of farmers who receive technical assistance in coffee growing and credit. There will be a continuation of this work under a Small Farmer Development II project beginning in FY 1980. A related Small Farmer Marketing project (0083) will help coffee farmers to form cooperatives as a means of increasing their returns from the sale of coffee. In order to further strengthen the community development work of the government, we are proposing a major new project -- Integrated Community Development -- starting in FY 1979 to increase the number and effectiveness of local organizations. The project will both strengthen the government's ability to encourage the formation of local organizations and will provide local organizations with the help they need in order to carry out a variety of self-help efforts:

-- income increasing activities in agriculture, handicrafts, and small rural enterprises;

-- soil conservation and reforestation efforts;

-- agricultural penetration roads;

-- water projects (potable and irrigation);

-- education and health activities including construction of schools and clinics.

This new activity will provide a major expansion of types of activities which we have been able to support to date with the Special Development Assistance (SDA) fund. As this new project develops, we intend to reduce the size of our SDA activities.

Strengthening of Government's Ability to Help the Rural Poor
Need for Budgeting and Tax Reform

Our analysis has demonstrated that effective government help for forming local community organizations and providing services requires a dramatic improvement in the efficiency of public administration, i. e., there must be a great increase in the absorptive capacity of Haitian government institutions. The actions needed to increase the government's absorptive capacity -- salary reform, hiring new staff, training programs -- can only be taken if the Haitian government can raise additional revenue. Our analysis indicates that there must be a basic reform in two areas if the Government of Haiti is to have sufficient revenues to finance assistance programs for the rural poor:

-- fiscalization of the special accounts of the government (totalling nearly $50 million in 1975), including their integration into an effective budgeting and auditing system. Until these accounts are fiscalized and included in the budgeting process, the effectiveness of CONADEP and the Ministry of Finance in development planning will be severely restricted and it will be very difficult to reach the objectives established in the five year plan.

-- steps to increase the revenue collected by the government. From a practical viewpoint, the requirement to raise more revenue must involve a basic reform of the customs collection system. The December 7, 1976 World Bank report on Haiti, Current Economic Position and Prospects of Haiti, estimates that with some reduction in exemptions and selective increases of import duty rates, an additional $15 million in customs receipts could have been collected during 1975.

Major reform in these two areas will not be easy to achieve: many persons benefit from the present system. There is reason, however, for cautious optimism. The government has recently issued a decree which transfers 50% of the gross profits of the Régie du Tabac to a special account in the National Bank and CONADEP, the National Planning Agency, has been given responsibility for programming these funds for development purposes.

Importance of Donor Coordination

Our strategy is to reach a consensus among the donor community on basic reforms and then to reach agreement with the Haitians on a reform program. We propose that the donors relate the size of their economic assistance efforts to continued progress by the Haitian Government in its reform programs as well as continued progress in the human rights field.

This dialogue among the donors and with the Haitian Government should include not only basic reform issues discussed above, but also other questions concerning the development program; e. g., development priorities, the absorptive capacity of the economy, availability of counterparts, and the role of technical assistance personnel. We propose that a number of different forums be used for these discussions:

-- formal meetings of the CEPCIES Joint Commission as well as informal meetings held in conjunction with the formal meetings;

-- bimonthly coordination meetings sponsored by CONADEP;

-- sector meetings. Currently, transportation meetings chaired by the Public Works Minister are held each six months. A meeting of all donors in the population field has also been held. We recommend that similar meetings be arranged for other important sectors such as agriculture, health, and education. To date, CONADEP has felt that its bimonthly coordination meetings will meet the need for coordination in each sector;

-- bilateral meetings, i. e., talks between a specific donor and the Haitian government.

Role of PL-480 Title I

A significant part of the funds obtained from fiscalizing the special accounts and reforming the customs' service will be required in providing basic health and education services to the rural poor (funds spent on rural education are at present scandalously low). Even after increasing its self-help efforts in the financial field, and given current levels of foreign donor assistance, Haiti needs additional resources, e. g., to provide local financing to complement foreign donor aid and in permitting key ministries, such as Agriculture, to institute an adequate program budget.

The PL-480 Title I program, in addition to meeting specific food requirements of the Haitian poor, will be able to supply these extra financial resources which are needed for a successful development effort. Because these resources need to be integrated into a planned development effort, we recommend that Haiti's PL-480 Title I requirements be built into a Core Title I program. This level would be approximately $7 million per year through FY 1979 and would be expanded beginning in FY 1980 by approximately $3 million a year to meet the growing investment requirements of the country. (Until FY 1980, the investment requirements should be met from the excess of deposits over expenditures built up during the early years of the Title I program and the Core program.)

As indicated above, Haiti will need to take some difficult, but necessary, reform decisions if the government's development effort is to succeed. We think it is appropriate for the United States to encourage these actions through an appropriate policy of "loan forgiveness" of Title I repayment obligations.

Proposed Strategy
Strengthen Existing Organizations

Another basic part of our strategy is to concentrate on strengthening the existing organizations of the government rather than to create more semiautonomous agencies. In some cases, there is no existing organization and a new organization must be created. Thus, our FY 1978 Disaster Preparedness project (0082) will help the Haitian government to create a new organization to provide help to the rural -- and urban -- poor in case of a disaster. This approach is, of course, a change from A.I.D.'s earlier practices. Prior to the termination of the American aid program in the early 1960s, the standard pattern was to create a specialized agency with American and Haitian personnel to carry out a particular task. When A.I.D. decided to help the Northwest, a specialized agency, HACHO, was created for this purpose. Another of these semiautonomous organizations, SNEM, also continues to receive American support for its work in malaria control.

Several other donors are continuing to follow the semiautonomous route: Canada has arranged for the creation of a specialized agency, DRIPP, for its regional development project in the Petit Goave area and the World Bank project in the Northern Plain area also uses a specialized agency. Another uncertainty is that the Haitian leadership may in certain instances propose that semiautonomous agencies be created for special tasks. There have been several purely Haitian initiatives to create semiautonomous organizations, e. g., the recent creation of INAREM to handle all matters relating to minerals development and the search for petroleum. Nevertheless, the Haitian government basically approves our strategy of strengthening existing Ministries.

Our reason for wanting to work through the regular Ministries is that they contain the largest number of trained personnel and receive an important share of the government's revenue. To leave them in their present unproductive state is to continue to waste valuable resources. Autonomous organizations also suffer from a common failing: they often work well while the foreign sponsor is there but when foreign help disappears, the organization often becomes ineffective or disappears completely.

An integral part of our strategy is to strengthen the planning and administrative work of key ministries. For the Ministry of Agriculture, which must bear the brunt of the priority task of increasing food production, help in planning is being given by both the UNDP through an FAO expert and the Inter-American Institute of Agricultural Sciences (IICA). Under the Agricultural Development Support II project (0092) which starts in FY 1978, we will be providing assistance to improve the collection of agricultural statistics and to perform evaluations of agricultural projects. Our Integrated Agricultural Development project provides a basic management implementation team to assist the Ministry of Agriculture in improving its administrative practices and this effort will be spun-off in an Agricultural Improvement project in 1980. In the health area, we are taking an active role in planning, and an A.I.D.-

financed expert is now working with a newly created health planning section within the Ministry of Health and Population as part of the Strengthening Health Services I project. While a number of important measures can be taken on a ministry-by-ministry basis, there is a need for general direction to the efforts to strengthen the capacities of individual ministries. Under the FY 1977 Administrative Improvement and Training project (0079), we will assist the Administrative Commission to strengthen the ministries through actions such as passage of civil service legislation, preparation of a salary reform program, assistance in organization and work methods, and training.

Proposed Strategy
Use of Nongovernmental Approaches to Help the Rural Poor

It is the conclusion of this DAP that it is not sufficient to strengthen the national government's ability to help the rural poor in view of the enormity of the problems and the difficulties of expanding government capabilities. We are proposing, therefore, to expand the role of Private and Voluntary Organizations (PVOs). (In FY 1979, for example, a follow-on Water Resources Development project and a Small Irrigation Development project will be undertaken on the Island of Gonave.) They already play, of course, a major role in development efforts in Haiti -- providing approximately $10 million per year in assistance, including major programs in education and health.

Any major expansion of the PVO role, however, requires a readjustment in the relationship between the PVOs and the Haitian Government, including improved coordination mechanisms. At the moment, the Haitian government is distressed by the uncoordinated nature of the various private efforts and the alleged slowness of several of the PVOs in expanding the number of Haitian professional personnel. Our strategy, therefore, is to help establish a coordinating council which would provide the Haitian government the necessary assurances that PVO efforts are integrated into the government's overall development effort while not placing restrictions on the PVOs which they feel are incompatible with their private nature. To expand their efforts, the PVOs will also require greater technical expertise. To solve these two issues, we are proposing a PVO Development Support project for FY 1979 to provide a cadre of technical experts to assist the PVOs to identify, plan, and implement community development projects. It is expected that these experts will be Haitians. In a related PVO project, funds will be given to strengthen the coordinating council of the Evangelical Churches in Haiti (CEEH), a purely Haitian organization, under the title "Development Support - CEEH."

PL 480 Title II

With these proposed changes in the relationship between the PVOs and the Haitian government, it should be possible to continue to increase the size of the regular PL 480 Title II program of the PVOs. (Droughts in 1975 and 1977 led to emergency Title II famine relief activities.) The FY 1978 program is

projected at $4.2 million (15 thousand metric tons of food) and we are proposing a FY 1979 program of approximately $4.7 million (over 16,000 metric tons of food) broken down by major categories as follows in terms of value:

	$ thousands	%
Food for Work	2,002	42
School feeding	1,869	40
Maternal and child health and other children	833	18
Other	22	-
Total	4,726	100

In view of the effect of poor diets on the vitality of students and the key role assigned education by the government in its five year plan 2/, we propose a continuation of the school funding program in future years. The FY 1979 PVO Development Support project should increase the capacity of the PVOs to design and implement Food-for-Work projects. We intend, therefore, to increase the size of Title II programs by approximately $1 million a year, beginning in FY 1980.

One issue is whether the Title II program for PVOs should be supplemented by a government-to-government Food-for-Work Program. An important body of opinion in the Haitian government apparently favors a government-to-government program. We oppose such a program considering

-- the possible misuse of Title II for nondevelopmental purposes;

-- the disincentive effect on food production of distributing food. (We recommend that the Government use Title I sales proceeds instead of food for development activities.);

-- the administrative problems of distributing food through government channels.

Strategy of Using the Private Sector

In addition to helping the PVOs participate more actively in Haiti's development efforts, our strategy includes helping the private sector to play an important role. Despite the agonizing long period taken to start the feasibility study, we are hopeful that a local group of professional men will be successful in starting a private Development Finance Corporation (DFC).

2/ The top four priorities are agriculture, decentralized industrial infrastructure development, education and professional training, institution strengthening.

FY 1978 funds (originally FY 1977) are being requested to provide capital to the DFC and to finance technical assistance both for this institution and for the potential borrowers. This institution will support our goal of increasing agricultural production and off-farm employment by concentrating its financing in agro-industries and labor-intensive industries.

We are also proposing a FY 1979 Rural Small Enterprises Development project to encourage the establishment of small local businesses to provide goods and services in the rural towns and hamlets of the country. Establishing businesses in rural towns requires, of course, that tested intermediate and simple technology be available. Under a FY 1977 Intermediate Technology project, we will help the Haitian government to adapt intermediate technology to Haitian conditions and to test the usefulness of this technology. In a proposed FY 1979 Simple Technology project, we will bring to Haiti simple technology which has proved useful in other developing countries and we will test its usefulness in the Haitian context. This technology will be a contribution not only to the Small Rural Enterprise project, but also to our community development activities. Haiti has a tradition of handicraft production, and we are giving support in FY 1977 to a local private organization, Association pour le Développement Artisanal (A.D.A.) to assist handicraft production. These activities will, of course, provide additional jobs for unemployed and underemployed rural workers.

