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FOOD AND AGRICULTURE SECTOR STRATEGY FOR HAITI

FINAL REPORT

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Prepared for the U.S. Agency for International Development

Port-au-Prince, Haiti

February, 1982

FOREWORD

USAID/Haiti would like to offer to the development community this unique, practical study of food needs and agricultural potential in one of the world's least-developed, most nutritionally-deficient nations. We do not propose it as a model for all others as it was an initiative tailored to our peculiar circumstances: Haiti is its own case. But we do lay claim to having mobilized for this purpose an outstanding multidisciplinary team of experts on agricultural development. Their methodology merits consideration for similar country cases. The product speaks for the participants.

The report also represents the first earnest of President Ronald Reagan's directive to the United States Agency for International Development following the Cancun Conference. At that time the President said that we must seek practical solutions to the problems of food security and agricultural development in the developing nations, and he charged U.S. AID to dispatch task forces to assist in that effort.

The leaders of the task force to Haiti merit special recognition. Haiti and the Haitian authorities want to thank Dr. Norman Nicholson and Dr. John Eriksson, both of AID/Washington, for their exceptional leadership, their insight and their careful attention to detail as well as to broad development issues. They and their associates in the enterprise have laid before us an analysis of the problems and the opportunities in such a way as to compel a fresh strategic approach to the sector and to demand action with the least possible delay.

The members of the strategy team would, for their part, want us to acknowledge the dedicated and able professionals they worked with on the Haitian side of this equation. The team received unusual openness, collaboration and hospitality from their Haitian counterparts, the Haitian people and many national leaders of notable ability and talent both in the Government and in the private sector.

The record should also show that the US Country Mission in Haiti found in this group of outside experts an unusual sense of purpose, a readiness to discover truth outside imported models of development and to adapt their own expertise to a nation that is unique in its social, natural andd political heritage. In development circles it is easy to forget that humans in their evolutionary climb have not gained new heights of grace by meeting externally imposed models of behavior. The rise of humankind, in various settings, has been a more rustic response to opportunity and necessity --- no matter how-little-it-is and in-what-form --- and then using the power of the human intellect and a determined faith to take it from there. This team understood that reality and gave us a strategy tailored to where we are in Haiti. For this, they enjoy our profound thanks and praise.

The report, in its present form, however, is not an official document of the USAID Mission and does not represent a program policy statement of our Mission nor an official position of the United States Government for its U.S. bilateral development program for Haiti. At this stage it is offered as an insightful, independent, analytical report to stimulate a searching dialogue on the Food and Agricultural Sector in Haitian development.

The USAID Mission will welcome observations on this report, particularly from officials of the Government of Haiti, the Haitian private sector, and from other donor organizations.

Harlan H. Hobgood
Director
USAID Mission to Haiti

ACRONYMS

ADIH -- Association of Haitian Industrialists

AIHE -- Association of Haitian Businessmen

CIAT -- Centro Internacional de la Agricultura Tropical (International Center for Tropical Agriculture, Cali, Colombia)

CIDA -- Canadian International Development Agency

CIMMYT -- Centro Internacional de Mejoramiento de Maiz y Trigo (International Center for Maize and Wheat Improvement, Mexico)

DARNDNR -- (Ministry of Agriculture, GOH)

DRIPP -- Developpement Regional Intégré de Petit Goave & Petit Trou de Nippes.

FAC -- Fond d'aide et de Cooperation.

FDI/IDF -- Fond de Developpement Industriel (Industrial Development Fund) (GOH)

GOH -- Government of Haiti

HACHO -- Harmonisation de l'Action des Communautés Haitiennes Organisées (formerly the Haitian-American Community Help Organization).

HACHCO -- Haitian Chamber of Commerce

HAMCHAM -- Haitian-American Chamber of Commerce

HDF -- Haitian Development Foundation

IBRD -- International Bank for Reconstruction and Development

ICRISAT -- International Center for Research ... Sèmi-Arid Tropics

IDB/BID -- Inter-American Development Bank/Banque de Developpement Inter-Americain

IDAI -- Institute de Developpement Agricole et Industriel (Institute for Agricultural and Industrial Development) (GOH)

IITA -- International Institute for Tropical Agriculture (Nigeria)

IMF -- International Monetary Fund

MASI --Multi National Agribusiness System Inc.

ODN -- Organisation pour le Developpement du Nord (Office for Development of the North) (GOH)

ODPG -- Organisation de Developpement de la Plaine des Gonaives (Office for Development of the Plain of Gonaives) (GOH)

ODVA -- Organisation de Développement de la Vallée de l'Artibonite (Office for Development of the Artibonite Valley) (GOH)

ONAPI -- Office National pour la Promotion d'Investissement (National Office for Investment Promotion) (GOH)

Optional New Regional Organizations for the Southwest (Chapter V)

ODAM -- Organisme pour le Developpement Agricolaire Meridional

ODRM -- Organisme de Developpement Rural Meridional (Organization for Rural Meridional Development)

ICRD -- Interministerial Council for Rural Development

RPC -- Regional Planning Council

RCC -- Regional Community Council