Our interest in encouraging the private sector is also reflected in the equipment rental component of our Agricultural Feeder Roads project. In order to encourage the construction of rural roads by the fledgling Haitian construction sector, we are helping the Haitian government to establish an equipment rental service for private contractors.

The private tourism sector can also provide an increasing number of jobs. However, in view of the Congressional Mandate, we are not recommending any A.I.D. assistance to tourism.

Significant copper deposits may exist in Haiti and two foreign private companies are carrying out explorations to determine whether it can be mined on a rational economic basis. Here again, we are not recommending any A.I.D. assistance to the mining sector.

Role of Women

Women in Haiti already play an important role in the economic and social life of the country. In addition to the traditional role of mother and housewife, they are often the head of the household under the existing system which permits men to have more than one common-law wife. Women also are active as small entrepreneurs since they effectively control the traditional marketing system for food, clothing, and other essential household commodities. Our

approach to integrating women more effectively into the development process has two key aspects: first, incorporating activities to integrate women into our regular projects; e.g., the Integrated Community Development project will include special measures to make women more effective participants in community councils. Second, designing special projects for women: we are projecting a special PVO project for FY 1979 entitled Women in Development.

Agricultural Activities

Having decided that certain reforms are needed at the national level to make any development effort effective and that programs for increasing agricultural production should be part of an effort to use local organizations, the question remains as to which types of agricultural production should be encouraged. Our criteria for guiding these decisions have been the following:

-- number of rural poor who will be assisted;

-- productivity of the proposed measure, i.e., its expected benefits;

-- effect on nutritional status of the rural population;

-- the technological simplicity of the activity; e.g., does its success depend heavily on the use of purchased inputs?

Coffee Projects

A.I.D.'s first agricultural project, the Small Farmer Development project to encourage the production of coffee, potentially can reach a large number of poor hill farmers -- there are approximately 270,000 peasant families who grow coffee. The project depends, however, on the acceptance by the peasant of a fairly sophisticated technology requiring a purchased input -- fertilizer. This project is currently being evaluated to determine whether the project goals will be met with current plans or whether the project needs to be redesigned. There will also be a Small Farmer Development II project beginning in FY 1980. A FY 1977 project, Small Farmer Marketing, will move to the next logical step of helping the coffee farmer gain a greater share of the profits from his coffee by forming marketing cooperatives and upgrading the quality of his coffee.

Adaptive Research

An effective method of helping the poor farmer is to permit him to grow more of the basic food crops his family needs for survival. Under the Agricultural Development Support project, the A.I.D. program is financing adaptive research on corn, one of the major food crops of the rural poor. An American researcher in collaboration with several Haitian colleagues is selecting the best varieties for use in Haiti and they are putting together two basic technological

packages: one which requires little, if any, purchased inputs and a second which provides greater increases in productivity but which does involve the purchase of fertilizer and insecticides. This same project is supporting the work of a rice team from the Republic of China which is introducing improved varieties of rice in the Artibonite Valley. The Integrated Agricultural Development project also contains significant funding for research. In view of the importance of applied agricultural research to the welfare of the rural poor, we are planning to spin-off the various research efforts into a new Adaptive Agricultural Research project which is scheduled to begin in FY 1980.

Environmental Preservation: Soil Conservation

Production-increasing activities are essential to any improvement in the life of the rural poor, but Haiti faces an even more crucial problem. The basic substance requirement for agriculture -- soil -- is steadily disappearing. Unless this loss of soil is stopped, a large number of Haiti's farmers will ultimately be forced to change their occupations, probably involving a move to a city. Thus, our strategy gives a heavy emphasis to soil conservation work and other efforts to protect the environment.

Major soil conservation work will be undertaken as part of the Integrated Agricultural Development project. However, in view of the absolutely crucial nature of this activity, we are proposing a separate Environmental Preservation project in FY 1979. One task of this project will be to use local organizations as a means of obtaining peasant understanding and support for soil conservation work, while at the same time launching a large enough effort to make a significant impact on the problem. The project will include studies of land tenure and charcoal production and will develop a set of practices and technologies for upland farming. Our Integrated Agricultural Development project provides a basic management implementation team to assist the Ministry of Agriculture in improving its administrative practices and this effort will be spun-off in an Agricultural Management Improvement project in 1980.

Irrigation

The Integrated Agricultural Development project also is rehabilitating approximately 9,000 hectares of small irrigation systems through the community development approach of having the farmers in an irrigation system form a self-governing irrigation district. This irrigation work will be continued under a proposed FY 1981 Intensive Irrigated Agriculture project which will not only improve the irrigation structures but will also develop an improved technological package for lowland farmers. These two projects fit in closely with the Government's five-year plan which places major emphasis on increasing the production of Haiti's fertile plain areas.

If this approach is successful, it will be possible for the peasants in a number of areas to rehabilitate their irrigation systems. The earlier riches of Haiti were due in large measure to the vast array of irrigation systems built by the French. The subsequent destruction and decay of these

systems explains in large measure the failure of the agriculture sector to fulfil its traditional role in Haiti. With adequate supplies of water the Haitian peasants living in lowland areas will be able to dramatically increase their production and, thus, their standard of living. A key part of our strategy for increasing agricultural production is to ensure that the farmer receives technical assistance and necessary inputs and that the farmer can market his surplus crop production. Thus, there is need for a basic transportation network. The World Bank and the Inter-American Development Bank are reconstructing the basic road network between Les Cayes and Cap-Haitien and under an agreed division of labor, the A.I.D. program is providing technical assistance, equipment, and new garages to SEPRRN, the Haitian Government's road maintenance organization. Our Road Maintenance II project will support this work through FY 1980 and a final project in this area. Road Maintenance III is scheduled to begin in FY 1981. A.I.D.'s target audience requires, of course, not only a main trunk road to get to the main market of Port-au-Prince, but also feeder roads. The FY 1976 program included an Agricultural Feeder Road project and a follow-on Agricultural Feeder Road II project is scheduled to start in 1981. The latter project will continue to upgrade existing agricultural roads to make them passable during all seasons and will also open up new areas by constructing very simple penetration roads.

Nutrition

Our strategy places great emphasis on the linkage between agriculture and health. The basic purpose of agriculture in the Haitian context is to produce enough food to keep people alive. The major health need in the country is improved nutrition: It is the poor nutritional status of the rural poor -- particularly the children -- which makes them subject to diseases. A part of any sound nutrition program must be education, i.e., providing the rural poor with basic nutrition knowledge and persuading the rural population to put this knowledge into practice wherever possible. The crucial problem in the Haitian context is the under-five age group. A relatively modest redistribution of food among family members could provide in many cases enough additional food for the under-five children to significantly reduce malnutrition in this age category and consequently reduce the high death and morbidity rates. Our current nutrition project, Nutrition Improvement (0075), is financing a network of centers where severely malnourished babies and children are restored to good health through a three-month feeding program while their mothers are simultaneously taught sound nutrition feeding patterns. A complete solution to the problem, however, must include increases in agricultural production, or employment which provides the family with a minimum living wage. This DAP proposes that our nutrition work be strengthened by adding a FY 1979 Intersectoral Nutrition Development project which will focus on ways of increasing the supply of nutritious food. The project involves pilot food production activities as well as efforts to improve the quality of existing food, e.g., fortification of flour.

The PVOs will also continue to assist nutrition work. Thus, in FY 1979 a PVO is proposing an Integrated Nutrition Education project which involves school feeding and nutrition education at schools being constructed with World Bank assistance.

Since the target audience needs help from both the agriculture and health ministries, we will strive in our program not only to help each ministry do its traditional job, but also to reinforce the efforts of the other. There is no reason why the agricultural extension worker cannot support the goals of the family planning program as he goes about his work; there is no reason why the family planning worker cannot encourage a family to become familiar with more rational agricultural techniques.

Health and Population

This DAP has selected health as a basic area of concern. There are reasons for this choice: first, good health for individuals -- and keeping babies and young people alive -- is one of the basic attributes of a just society. Second, healthy individuals are able to produce more and thus improve their economic well-being. Third, health activities provide one of the most effective means of achieving the priority goal of limiting population growth. The future outlook for Haiti is bleak unless population growth can be controlled. Although the population growth rate of 2.1% is not unusually high in comparison with rates in other developing countries, Haiti is already overtaxing its natural resources and cannot provide a decent living for its expanding population. Many social forces are at work, of course, in determining the birth rate of Haiti and activities of the Ministry of Health alone will undoubtedly not be sufficient to reduce the population growth rate to an acceptable level. However, health programs bring government health workers face to face with mothers and fathers and these workers can help persuade parents to limit their families and to supply parents with the necessary family planning information and devices.

Our general interest in population matters is given a practical focus in the specific activities of the Maternal and Child Health/Family Planning project II (0087). This project will support the extension of family planning services throughout Haiti and will provide all the contraceptives required for this effort. Urban clinics service areas will be more thoroughly covered by outreach visits and rural dispensaries will begin to offer family planning services in more remote areas. A new category of village health worker called the "sanitary agent" will extend coverage from the dispensaries to surrounding communities, and traditional midwives - matrones - will be trained to offer family planning services to their clients. Child nutrition centers will add family planning services to their other activities, and an operational research project in household distribution of contraceptives and basic medicines will get underway.

A pilot effort in commercial condom distribution and continued trials with mobile clinics will supplement these activities. Voluntary surgical contraception will become more widely available in Government hospitals, and will become an integral part of medical school training. Thermal-symptomatic family planning will be offered on an expanded basis as a result of the favorable experience with this method to date. Information and education activities will expand through continued development and dissemination of radio broadcasts, school textbooks, pamphlets, films, posters, seminars, and direct personal contact of community motivators. Family planning services will remain an integral part of maternal and child health services, which will in turn comprise the greater part of the Government's health effort.

The health sector, however, has one basic difference from the agricultural sector. In agriculture, we are trying to increase the absorptive capacity of the Ministry as a means of reaching our goal of increased agricultural production. We expect that the donor community can make available all, or nearly all, of the resources which can be productively employed. In the health field, however, we are making the basic assumption that Haiti should not become dependent on foreign aid for the current costs of health programs. (We are also assuming, however, that A.I.D. and other donors should continue to support health sector activities for many years to come.) There are definite limits on the amount of money which Haiti can afford to devote to the health effort. Considering the tremendous need to increase help to education, our assumption is that the Haitian government will be able to increase allocations to health by only modest amounts during the next few years.

Our strategy is to help the government design a health system which will provide basic services to the rural population at a relatively low cost. Until now, Haiti's health system had been basically modeled on the pattern of developed countries, i.e., to build hospitals (or clinics with beds) and to try to have each patient treated by a doctor.

In order to provide a basis for reforming the system so that it will place more emphasis on paraprofessional workers who will provide immunization and other basic preventive and curative services to the rural poor, we are strengthening the health planning section of the Ministry of Health. Preliminary planning has identified certain basic requirements such as strengthening the health logistic system and providing basic health commodities to the rural poor. A FY 1977 project, Strengthening Health Services II (0086), will begin to support this effort through demonstration activities and a FY 1978 project, Rural Health Delivery Systems, will provide the essential inputs for implementation of an effective rural health program.

Traditionally, one of the most serious health problems affecting the rural poor has been malaria. A.I.D. began its support for anti-malaria work in the early 1960s and our support to the anti-malaria organization (SNEM) continued even after the A.I.D. mission was withdrawn. We are using the FY 1977 project, Strengthening Health Services II, to provide bridge financing which will permit the government to take over full administrative and financial responsibilities for this activity.

Water

Water is, of course, a commodity important for both agriculture and health. Our analysis had led us to the conclusion that potable drinking water projects are desirable but that they are of secondary importance to efforts to improve nutrition and to provide basic health services such as vaccinations. Because of the widely dispersed population in rural areas, it is not economically feasible to bring potable water to individual rural homes,although this is a step which would have a major impact on health.

Improved public water supplies would be of some help to the rural poor but the most vulnerable group, that of young children, apparently becomes infected not only from water but also from bacteria which are absorbed by playing on the ground or eating unsanitary food. A second problem in this area is the administrative weakness on the Haitian side. The World Bank and PAHO are working with the rural water service to improve its administrative capability so that it can supervise the construction or improvement of water systems in 10 provincial towns. The Bank intends to further strengthen this service and to finance smaller water systems. The FY 1978 ABS had proposed a joint venture between A.I.D. and the World Bank whereby A.I.D. would supply some of the technical assistance required in this effort. It was decided by the DAEC, however, that it would be best not to split responsibility for this activity and to let the World Bank finance both the capital costs and technical assistance costs of this work.

However, in view of a long-term need for both drinking purposes and irrigation water, we are proposing that the United States carry out feasibility studies looking towards a ground water survey project in FY 1980 which would include an activity to transform the test wells into production wells whenever this is feasible from a technical and institutional point of view.

Education

Except for special training described below, our analysis of the education needs of the country has led us to the conclusion A.I.D. should not be directly involved in the traditional education system of the country for the following reasons:

-- the firm commitment of the Haitian government to a purely French language education system;

-- the lack of adequate Haitian financial support for the education sector;

-- the heavy involvement of other groups in the education sector -- French assistance to a National Pedagogic Institute, the UNDP and ILO in vocational education, and the World Bank and IDB in teacher training and school construction, including an attempted reform of primary rural education.

Our decision is also influenced by the difficulties A.I.D. has had to-date in recruiting teams of technical specialists who also have a language competency. While the Haitians will accept a health planner and/or an agricultural adviser who speaks incorrect but understandable French, we believe they would demand fluency, i. e., bilingualism in French from any American who is an education specialist. Experience to-date indicates that it would be very difficult to recruit such staff. We will, of course, furnish development information to rural people. We will identify specific messages (20 basic health messages have already been identified) which need to be communicated to the target audience and we will then work to find an effective way of getting these messages to the intended beneficiaries. In some cases, this may be by radio broadcast, in other cases, video films, while in other cases, a direct oral presentation to a meeting of a local organization may be the most appropriate approach.

In addition, we will help to create or to strengthen institutions to resolve special development problems. Thus, under the Integrated Agricultural Development project, we are adding an irrigation specialty to the College of Agriculture. We have also identified a bottleneck in the subprofessional engineering category which is limiting the progress under our road projects as well as in our agricultural work to reconstruct irrigation systems and to build soil conservation structures. Thus, we are proposing for FY 1979 that Haiti establish with American assistance a subprofessional engineering institute which would take students -- particularly students from the poor rural areas -- at approximately the 10th grade level and give them two to three years of intensive work in mathematics, physics, and chemistry so that they can serve as subprofessional engineering staff in the country's development effort.

We have also identified a need in several sectors for better information on the physical characteristics of the country. The French are planning to take aerial photographs of the country at 1/40,000. However, no steps are being taken to establish a photo-interpretation capability on the Haitian side and, for many purposes, a 1/40,000 scale will not provide sufficient detail. For FY 1979, we are proposing an activity to provide geographic and demographic information entitled Baseline Data Aerial Photography. This project, based on aerial photomapping and aerial photomapping interpretation which will take aerial photographs at 1/10,000 and develop a Haitian photo-interpretation capability.

Additional knowledge is needed not only on the physical characteristics of the country but also on the people of the country. While some useful information has been gathered on the characteristics of the rural poor in Haiti, there is no indigenous research institution able to undertake a vigorous program of sponsoring studies by Haitian and American researchers. A FY 79 project of Development Research and Studies is proposed to permit an American institution to assist a Haitian institute to sponsor developmental research.

Final Summary

In summary, our proposed U. S. assistance strategy is to

-- help rural inhabitants to achieve a better life by developing local institutions which can participate in programs to increase production and incomes and which provide a framework for government programs to furnish essential services;

-- strengthen government and private institutions -- particularly those involved in rural development and in providing health and family planning services -- so that they will be able to help create local institutions which provide essential services and introduce new ideas to the rural people of Haiti;

-- in cooperation with other donors, link the level and timing of development assistance to the self-help efforts of Haiti.

XVI. PROGRAM LEVEL AND MANPOWER REQUIREMENTS

The following tables provide information on the agreed program for FY 1977 and FY 1978 and the proposed program for FY 1979 through FY 1983 as well as the manpower requirements for the proposed program.

Now that all A.I.D. assistance is provided on a grant basis, we are proposing for all FY 1979 and subsequent projects that A.I.D. obligate funds as they are required rather than providing all non-technical assistance funds in the first year. Primarily as a result of this change in the programming of funds, the A.I.D. program will drop from $21.3 million in FY 1978 to $15.7 million in FY 1979 and the total program (A.I.D. plus PL 480) will drop from $32 million to $26.9 million.

In future years, as the pipeline of earlier loans is disbursed, the A.I.D. obligation level will increase. By FY 1983, the A.I.D. program will total $23 million while the PL 480 program of $26 million will raise the total U.S. assistance level for Haiti to $49.1 million.

Personnel requirements are expected to increase through FY 1979. The USAID's personnel ceiling at the end of FY 1979 is expected to be 40 American direct hire and 73 Haitian direct hire. In addition, there are expected to be 95 American contract employees and 39 Haitian contract employees. It is expected that employment will generally remain at these levels in future years.

H A I T I
DAP Long-Range Program Plan
By Project
($ 000's)

Project Title and Number	Years of Obligation	FY 1977	FY 1978	FY 1979 Request	FY 1980	FY 1981	FY 1982	FY 1983
FOOD AND NUTRITION								
Rural Community Development (0061)	1966-79	550	400	250	-	-	-	-
Agriculture Develop.Support (0069)	1973-77	200	-	-	-	-	-	-
Agriculture Develop.Support II (0092)	1978-81	-	600	583	443	368	256	-
Road Maintenance I (0072)	1974-77	270	-	-	-	-	-	-
Road Maintenance II (0084)	1977-80	6550	1300	600	150	-	-	-
Road Maintenance III (New 81)	1981-84	-	-	-	-	2000	2000	1000
Small Farmer Development (0073)	1974-79	292	195	184	-	-	-	-
Small Farmer Development II (New 80)	180-83				1000	1000	1000	2000
Agricultural Feeder Roads (0074)	1976-80	725	1050	-	-	-	-	-
Agriculture Feeder Roads II (New 81)	1981-84	-	-	-	-	2000	3000	2000
Nutrition Improvement (0075)	1976-80	300	290	200	-	-	-	-
Integrated Agricultural Develop. (0078)	1[illegible]-79	750	700	960	-	-	-	-
Environmental Preservation (0096)	1979-83	-	-	1591	1077	1245	1140	1064
Intensive Irrigated Agriculture (New 81)	1981-83	-	-	-	-	3000	3000	4000
Small Farmer Marketing (0085)	1977-81	750	4600	590	185	75	-	-
Adaptive Agriculture Research (New 80)	1980-83	-	-	-	2000	2000	2000	2000
Agriculture Management, Improv. & Training	1980-83	-	-	-	500	500	500	500
Integrated Community Develop. (0097)	1979-82	-	-	600	800	1150	1400	-

Project Title and Number FOOD AND NUTRITION (Cont)	Years of Obligation	FY 1977	FY 1978	FY 1979 Request	FY 1980	FY 1981	FY 1982	FY 1983
Rural Small Enterprise Develop. (0098)	1979-82	-	-	1336	1297	2297	269	-
Develop. Research & Studies (0100)	1979-81	-	-	535	625	540	-	-
Intersectoral Nutrition Develop. (0099)	1979-82	-	-	600	700	800	900	-
Water/Soil Development, (OPG)	1976-77	45	-	-	-	-	-	-
Integrated Nutrition Education Centers, (OPG)- (0103)	1978- 80	-	65	95	90	-	-	-
Water Resource Development II (OPG) - (0101)	1979-81	-	-	80	90	80	-	-
Small Irrigation Development Gonave (OPG) - (0102)	1979-81	-	-	90	80	80	-	-
Gros Morne Rural Development (OPG) - (0081)	1977-78	44	60	-	-	-	-	-
Groundwater Survey (New-80)	1980-82	-	-	-	1000	1000	1000	-
Other New Projects	-	-	-	-	-	200	400	2000
Program Development & Support	-	100	1038	350	450	500	500	500
Sub-Total: Food and Nutrition	-	10576	10298	8644	10487	18833	17365	15064

Project Title and Number	Years of Obligation	FY 1977	FY 1978	FY 1979 Request	FY 1980	FY 1981	FY 1982	FY 1983
POPULATION								
MCH/Family Planning (0071)	1975-77	700	-	-	-	-	-	-
MCH/Family Planning II (0087)	1978-80	-	850	1269	1400	-	-	-
Other New Projects	-	-	-	-	-	2000	2500	3000
Program Development & Support	-	20	25	25	100	100	100	150
Sub-Total: Population	-	720	875	1294	1500	2100	2600	3150
HEALTH								
Strengthening Health Serv. I (0070)	1974-77	1200	-	-	-	-	-	-
Strengthening Health Serv. II (0086)	1977-81	7100	1200	750	750	700	-	-
Rural Health Delivery System (0091)	1978-81	-	4650	350	350	350	-	-
Other new Projects	-	-	-	-	-	-	1000	1250
Program Development & Support	-	-	75	100	100	200	200	200
Sub-Total: Health	-	8300	5925	1200	1200	1250	1200	1450

Project Title and Number	Years of Obligation	FY 1977	FY 1978	FY 1979 Request	FY 1980	FY 1981	FY 1982	FY 1983
EDUCATION AND HUMAN RESOURCES								
Administrative Improvement (0079)	1977-80	300	677	326	266			
Sub-Professional Engineering (0104)	1979-82	-	-	755	1390	450	350	-
Crafts Development (OPG) (0094)	1977-79	57*	25	25	-	-	-	-
Other New Projects	-	-	-	-	250	800	1000	1500
Program Development & Support	-	112	-	90	100	100	100	150
Sub-Total: Education and Human Resources	-	469	702	1196	2006	1350	1450	1650
SELECTED DEVELOPMENT ACTIVITIES								
Selected Development Activities (0062)	1968-Cont.	75	75	50	25	25	25	25
Disaster Preparedness (0082)	1978-80	-	60	150	65	-	-	-
Development Finance Corp. (0085)	1978-79	-	3185	105	-	-	-	-
Intermediate Technology (0095)	1978-80	-	85	300	95	-	-	-
Baseline Data Aerial Photography (0110)	1979-82	-	-	2050	530	260	160	
Simple Technology (0105)	1979-81	-	-	250	250	201	-	-
Develop. Support-CEEH (OPG/DPG) (0106)	1979-81	-	-	60	60	70	-	-
PVO Development Support (0108)	1979-81	-	-	90	200	200	-	-
Women in Development (OPG) (0109)	1979-81	-	-	80	90	80	-	-
Development Support-CARITAS (OPG/DPG) (0107)	1979-81	-	-	90	90	70	-	-
Other New Projects	-	-	-	-	500	800	1400	1600
Program Development & Support	-	72	120	100	100	100	100	150
Sub-Total: SDA	-	147	3525	3325	2005	1806	1685	1775

*OYB figure was originally 100

Project Title and Number	Years of Obligation	FY 1977	FY 1978	FY 1979 Request	FY 1980	FY 1981	FY 1982	FY 1983
Sub-Total:AID Project Assistance	-	20,212	21,325	15,659	17,198	25,339	24,300	23,089
PL-480 Title I	-	11,300	6,500	6,500	8,000	11,000	14,000	17,000
PL-480 Title II	-	4,900	4,200	4,700	6,000	7,000	8,000	9,000
Sub-Total: PL-480	-	16,200	10,700	11,200	14,000	18,000	22,000	26,000
Grand Total: AID Project Assistance + PL-480		36,412	32,025	26,859	31,198	43,339	46,300	49,089

PERSONNEL REQUIREMENTS PROJECTIONS

	1977	1978	1979	1980	1981	1982	1983
A. Direct Hire (American)							
1. Executive Direction	4	4	4	4	4	4	4
2. Program Planning and Budgeting	5	5	5	5	5	5	5
3. Technical Direction and Management	10	12	13	13	13	13	13
4. Food for Peace (FFP)	1	1	1	1	1	1	1
5. Program Support Services (participants, Loan Office, etc.)	7	8	9	9	9	9	9
6. Financial Management	4	4	4	4	4	4	4
7. Management Support Services	4	4	4	4	4	4	4
Sub-Total	35	38	40	40	40	40	40
B. Direct Hire (Haitian)							
1. Executive Direction	1	1	1	1	1	1	1
2. Program Planning and Budgeting	4	7	8	8	8	8	8
3. Technical Direction and Management	4	10	10	11	11	11	11
4. Food for Peace (FFP)	2	2	2	2	2	2	2
5. Program Support Services (participants, Loan Office, etc.)	5	11	11	11	11	11	11
6. Financial Management	8	10	10	10	10	10	10
7. Management Support Services	28	31	31	31	31	31	31
Sub-Total	52	72	73	74	74	74	74
C. American Contract Personnel (Project Funded & PSC)							
1. Food and Nutrition	32	62	73	73	73	73	73
2. Population and Health	1	4	4	4	4	4	4
3. Education and Human Resources Development	-	3	7	7	7	7	7
4. Selected Development Activities	-	4	11	11	11	11	11
Sub-Total	33	73	95	95	95	95	95

	1977	1978	1979	1980	1981	1982	1983
D. Foreign National Contract Personnel (Project Funded and PSC)							
Management Support Services	11	20	21	21	21	21	21
Project Funded Personnel							
1. Food and Nutrition	5	17	17	17	17	17	17
2. Population and Health	1	1	1	1	1	1	1
3. Education and Human Resources Development	-	-	-	-	-	-	-
4. Selected Development Activities	-	-	-	-	-	-	-
Sub-Total	17	38	39	39	39	39	39
E. Totals							
American Personnel (Direct Hire and Contract)	68	111	135	135	135	135	135
Foreign National Personnel	69	110	112	113	113	113	113
Grand Total	137	221	247	248	248	248	248

STATISTICAL ANNEX

Table No.	Title
II.1	Age and Sex Structure of the Population in 1973
II.2	Distribution of Landholdings per Size and per Region in 1971
II.3	Income Distribution Pattern - Employed Population in Urban and Rural Areas - 1970
II.4	Gross Domestic Product by Sector Origin
II.5	Macroeconomic Framework (Constant Prices)
II.6	Gross Domestic Product by Type of Expenditure
II.7	Money and Price Movement
II.8	Balance of Payments
II.9	External Public Debt Outstanding Including Undisbursed as of December 31, 1975
II.10	Service Payments, Commitments, Disbursements, and Outstanding Amounts of External Public Debt
II.11	External Public Debt Outstanding Including Undisbursed as of December 31, 1975
II.12	Service Payments, Commitments and Outstanding Amounts of Public Debt
II.13	Foreign Exchange Reserves
II.14	Exports by Major Categories
II.15	Exports by Major Commodity Groups
II.15A	Small Industry Exports, Including Assembled Components

II.16 Exports to United States of Light Manufactured Products Made of Imported Components, F.O.B.

II.17 Imports by Large Groups of Products - C.I.F. (Estimate)

II.18 Imports by Major Categories (Estimate)

II.19 Fiscal Operations of the Central Government 1971-1975

II.20 Role of the Public Institutions in the Collection and Expenditure of Public Funds

II.21 Revenues in Percentages of GDP

II.22 Growth of Central Government Revenue, 1971-1975 in Percentages per Annum.

II.23 Central Government Deficit and its Financing

II.24 Structure of Budgetary Revenues 1971-1975

II.25 Tax Revenues, Composition as a Percentage of Total

II.26 Composition of Tax Revenues

II.27 Trend of Budgetary Revenues; Percentage Change in Nominal Terms

II.28 Trend of Government Expenditures 1971 to 1975

II.29 Government Expenditures by Functional Categories (Millions of gourdes in current prices)

II.30 Government Expenditures by Functional Categories (Adjusted to constant prices)

II.31 Public Development Expenditures, by Sectors

II.32 Investment Expenditures 1971-1975

II.33 Trend of Civil Service Salaries, 1971-1975

11.34 Financing of Public Sector Deficit

Table II.1

AGE AND SEX STRUCTURE OF THE POPULATION IN 1973*

(thousand and percent)

Age	Males	%	Females	%	Total	%
0-4	349.4	16.2	336.8	14.7	686.2	15.5
5-9	307.6	14.3	297.0	13.0	604.6	13.6
10-14	281.4	13.1	279.1	12.2	560.5	12.6
15-19	244.3	11.3	251.6	11.0	496.0	11.2
20-24	184.9	8.6	206.1	9.0	391.0	8.8
25-29	130.9	6.1	165.4	7.2	296.3	6.7
30-34	109.2	5.1	141.4	6.2	250.5	5.6
35-39	102.2	4.7	127.7	5.6	229.9	5.2
40-44	103.7	4.8	118.0	5.2	221.7	5.0
45-49	91.4	4.2	93.2	4.1	184.6	4.2
50-54	72.0	3.3	70.9	3.1	143.0	3.2
55-59	54.4	2.5	53.7	2.4	108.2	2.4
60-64	42.8	2.0	43.0	1.9	85.7	1.9
65-69	33.1	1.5	36.2	1.6	69.2	1.6
70 and +	48.0	2.2	64.3	2.8	112.3	2.5
Total	2155.3 (48.5)	100.0	2284.3 (51.5)	100.0	4439.6 (100.0)	100.0

Source: Haitian Statistical Institute

*Extract from World Bank Report No. 1243-HA: Current Economic Position and Prospects of Haiti - Table 1.1

Table II.2

Distribution of Land Holdings Per Size and Per Region in 1971

Size of holding / Region	Less than 1 carreau			From 1 to 10 carreaux			More than 10 carreaux		
	% of area	% of population	density per ha.	% of area	% of population	density per hectare	% of area	% of population	density per ha.
South	32.0	66.5	6.78	61.0	32.9	1.74	7.0	0.6	0.26
West	38.0	78.4	8.04	61.9	27.6	1.88	0.1	0.0	0.41
North-West	19.7	52.0	6.29	63.5	45.5	1.71	16.8	2.5	0.36
Antibonite	35.0	64.1	5.18	62.1	35.6	1.62	2.9	0.3	0.37
North	29.5	62.5	5.92	64.5	36.6	1.58	6.0	0.9	0.43
Total	32.6	66.3	6.56	62.4	33.2	1.71	5.0	0.5	.34

Note: 1 carreau =1.29 hectare
Source: I.H.S., in World Bank Report No. 1243-HA, 1976 - Table 7.7

Table II.3

INCOME DISTRIBUTION PATTERN - EMPLOYED POPULATION IN URBAN AND RURAL AREAS - 1970*

Income Class (Gourdes per annum)	Average for the Class In Gourdes	COUNTRY TOTAL Employed In Thousand	%	Labor Income In Thousand Gourdes	%	RURAL AREAS Employed In Thousand	%	Labor Income In Million Gourdes	%
Lowest incomes									
Less than 1,200	600	1,246.7	86.9	748,056	55.8	1,121.5	92.0	672.9	72.1
Medium incomes	2,900	183.9	12.8	530.301	39.4	96.7	7.9	250.9	26.8
1,200 - 3,600	2,400	156.8	10.9	376,272	28.0	90.8	7.4	218.0	23.3
3,601 - 6,000	4,800	19.4	1.3	92,952	6.9	4.5	0.4	21.7	2.3
6,001 - 8,400	7,200	5.4	0.4	39,273	2.9	0.9	0.1	6.8	0.7
8,401 -10,800	9,600	2.3	0.2	21,804	1.6	0.5	0.0	4.4	0.5
Higher incomes	16,200	3.9	0.3	63,009	4.8	0.5	0.1	9.9	1.1
10,801 - 13,200	12,000	1.6	0.1	19,092	1.4	0.1	0.1	1.5	0.2
13,201 - 15,600	14,400	0.8	0.2	11,688	0.9	0.2	0.1	3.4	0.4
15,601 - 18,000	16,800	0.2	0.2	4,164	0.3	-	0.1	-	-
18,001 - 20,400	19,200	0.6	0.2	11,556	0.9	0.1	0.1	2.0	0.2
20,401 - 22,800	21,600	0.2	0.2	4,980	0.4	0.1	0.1	2.6	0.3
22,801 and more	24,000	0.5	0.2	11,520	0.9	-	-	-	-
Total:		1,434.6	100.0	1,341,403	100.0	1,218.9	100.0	933.4	100.0
Average annual income per employed in Gourdes				935				765	
in $				187				153	
Number of inhabitants		4,271.0				3,359			
% of employed per population (%)		33.6				36.3			
Labor income per one inhabitant in Gourdes				314				277	
in $				63				55	
Ratio between average income in the lowest and the highest group				1:28				1:33	

*Source: Mission's computations, based on "Enquete Socio-Economiques", April 1970; May 1975, Haitian Institute of Statistics. World Bank Report No. 1243-HA - Current Economic Position and Prospects of Haiti. Table 1.4

Table II.4

GROSS DOMESTIC PRODUCT BY SECTOR ORIGIN*

(in millions of 1955 Gourdes)

	1955	1960	1965	1970	1971	1972	1973	1974	1975
Agriculture	681.8	753.1	775.7	806.4	837.9	832.0	754.3	902.7	879.8
Mining	1.2	17.5	22.5	28.6	33.7	28.8	33.0	34.4	22.9
Manufacturing	156.3	154.7	161.5	163.8	173.6	188.7	196.6	215.8	226.2
Construction	18.4	30.9	29.0	36.8	42.5	49.2	64.6	81.3	82.5
Public Utilities	6.2	14.7	19.0	21.6	25.3	28.2	33.8	37.0	40.9
Transport and Communications	51.0	47.3	36.0	37.9	43.6	47.2	45.1	46.8	49.0
Commerce	145.3	173.8	165.4	164.1	181.7	178.6	190.8	195.8	203.4
Banking and Insurance	10.3	11.5	13.4	7.5	8.1	9.5	9.5	12.3	12.3
Real Estate	124.3	134.2	144.9	156.8	159.8	161.8	164.4	167.3	170.0
Government	111.9	98.1	101.8	122.2	134.4	128,7	127.9	130.2	132.5
Personal Services	78.9	86.8	102.8	103.6	115.5	119.7	115.1	112.9	117.3
Total GDP at Market Prices	1385.6	1522.6	1572.0	1649.3	1756.2	1772.6	1735.1	1936.5	1936.0

Source: Haitian Institute of Statistics, and mission estimates.

*Extract from World Bank Report No. 1243-HA: Current Economic Position and Prospects of Haiti - Table 2.1

Table II.5

MACRO-ECONOMIC FRAMEWORK (CONSTANT PRICES)*

Availability and use of real resources
(in % of GDP - constant prices)

	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75
Gross Domestic Product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gains from Terms of Trade	-1.7	-2.0	-2.7	1.7	-1.9	-2.8	2.0	0.4	3.2
Gross Domestic Income	98.3	98.0	97.3	101.7	98.1	97.2	102.0	100.4	103.2
Resource Gap	4.8	2.9	4.0	3.0	1.3	4.5	5.6	4.0	7.1
Resource Availability	103.1	100.9	101.3	104.7	99.4	101.7	107.6	104.4	110.3
Fixed Investment	5.9	6.2	7.1	10.5	10.1	11.8	14.1	14.0	15.4
a. Public	4.2	3.0	2.2	2.1	2.8	3.1	3.6	4.6	7.8
b. Private	1.7	3.2	4.9	8.4	7.3	8.7	10.5	9.4	7.6
Consumption	97.2	94.7	94.2	94.2	89.3	89.9	93.5	90.4	94.9
a. Public	8.8	8.8	8.8	9.2	9.9	8.8	8.2	7.1	7.0
b. Private	88.4	85.9	85.4	85.0	79.4	81.1	85.3	83.3	87.9

* Extract from World Bank Report No. 1243-HA Table 2.4 - Current Economic Position and Prospects of Haiti

Table II.6

GROSS DOMESTIC PRODUCT BY TYPE OF EXPENDITURE*
(in millions of 1955 Gourdes)

	1955	1960	1965	1970	1971	1972	1973	1974	1975
GDP at Market Prices	1386.0	1523.0	1572.0	1649.0	1756.0	1773.0	1735.1	1936.5	1936.0
Consumption	1380.0	1413.3	1529.0	1552.2	1566.7	1591.9	1624.9	1750.5	1838.2
Private				(1399.7)	(1393.0)	(1436.0)	(1482.4)	(1612.4)	(1703.0)
Public				(152.5)	(173.7)	(155.9)	(142.5	138.1	(135.2)
Investment	83.0	112.0	100.0	174.0	178.0	210.0	244.9	271.7	298.9
Private	(45.1)	(47.5)	(43.5)	(139.7)	(128.7)	(155.4)	(183.0)	(181.7)	(147.5)
Public	(37.9)	(64.5)	(56.5)	(34.3)	(49.3)	(54.6)	(61.9)	(90.0)	(151.3)
Exports of Goods and NFS	228.0	304.0	283.0	334.7	429.5	404.9	396.7	444.4	391.5
Import of Goods and NFS	305.0	306.3	340.0	411.9	418.2	433.8	531.4	530.1	592.5
Resource Gap	77.0	2.3	57.0	77.2	-11.3	28.9	134.7	85.7	201.0
Net Factor Income Payments	-9.0	-21.0	-28.0	-22.4	-22.2	-24.1	-24.4	-23.2	-26.1
GNP at Market Prices	1377.0	1502.0	1544.0	1626.6	1733.8	1748.9	1710.7	1913.3	1909.9
Gross Domestic Savings	6.0	109.7	43.0	96.8	189.3	181.1	110.2	186.0	97.8
Gross National Savings	-3.0	88.7	15.0	74.4	167.1	157.0	85.8	162.8	71.7

*Extract from World Bank Report No. 1243-HA Current Economic Position and Prospects of Haiti.
Source: Haitian Institute of Statistics, and mission estimates.

Table II.7

MONEY AND PRICE MOVEMENT

(Annual growth, in %)

	1967-72	1972-75
GDP		
Nominal Growth	4.6	23.9
Implicit Deflator	1.6	20.3
Prices		
Consumption	2.4	17.6
Food	2.9	18.5
Clothing	5.3	21.0
Housing	-1.5	11.6
Investment	-3.5	15.9
Imported Equipment	-5.7	12.3
Construction	-0.7	16.1
Imported Food /a	6.2	35.2
International Price Index	5.0	16.9
Money and Credit		
Money and Quasi Money	18.7	22.9
Money	16.0	10.2
Quasi-money	25.3	43.8
Net Domestic Credit	8.0	44.0
Public Sector	6.0	24.5
Private Sector	10.4	70.0

/a Selected food imports constituting about 80 percent of food imports during 1975.

Source: World Bank Report No. 1243-HA, 1976 - Table 7

Table II.8

BALANCE OF PAYMENTS*

	1973	1974	1975
	(Million US $)		
Exports of Goods, NFS	78.0	115.2	118.3
Imports of Goods, NFS	95.7	134.9	154.4
Resource Gap (deficit = -)	-17.7	-19.7	-36.1
Interest Payments (net)	-0.6	-0.6	-0.5
Other Factor Payments (net)	-3.8	-5.3	-6.3
Net Transfers	19.1	26.9	40.1
Balance on Current Account	-3.0	1.3	-2.8
Direct Foreign Investment	7.0	7.9	2.6
Net MLT Borrowing			
Disbursements	3.2	8.4	22.4
Amortization	-6.1	-4.8	-6.2
Subtotal	-2.9	3.6	16.2
Other items n.e.i	-2.2	-32.7	-39.5
Increase in Reserves (+)	-1.1	-19.9	-23.5
Gross Reserves 1/	20.1	14.7	12.8
Net Reserves 1/	19.3	-0.6	-24.1
Fuel and Related Materials			
Imports	4.3	12.4	11.2
Exports	-	-	-

*Source: Trade Payments and Capital Flows, Economic Indicators
World Bank Report No. 1243-HA - Current Economic Position and Prospects of Haiti

1/ Data refers to fiscal years ending September 30.

Table II.9

EXTERNAL PUBLIC DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1975
DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
(IN THOUSANDS OF U.S. DOLLARS)

TYPE OF CREDITOR / CREDITOR COUNTRY	DEBT OUTSTANDING			IN ARREARS	
	DISBURSED	UNDISBURSED	TOTAL	PRINCIPAL	INTEREST
Suppliers Credits					
Canada	710	-	710	-	-
France	150	-	150	-	-
Germany, Fed. Rep. Of	9	-	9	-	-
Italy	2,124	-	2,124	-	-
Japan	650	-	650	-	-
Sweden	541	-	541	-	-
United Kingdom	50	-	50	-	-
United States	279	-	279	-	-
Total Suppliers Credits	4,513	-	4,513	-	-
Privately Placed Bonds					
Cuba	4,000	-	4,000	-	-
Total Privately Placed Bonds	4,000	-	4,000	-	-
Loans From International Org.					
IDA	10,720	19,688	30,408	-	-
IDB	6,122	43,778	49,900	-	-
Total Loans from International Org.	16,842	63,466	80,308	-	-
Loans From Governments					
Canada	9,717	-	9,717	-	-
United States	26,914	7,897	34,811	-	-
Total Loans From Governments	36,631	7,897	44,528	-	-
Total External Public Debt	61,986	71,363	133,349	-	-

Notes: (1) Only Debts with an original or extended Maturity of over one year are included in this table.
(2) Debt outstanding includes principal in arrears out excludes interest in Arrears.

Source: World Bank Report No. 1243-HA - Table 4.1, 1976

Table II.10

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING AMOUNTS OF EXTERNAL PUBLIC DEBT

PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1975
DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
(IN THOUSANDS OF U.S. DOLLARS)

YEAR	DEBT OUTSTANDING AT BEGINNING OF PERIOD		TRANSACTIONS TOTAL DURING PERIOD					OTHER CANCEL-LATIONS	CHANGES ADJUST-MENT 1/
	DISBURSED ONLY	INCLUDING UNDISBURSED	COMMIT-MENTS	DISBURSE-MENTS	SERVICE PAYMENTS PRINCIPAL	INTEREST	TOTAL		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1971	40,552	45,468	4,484	2,965	4,523	278	4,801	2,260	82
1973	41,338	48,775	27,175	4,337	4,514	401	4,915	267	42
1975	45,079	84,667	54,124	22,349	5,595	456	6,051	-	153
* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *									
1976	61,986	133,349	-	14,658	5,272	739	6,011	-	-4,051
1977	67,321	124,026	-	26,201	4,031	1,442	5,473	-	2
1978	89,493	119,997	-	20,624	3,607	1,514	5,121	-	2
1979	106,512	116,392	-	9,680	3,212	1,579	4,791	-	-
1980	112,980	113,180	-	200	2,795	1,581	4,376	-	1
1985	103,455	103,455	-	-	2,631	1,664	4,295	-	1
1990	86,543	86,543	-	-	3,915	1,480	5,395	1	-2
1995	69,511	69,511	-	-	2,909	1,117	4,026	-	2

1/ THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBITS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

SOURCE: World Bank Report No. 1243-HA, 1976 - Table 4.2,(page 25 only)

Table II.11

EXTERNAL PUBLIC DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1975
DEBT REPAYABLE IN LOCAL CURRENCY
(IN THOUSANDS OF U.S. DOLLARS)

TYPE OF CREDITOR / CREDITOR COUNTRY / CURRENCY OF DRAWINGS	DEBT OUTSTANDING			IN ARREARS	
	DISBURSED	UNDISBURSED	TOTAL	PRINCIPAL	INTEREST
LOANS FROM INTERNATIONAL ORG.					
IDB					
DRAWINGS IN LOCAL CURRENCY	2,015	7,183	9,198	-	-
DRAWINGS IN FOREIGN CURRENCY	12,223	6,647	18,870	-	-
TOTAL IDB	14,238	13,830	28,068	-	-
TOTAL LOANS FROM INTERNATIONAL ORG.	14,238	13,830	28,068	-	-
LOANS FROM GOVERNMENTS					
UNITED STATES					
DRAWINGS IN LOCAL CURRENCY	4,731	-	4,731	-	-
TOTAL UNITED STATES	4,731	-	4,731		-
TOTAL LOANS FROM GOVERNMENTS	4,731	-	4,731	-	-
TOTAL EXTERNAL PUBLIC DEBT	18,969	13,830	32,799	-	-

NOTES: (1) ONLY DEBTS WITH AN ORIGINAL OR EXTENDED MATURITY OF OVER ONE YEAR ARE INCLUDED IN THIS TABLE.
(2) DEBT OUTSTANDING INCLUDES PRINCIPAL IN ARREARS BUT EXCLUDES INTEREST IN ARREARS.

Source: World Bank Report No. 1243-HA - Table 4.3

Table II.12

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING PLUS UNDISBURSED PUBLIC DEBT

PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1975
DEBT REPAYABLE IN LOCAL CURRENCY
(IN THOUSANDS OF U.S. DOLLARS)

YEAR	DEBT OUTSTANDING AT BEGINNING OF PERIOD		TRANSACTIONS TOTAL DURING PERIOD					OTHER CANCEL-LATIONS	CHANGES ADJUST-MENT 1/
	DISBURSED ONLY	INCLUDING UNDISBURSED	COMMIT-MENTS	DISBURSE-MENTS	SERVICE PAYMENTS PRINCIPAL	INTEREST	TOTAL		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1971	9,351	16,310	4	988	185	337	522	623	1
1973	10,424	26,959	2,300	302	407	374	781	-	-
1975	10,709	28,478	4,800	8,740	480	438	918	-	1
* * * * THE FOLLOWING FIGURES ARE PROJECTED * * * *									
1976	18,969	32,799	-	6,835	509	552	1,061	-	-
1977	25,295	32,290	-	2,455	565	593	1,158	-	1
1978	27,186	31,726	-	2,920	832	600	1,432	-	-
1979	29,274	30,894	-	1,620	846	588	1,434	-	-
1980	30,048	30,048	-	-	861	568	1,429	-	-1
1985	25,792	25,792	-	-	1,086	570	1,656	-	-
1990	19,644	19,644	-	-	1,294	457	1,751	-	1
1995	13,499	13,499	-	-	1,202	295	1,497	-	-2

1/ THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC INBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

SOURCE: World Bank Report No. 1243-HA, 1976 - Table 4.4 page 8 only.

Table II.13

FOREIGN EXCHANGE RESERVES

(in millions of U.S. dollars)

	September 30			December 31
	1971	1973	1975	1975
Banking system (net)	9.6	19.3	-24.1	-18.1
National Bank (net)	8.6	19.5	-4.3	-0.7
Assets	9.8	20.1	10.0	12.6
Gold	(0.1)	(0.1)	(0.1)	(0.1)
IMF gold tranche position	(1.9)	(2.6)	(----)	(----)
Special drawing rights	(1.1)	(3.6)	(2.8)	(2.3)
Foreign currency holdings	(1.3)	(2.3)	(1.4)	(0.9)
Deposits	(4.1)	(9.4)	(3.7)	(6.3)
Items in transit	(1.3)	(2.1)	(2.0)	(3.0)
Contractual liabilities	-1.2	-0.6	-14.3	-13.3
To foreign banks	(---)	(-0.6)	(-0.7)	(-0.5)
Use of Fund resources	(-1.2)	(----)	(-13.6)	(-12.8)
Payment arrears	---	----	-----	-----
Commercial arrears	(----)	(----)	(-----)	(-----)
External public debt arrears	(----)	(----)	(-----)	(-----)
Other banks (net)	1.0	-0.2	-19.8	-17.4

Source: National Bank of the Republic of Haiti and IMF, in World Bank Report No. 1243-HA, 1976 (Table 3.11)

Table II.14

Exports by Major Categories*

	1971		1973		1975	
	Million $	%	Million $	%	Million $	%
	A. IN CURRENT VALUE TERMS					
Agricultural, Forestry and Fishery Products	28,706	63.6	31,492	55.1	39,527	53.9
Minerals	7,844	17.4	6,579	11.4	10,462	14.3
Industrial and Other Non-Traditional Exports	8,616	19.2	19,209	33.5	23,376	31.8
Total	45,166	100.0	57,279	100.0	73,365	100.0
	B. IN CONSTANT (1970 VALUE) TERMS					
Abricultural, Forestry and Fishery Products	31,578	66.1	28,115	55.2	26,294	56.1
Minerals	8,171	17.1	6,804	13.4	4,503	9.6
Industrial and other Non-Traditional Exports	8,051	16.8	15,981	31.4	16,042	34.3
Total	47,800	100.0	50,900	100.0	46,840	100.0

*Extract from World Bank Report No. 1243 - Table 3.3: Current Economic Position and Prospects of Haiti (Export Data differ from those in the balance of payments because the amounts of "industrial and other non-traditional exports" were adjusted downward, to reflect only the (estimated) Value added in Haiti.)

Table II.15

Exports by Major Commodity Groups
Current Values, Million of Gourdes*

	1971	1973	1975
Cocoa	2,649	,557	1,387
Coffee	94,813	103,072	92,482
Campeche Wood	,239	,238	,516
Bees wax	,206	,296	,307
Cotton			
Cajuc Wood	,066	,196	,122
Caster oil	,201	,267	,236
Corn	,016	,005	,004
Molasses	2,229	3,457	5,530
Honey	,025	,092	,400
Goat Skin	,512	1,460	2,025
Sisal	3,991	6,146	16,106
Rum	,397	,507	,509
Raw Sugar	17,128	13,152	48,213
Orange Peel	1,483	1,069	1,117
Essential Oils	15,496	18,489	24,408
Sea Food	1,329	1,723	1,771
Meat	2,749	6,732	2,480
Total Agriculture & Forestry	143,530	157,458	197,633
Bauxite	32,720	32,895	52,309
Copper	6,500	--	--
Total Mining	39,220	32,895	52,309
Small Industries and Handicrafts1/	31,325	83,633	91,198
Cement	--	--	,303
Wheat by-products	--	,140	3,952
Wheat Flour	--	--	,831
All others	11,754	12,270	20,598
Total Industrial and Non-Traditional	43,083	96,045	116,882
GRANT TOTAL	225,833	286,396	368,824

* Extract from World Bank Report No. 1243-HA - Table 3.4 - Current Economic Position and Prospects of Haiti.

1/ Amount of "Small Industry exports", reported by Ministry of Commerce. Adjusted for imported materials by that Industry (see table: Assembly and Small Industry Exports) data differ from those used by Customs authorities and those in balance of payment table.

SMALL INDUSTRY EXPORTS, INCLUDING ASSEMBLED COMPONENTS
(Thousands of Gourdes, Current Prices Unless Otherwise Specified)

	1970	1971	1972	1973	1974	1975	Annual Rates of Growth 1970-75
Gross							
Based on Local Raw Materials	16.774	12.120	13.976	32.540	39.169	32.062	13.8
Based on Mixed Raw Materials (Foreign and Domestic)	18.839	27.494	25.788	77.242	88.086	90.844	37.[illegible]
Based on Imported Raw Materials	19.105	27.090	23.827	62.501	78.832	67.672	28.8
Gross Total (Gourdes '000)	54.718	66.704	63.591	172.283	205.569	190.579	28.3
($ '000)	10.944	13.340	12.718	34.456	41.114	38.115	28.3
Net							
Minus Re-exports Foreign Inputs used in:							
a. Exports made of mixed materials	7.535	10.988	10.315	30.896	35.227	36.338	37.[illegible]
b. Exports made of foreign materials	15.284	21.672	19.062	50.000	63.065	54.138	28.[illegible]
Net Total: (Gourdes '000)	31.899	34.034	34.214	90.387	107.277	100.103	25.[illegible]
($ '000)	6.377	6.806	6.843	18.277	21.455	20.021	25.[illegible]

Source: World Bank Report No. 1243-HA, 1976 - Table 28

Table II.16

EXPORTS TO UNITED STATES OF LIGHT MANUFACTURED PRODUCTS
MADE OF IMPORTED COMPONENTS, F.O.B.*
(In thousand of U.S. dollars)

	1970	1971	1972	1973	1974	1975
Tulle, lace, ribbons, etc.	125	174	283	286	193	261
Articles of iron and steel (nes)	53	14	5	23	16	43
Power-generating machinery	--	--	--	129	4	41
Office machines and parts	--	--	21	1,699	4,595	3,160
Machinery and appliance parts (nes)	120	140	350	447	676	782
Transformers, switch gears, etc.	288	669	1,422	2,406	4,181	3,670
Equipment of distributing Electricity	--	76	242	225	893	1,491
Radio receivers and parts	203	231	89	272	163	67
Electric apparatus and parts	12	172	201	1,191	9,529	6,231
Travel goods and handbags	54	190	318	751	525	960
Clothing	1,786	2,656	5,293	12,005	22,466	22,707
Footwear	1,803	1,934	1,409	1,879	1,437	967
Tape recorders	153	355	401	473	318	659
Rubber and plastic manufactures	64	107	190	367	929	303
Toys, sporting goods	3,518	5,332	8,614	10,815	15,442	17,682
Total	8,179	11,950	18,838	32,968	61,368	59,023
Annual rate of change		46.1	57.6	75.0	86.1	-3.8

Source: IMF

*Extract from World Bank Report No. 1243-HA - Table 3.7 - Current Economic Position and Prospects of Haiti

Table II.17

IMPORTS BY LARGE GROUPS OF PRODUCTS - CIF (Estimate)

	1970		1973		1975		Rate of Growth 1970-75	Rate of Growth 1973-75
	Million Gourdes	Percent of Total	Million Gourdes	Percent of Total	Million Gourdes	Percent of Total		
1. Capital Goods 1/	79.8	31	117.0	30	243.1	36	25.0	54
2. Inputs into Export Industries	22.9	9	80.9	21	90.5	13	31.6	5.9
3. Development Imports (1 + 2)	102.7	40	197.9	51	333.6	49	26.6	34
4. Food Products	54.1	21	95.6	25	194.4	28	29.1	52
5. Other Consumer Goods	103.0	39	89.8	24	152.8	23	8.2	35
6. Consumer Imports (4 + 5)	157.1	60	185.4	49	347.2	51	17.2	44
7. Total Imports	259.8	100	383.3	100	680.8	100	21.3	39

1/ Includes raw materials, intermediate and capital goods proper

Source: Adapted from Haitian Customs Year books, in World Bank Report No. 1243- HA (Table 31)

Table II.18

IMPORTS BY MAJOR CATEGORIES (ESTIMATE)

	1969-70 Million Gourdes	%	1970-71 Million Gourdes	%	1971-72 Million Gourdes	%	1972-73 Million Gourdes	%	1973-74 Million Gourdes	%	1974-75 Million Gourdes	%
Raw materials other than specified below	12.154	4.7	19.[illegible]	6.5	12.383	5.9	23.662	6.2	43.461	7.8	54551	8.0
Mineral Fuels	14.5[illegible]	5.6	18.[illegible]	6.1	19.591	6.0	21.[illegible]	5.7	61.911	11.[illegible]	55.[illegible]	8.21
Chemicals	14.[illegible]	[illegible]	15.[illegible]	5.[illegible]	16.1[illegible]	4.9	19.194	5.0	24.186	4.3	29.63[illegible]	[illegible]
Appliances, machinery and Transport Equipment which are producers goods (est)	[illegible]	15.1	[illegible]	13.[illegible]	[illegible]	13.[illegible]	[illegible]	13.6	[illegible]	[illegible]	[illegible]	[illegible]
Imported Inputs into Assembly Exports 1/	22.882	[illegible]	[illegible]	11.[illegible]	29.413	8.9	[illegible]	21.1	98.3[illegible]	17.6	99.436	13.2
Total Producers Goods	[illegible]	37.5	[illegible]	42.2	120.446	34.7	137.[illegible]	35.6	255.592	50.0	333.612	52.8
Food Products	29.176	11.3	37.[illegible]	12.5	51.050	15.5	48.593	18.[illegible]	79.203	14.2	147.6[illegible]	21.7
Beverages and Tobacco	7.179	[illegible]	[illegible]	2.6	5.448	2.0	6.644	1.7	12.880	2.3	13.163	1.9
Oils & Fats of animals and vegetable origin	17.718	[illegible]	26.[illegible]	9.[illegible]	26.602	8.1	2[illegible].288	5.3	41.607	7.5	33.579	4.9
Total, food, products, beverages, tobacco, oils and fats	54.073	21.8	71.333	24.1	84.15[illegible]	25.6	85.580	25.0	133.690	24.0	194.432	28.5
Pharmaceuticals, soap Products other toiletteries	14.042	5.4	15.431	5.2	16.156	4.9	19.194	5.0	24.186	4.3	29.637	4.4
Manufactures classified mainly by materials 1/	52.168	19.6	48.155	16.3	58.780	17.9	20.465	6.3	30.524	5.8	38.447	5.7
Private cars and household appliances (est).	13.018	5.[illegible]	13.753	4.4	14.301	4.6	17.466	4.1	27.612	5.1	34.360	5.1
Various Manufactures	24.400	9.4	22.852	7.8	28.338	8.6	32.729	8.5	49.897	9.0	50.325	7.4
Total Consumer Goods other than food, beverages and tobacco	103.028	39.6	99.481	33.7	117.575	35.8	89.854	23.4	127.237	23.2	152.769	22.6
Grand total	259.801	100.0	296.167	100.0	329.171	100.0	383.332	100.0	556.619	100.0	680.813	100.0

Source: Data in Haitian Annual Customs Yearbooks, rearranged for purposes of this table.
World Bank Report No. 1243-HA, 1976 Table 3.8

1/ Assuming that 80% of the value "Assembly Exports" entirely with foreign materials consists of imported manufactures classified mainly by materials; that the corresponding ratio of imports is 40% in the case of small industry exports partially based on imported materials; and that the value of both types of imports, being considered "producers goods," should be subtracted from the entry of "Manufactures classified mainly by materials" when the latter is shown under consumer goods.

Table II.19

Fiscal Operations of the Central Government 1971-1975
(Fiscal Year ending September 30)

(In Millions of Gourdes in Current Prices)

	1971 % OF TOTAL	1971	1972	1973	1974	1975	1975 % OF TOTAL
Total Revenue		263.5	278.8	303.4	334.7	475.4	
Budgetary Revenue	59	155.8	173.5	191.3	205.7	225.0	47
Extrabudgetary Revenue		107.7	105.3	112.1	129.0	250.4	
Other extrabudgetary revenue		0.0	0.0	0.0	0.0	0.0	
Total Expenditure		310.7	326.3	328.7	440.5	666.5	
Budgetary Expenditure	49	152.3	159.9	171.8	176.8	204.3	31
Extrabudgetary Expenditure		120.6	116.6	130.6	167.8	313.4	
Other extrabudgetary expenditure		37.8	49.8	26.3	95.9	148.8	
Overall Surplus or Deficit (Deficit = -)		-47.2	-47.5	-25.3	-105.8	-191.1	
Budgetary		3.5	13.6	19.5	28.9	20.7	
Extrabudgetary		-12.9	-11.3	-18.5	-38.8	-63.0	
Other extragudgetary		-37.8	-49.8	-26.3	-95.9	-148.8	
Financing		47.2	47.5	25.3	105.8	191.1	
Net external borrowing		-6.6	19.1	-15.1	-12.7	63.6	
Net internal borrowing		24.3	5.7	9.3	61.4	8.1	
Grants		29.5	22.7	31.1	57.1	119.4	
Deficit to Revenue Ratio - (%)		-18	-17	-8.3	-32	-40	
Budgetary		2.2	7.8	10	14	9.2	
All extrabudgetary		-47	-58	-40	-104	-85	
Deficit to Expenditure Ratio (%)		-15	-15	-7.7	-24	-29	
Budgetary		2.3	8.5	11	16	10	
All extrabudgetary		-32	-37	-29	-51	-46	
Gross Domestic Products (million of Gourdes)		2,223	2,327	2,837	3,585	4,379	
Deficit to GDP Ratio - (%)		2.1	2.0	0.89	2.95	4.4	

1/ Excludes unaccounted RTA revenues and expenditures handled directly through special BNRH accounts (see table No.

Source: World Bank Document No. 1243-HA, Tables 17 and 5.13

Table II.20

ROLE OF THE PUBLIC INSTITUTIONS IN THE COLLECTION AND EXPENDITURE OF PUBLIC FUNDS*
(in current prices - millions of gourdes)

	1971		1975		Growth 1971-75 in %
	Million Gourdes	%	Million Gourdes	%	
A. Sources					
Total General Govt. Revenue	305	100.0	555	100.0	16.1
i. Accounted for by Ministry of Finance, mainly for budgetary purposes (customs and Internal Revenue)	156	51.1	247	44.5	9.6
ii. Unaccounted for and credited to accounts held by the Central Bank)	107	35.1	228	41.0	23.6
iii. Unaccounted for and credited to account of the Regie du Tabac	42	13.8	80	14.5	17.5
B. Uses					
Total General Govt. Expenditure	353	100.0	746	100.0	20.6
i. Current Budget (current exp.)	152	43.1	204	27.3	7.6
Wages & Salaries	95	26.7	123	16.5	6.7
Materials etc.	28	7.9	41	5.5	10.0
Transfers etc.	29	8.2	40	5.4	8.4
ii. Development Budget (invest. exp.)	81	22.9	214	28.7	27.5
(a) CONADEP	13	3.7	13	1.7	zero
(b) Other Ministries & Agencies and the Central Bank	68	19.3	201	26.9	31.1
iii. Unaccounted for current extra-budgetary expenditures (payment from Central Bank accts.)	78	22.1	248	33.2	33.5
iv. Unaccounted for Regie du Tabac	42	11.9	80	10.7	17.5
C. Deficit	48		191		41.2
D. Memorandum items:					
GDP	2.226		4.386		18.5
Consumption price index	100.0		169.7		14.1
Investment price index	100.0		146.8		10.1

*Source: Table 5 - World Bank Report No. 1243-HA - Current Economic Position and Prospects of Haiti

Table II.21

REVENUES IN PERCENTAGES OF GDP

	1971	1972	1973	1974	1975
GDP	100.0	100.0	100.0	100.0	100.0
Total Revenue 1/	11.8	12.0	10.6	9.3	10.8
Budgetary Revenue 1/	7.0	7.5	6.7	5.7	5.1
Extra-budgetary Revenue 1/	4.9	4.6	4.0	3.6	5.7
Regie du Tabac-Revenue	1.9	2.0	1.9	1.8	1.8
Total Revenue including Regie	13.7	14.0	12.5	11.1	12.6

1/ Central Government.

Source: World Bank Report No. 1243-HA, 1976 - Table 13

Table II.22

GROWTH OF CENTRAL GOVERNMENT REVENUE, 1971-75 IN PERCENTAGES PER ANNUM

	In current terms			In real terms		
	1971-1974	1974-1975	1971-1975	1971-1974	1974-1975	1971-1975
Total Revenue	8.3	42.0	15.9	-4.1	20.4	1.5
Budgetary Revenue	9.7	9.4	9.6	-2.8	-7.3	-4.0
Extra-budgetary Revenue	6.2	94.1	23.5	-5.9	64.6	8.2

Source: World Bank Report No. 1243-HA, 1976 - Table 14

Table II.23

CENTRAL GOVERNMENT DEFICIT AND ITS FINANCING
(in million Gourdes)

	1971	1972	1973	1974	1975	Annual Increments 1972	1973	1974	1975
Total Revenue	263.5	278.8	303.4	334.7	475.4	15.3	24.6	31.3	140.7
Total Expenditure	310.7	326.3	328.7	440.5	666.5	15.6	2.4	111.8	226.0
Deficit	-47.2	-47.5	-25.3	-105.8	-191.8	0.3	-22.2	80.5	85.3
Net External Borrowing	-6.6	19.1	-15.1	-12.7	63.6	25.7	-34.1	2.4	76.3
Net Internal Borrowing	24.3	5.7	9.3	61.4	8.1	-18.6	3.6	52.1	-53.3
Grants	29.5	22.7	31.1	57.1	119.4	-6.8	8.4	26.0	62.3

Source: World Bank Report No. 1243-HA, 1976 - Table 11

Table II.24

Structure of Budgetary Revenues 1971-1975
(Fiscal Year Ending September 30)

(In millions of gourdes in current prices)

	1971	1972	1973	1974	1975
Budgetary Revenue	155.8	173.5	191.3	205.7	225.0
Tax Revenues	148.3	159.3	183.4	194.9	220.9
Customs Revenue	83.4	83.7	89.8	100.9	111.4
Import Duties	61.8	64.8	70.4	76.1	79.3
Coffee Export Taxes	18.2	16.0	15.9	19.8	21.4
Other Export Taxes	1.6	1.1	1.0	1.3	9.5
Other	1.7	1.8	2.5	3.7	1.2
Income Tax	15.8	19.0	27.6	32.8	44.4
Enterprises	12.6	15.5	23.3	27.0	36.5
Individuals	3.2	3.5	4.3	5.8	7.9
Excise Taxes	28.4	35.0	41.1	30.0	28.6
Flour	12.1	13.6	19.1	11.0	7.0
Sugar	7.0	8.3	8.3	5.6	6.9
Cigarettes, Oil and other 1/	9.3	13.1	13.7	13.4	14.7
Other Tax Revenues	20.7	21.6	24.9	31.2	36.5
Identity Cards	2.5	2.7	3.1	3.5	4.2
Mortgage Registry	1.7	2.3	3.3	4.1	5.0
Vehicles	2.2	2.3	3.0	3.4	3.7
Stamps	4.2	4.5	5.5	6.5	7.4
Other	10.1	9.8	10.0	13.7	16.2
Nontax Revenues 2/	7.5	14.2	7.9	11.0	4.1
Extra-budgetary Revenue	107.7	105.3	112.1	129.0	250.4
Total Revenues	263.5	278.8	303.4	334.7	475.4

1/ Includes about 30 taxes
2/ Includes discrepancy between accounts of National Bank and Ministry of Finance
Source: Administration Generale des Contributions
Administration Generale des Douanes
Ministry of Finances, in World Bank Report No. 1243-HA - Table 5.2

Table II.25

Tax Revenues, Composition as a Percentage of Total 1/

Based on current prices

(Fiscal Year Ending September 30)

	1971	1972	1973	1974	1975
Tax Revenues	100.0	100.0	100.0	100.0	100.0
Customs Revenue	56.3	52.6	49.0	51.8	50.5
Import Duties	41.7	40.7	38.4	39.1	35.9
Coffee Export Taxes	12.3	10.1	8.7	10.2	9.7
Other Export Taxes	1.1	0.7	0.6	0.7	4.3
Other	1.2	1.2	1.4	1.9	0.6
Income Tax	10.7	12.0	15.1	16.9	20.1
Enterprises	8.5	9.8	12.7	13.9	16.6
Individuals	2.2	2.2	2.4	3.0	3.6
Excise Taxes	19.2	22.0	22.5	15.4	13.0
Flour	8.2	8.6	10.5	5.7	3.2
Sugar	4.8	5.3	4.6	2.9	3.2
Cigarettes, Oil and Other	6.3	8.3	7.5	6.9	6.7
Other Tax Revenues	14.0	13.6	13.6	16.0	16.6
Identity Cards	1.7	1.7	1.7	1.8	1.9
Mortgage Registry	1.2	1.5	1.8	2.1	2.3
Vehicles	1.5	1.5	1.7	1.8	1.7
Stamps	2.9	2.9	3.0	3.4	3.4
Other	6.9	6.2	5.5	7.1	7.4

1/ Excludes non-tax revenues which account for only about 5% of budgetary revenues.

Source: World Bank Report No. 1243-HA, 1976 - Table 5.3

Table II.26

COMPOSITION OF TAX REVENUES* 1/

(In Percentages)

	1971	1972	1973	1974	1975
Tax Revenue	100.0	100.0	100.0	100.0	100.0
Customs Revenue	56.3	52.6	49.0	51.8	50.5
Import Duties	41.7	40.7	38.4	39.1	35.9
Coffee Export Taxes	12.3	10.1	8.7	10.2	9.7
Other Export Taxes	1.1	0.7	0.6	0.7	4.3
Other	1.2	1.2	1.4	1.9	0.6
Income Tax	10.7	12.0	15.1	16.9	20.1
Enterprises	8.5	9.8	12.7	13.9	16.6
Individuals	2.2	2.2	2.4	3.0	3.6
Excise Taxes	19.2	22.0	22.5	15.4	13.0
Flour	8.2	8.6	10.5	5.7	3.2
Sugar	4.8	5.3	4.6	2.9	3.2
Cigarettes, Oil and Other	6.3	8.3	7.5	6.9	6.7
Other Tax Revenues	14.0	13.6	13.6	16.0	16.6
Identity Cards	1.7	1.7	1.7	1.8	1.9
Mortgage Registry	1.2	1.5	1.8	2.1	2.3
Vehicles	1.5	1.5	1.7	1.8	1.7
Stamps	2.9	2.9	3.0	3.4	3.4
Other	6.9	6.2	5.5	7.1	7.4

1/ Central Government Budgetary Revenue; Source: Ministry of Finance.

*Source: Table 15: World Bank Report No. 1243-HA - Current Economic Position and Prospects of Haiti

Table II.27

Trend of Budgetary Revenues; Percentage Change in

Nominal Terms

(Fiscal Year Ending September 30)

	1971/ 1972	1972/ 1973	1973/ 1974	1974/ 1975
Tax Revenues	7.5	15.2	6.3	13.4
Customs Revenue	0.4	7.3	12.4	10.4
Import Duties	4.9	8.7	8.1	4.2
Coffee Export Taxes	-12.0	-0.6	24.6	8.1
Other Export Taxes	-31.0	-9.0	30.0	730.8
Other	5.9	38.9	48.0	-325.0
Income Tax	20.3	45.3	18.9	35.4
Enterprises	23.1	50.4	15.9	35.2
Individuals	9.4	22.9	34.9	33.9
Excise Taxes	23.3	17.5	-27.0	-4.6
Flour	12.4	40.5	-42.4	-36.3
Sugar	18.6	0.0	-32.5	23.3
Cigarettes, Oil and Others	40.9	4.6	-2.1	9.7
Other Tax Revenues	4.4	15.3	25.3	17.0

Source: World Bank Report No. 1243-HA, 1976 - Table 5.4

Table II.28

TREND OF GOVERNMENT EXPENDITURES
1971 to 1975

At current prices					
	1971		1971-1975	1975	
Expenditures	Amount Millions of Gourdes	% of Total	% change	Amount Millions of Gourdes	% of Total
Budgetary					
Operating	152.3	49	+ 34	204.3	31
Extra-budgetary	158.4	51	+191	462.2	69
Operating	104.5	34	+138	248.3	37
Development	53.9	17	+297	213.9	32
TOTAL	310.7	100	+114	666.5	100

At constant prices					
Budgetary					
Operating	152.3	49	-12	120.4	31
Extra-budgetary	158.4	51	+69	272.3	69
Operating	104.5	34	+40	146.3	37
Development	53.9	17	+134	126.0	32
TOTAL	310.7	100	+26	392.7	100

Source: Adapted from tables in the World Bank Report No. 1243-HA, 1976 No. 5.6, 5.8, 10

Table II.29

GOVERNMENT EXPENDITURES BY FUNCTIONAL CATEGORIES

(millions of gourdes in current prices)

	1971	1972	1973	1974	1975	1971-1975 change
Current Operating Expenditures						
Budgetary	152.3	159.9	171.8	176.8	204.3	+34 %
						%
General Public Services	28.7	29.2	32.3	35.0	45.5	+58 %
Defense	40.3	43.4	40.4	38.7	42.1	+ 4.0 %
Education	16.8	17.3	19.8	21.4	22.9	+ 3.6 %
Health	18.7	19.5	19.7	22.6	26.6	+ 7.9 %
Community and Social Services	3.1	3.1	3.2	3.4	3.7	+ 0.19%
Economic Services	22.1	23.6	24.3	26.1	29.8	+34 %
Unallocable Expenditures	0.6	0.9	0.9	3.0	29.4	--
Other	22.0	22.9	31.2	26.6	4.3	-80 %
Extra-budgetary Operating Expenses	104.5	104.3	91.8	151.8	248.3	+138 %
Total Current Operating Expenses	256.8	264.2	263.6	328.6	452.6	+76 %
Development Expenditures (extra-budgetary 1/)	53.9	62.1	65.1	111.9	213.9	+297 %
Total Expenditures	310.7	326.3	328.7	440.5	666.5	+114 %
Annual Change	--	+5.0%	+0.73%	+34%	+51%	

1/ For 1971, 1972, 1973, the World Bank assumed that the Central Government financed 2/3 of the public sector investment. For 1974 and 1975 available data was used.

Source: adapted from tables in World Bank Report 1243-HA Nos. 5.6 and 10

Table II.30

GOVERNMENT EXPENDITURES BY FUNCTIONAL CATEGORIES

(Adjusted to constant prices)

(Millions of Gourdes in constant prices)

	1971	1972	1973	1974	1975	1971-1975 change
Current Operating Expenditures						
Budgetary	152.3	153.3	137.2	122.9	120.4	-12%
General Public Services	28.7	28.1	25.8	24.4	26.8	-15%
Defense	40.3	41.6	32.3	26.9	24.8	-33%
Education	16.8	16.6	15.8	14.9	13.5	-19%
Health	18.7	18.7	15.8	15.7	15.7	-16%
Community and Social Services	3.1	3.0	2.5	2.3	2.2	-29%
Economic Services	22.1	22.6	19.4	18.1	17.6	-20%
Unallocable Expenditures	0.6	0.8	0.7	2.1	17.3	--
Other	22.0	21.9	24.9	18.5	2.5	-88%
Extra-budgetary Operating Expenses	104.5	100.0	73.3	105.5	146.3	+ 40%
Total Current Operating Expenses	256.8	253.3	210.5	228.3	266.7	+ 3.8%
Development Expenditures (extra-budgetary)	53.9	59.5	52.0	77.8	126.0	+ 134%
Total Expenditures	310.7	312.8	262.5	306.1	392.7	+ 26%
Annual Real Change	--	+ 0.67%	-16%	+ 17%	+ 28%	
Deflator	100.0	104.3	125.2	143.9	169.7	--

Source: Adapted from tables in the World Bank Report No. 1243-HA Nos 5.8 and 10

Table II.31

Public Development Expenditures by Sectors
(in millions of Gourdes)

Sector	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1972-73/1974-75 Annual Average	Percentage share of: Development Expenditures	Percentage share of: Investment Expenditures
1. Power 1/	6.5	14.5	31.9	24.4	13.4	14.1	13.3	13.6	7.4	
Investment					13.1	13.7	12.4	13.1	7.2	9.0
Technical assistance					0.3	0.4	0.9	0.5	0.2	
2. Transports	12.0	7.6	8.5	13.6	8.1	40.2	138.8	62.4	34.1	
Investment					2.8	28.7	136.7	56.1	30.6	37.9
Technical assistance					5.3	11.5	2.1	6.3	3.5	
3. Telecommunications	7.7	4.4	3.0	6.8	13.3	30.3	29.3	24.3	13.3	
Investment					12.7	30.0	29.0	23.9	13.0	16.1
Technical assistance					0.6	0.3	0.3	0.4	0.3	
4. Agriculture	8.4	9.1	9.9	8.1	12.1	22.4	26.7	20.4	11.1	
Investment					9.7	13.6	15.5	12.9	7.0	8.7
Technical assistance					2.4	8.8	11.2	7.5	4.1	
5. Industry	1.0	0.8	4.3	4.9	1.5	4.4	10.3	5.4	2.9	
Investment					0.8	3.3	10.1	4.7	2.6	3.2
Technical assistance					0.7	1.1	0.2	0.7	0.3	
6. Tourism	1.8	0.7	0.8	0.6	0.9	1.2	1.8	1.3	0.7	
Investment					0.6	0.9	0.3	0.6	0.3	0.4
Technical assistance					0.3	0.3	1.5	0.7	0.4	
7. Water Supply	6.3	1.0	1.3	2.0	1.4	1.7	5.5	2.9	1.6	
Investment					1.0	1.2	4.5	2.2	1.2	1.5
Technical assistance					0.4	0.5	1.0	0.7	0.4	
8. Education	2.4	3.0	2.2	2.3	9.2	6.9	21.2	12.4	6.8	
Investment					4.0	4.7	14.2	7.6	4.1	5.1
Technical assistance					5.2	2.2	7.0	4.8	2.7	
9. Health	10.5	8.6	9.3	13.0	17.1	12.4	16.9	15.5	8.5	
Investment					15.9	10.4	15.2	13.8	7.5	9.3
Technical assistance					1.2	2.0	1.7	1.7	1.0	
10. Community Development	0.7	0.7	0.9	9.7	9.2	20.1	10.0	13.1	7.1	8.8
11. Preinvestments, studies & Research	5.3	7.0	8.7	7.7	11.5	9.5	12.5	11.2	6.1	
12. Housing	-	-	-	-	-	-	2.1	0.7	0.4	
TOTAL	62.6	57.4	80.8	93.1	97.7	163.2	288.4	183.2	100.0	
(of which investment)	(42.0)	(34.0)	(55.0)	(58.0)	(69.8)	(126.6)	(247.7)	(148.0)	(80.7)	100.0

1/ Excludes amortization payments to GIE.

Source: CONADEP, in World Bank Document No. 1243-HA, 1976 - Table 5.14

Note: This table provides a good distribution of development expenditures by sectors. Annual totals are somewhat higher than those in textual material. Presumably different sources and methods of compilation may have been used.

Table II.32

INVESTMENT EXPENDITURES 1971 - 1975

Sectors	Actual Investment: Millions of current Gourdes	Actual Investment: Percent of Total	Degree of Execution of Planned Investment: Weighted	Degree of Execution of Planned Investment: Average 1/ of annual Deviations
Goods-producing Sectors	109.9	15.2	51.4	51.8
Agriculture	79.2	11.0	52.7	48.4
Industry	25.4	3.5	45.4	44.6
Tourism	5.3	0.7	69.7	67.2
Infrastructure	399.5	55.3	104.1	117.1
Power	97.1	13.4	129.5	134.1
Transport	209.2	29.0	104.3	98.4
Telecommunication	82.7	11.4	148.2	126.9
Water	10.5	1.4	20.2	22.8
Social Sectors	162.5	22.5	87.2	89.6
Education	41.8	5.8	135.7	111.1
Health	68.7	9.5	70.6	77.9
Community Development	49.9	5.9	91.9	84.6
Housing	2.1	0.3	53.8	98.6
Preinvestment Studies	49.9	5.9	83.7	55.3
Total investment	721.8	100.0	85.6	83.5

1/ This method aims to eliminate the influence of inflation on results.

Source: World Bank Report No. 1243-HA, 1976 - Table 6

Table II.33

TREND OF CIVIL SERVICE SALARIES, 1971-1975 1/
(in current and constant prices, 1971-1975

	Number of Civil Servants	Wages and Salaries	Average salary in current prices	Price Index	Average salary in constant prices	Percent Increase or Decrease
1971	16,180	70,499,000	4,357.2	100.0	4,357.2	--
1972	16,606	70,908.000	4,270.0	104.3	4,094.0	-6.0
1973	16,499	83,655,100	5,070.0	125.2	4,049.0	-1.0
1974	16,792	85,823,100	5,111.0	143.9	3,551.8	-12.0
1975 2/	16,792	92,786,300	5,525.0	169.7	3,256.1	-8.0

1/ Excluding the Armed Forces of Haiti.
2/ For 1975 number of personnel assumed to be at 1974 level.

Source: Ministry of Finance, in World Bank Document 1243-HA, 1976 - Table 5.16

Table II.34

FINANCING OF PUBLIC SECTOR DEFICIT
(in US$ million)

				Percentage Shares		
	1974	1975	1974-75	1974	1975	Annual Average 1974-75
Development Expenditures 1/	32.6	57.5	45.2	100.0	100.0	100.0
Financing	32.6	57.5	45.2	100.0	100.0	100.0
Savings	4.0	6.6	5.3	12.4	11.4	11.7
Net internal borrowing 2/	19.9	9.2	14.6	60.9	16.0	32.3
(monetary authorities)	(16.3)	(8.8)	(12.6)	(50.0)	(15.3)	(27.9)
(private banks)	(3.8)	(-1.0)	(1.4)	(11.6)	(-1.7)	(3.1)
(private sector)	(-0.2)	(1.4)	(0.6)	(-0.7)	(2.4)	(1.3)
Net Foreign disbursements	-2.7	17.6	7.5	-8.3	30.5	16.6
(Gross disbursements)	(0.4)	(21.0)	(10.7)	(1.2)	(36.4)	(23.7)
(Amortization)	(3.1)	(3.4)	(3.2)	(9.5)	(5.9)	(7.1)
Foreign Grants	11.4	23.7	17.5	35.0	41.1	38.7
Statistical discrepancy	-	0.4	0.3	-	1.0	0.7

1/ Includes Technical Assistance
2/ Excludes IDB and IDA credits channelled through the BNRH to the public sector

Source: BNRH and consolidated public sector accounts (includes Central Government, CAMEP, TELECO, EDH, Administration Portuaire) in World Bank Report No. 1243-HA - Table 24

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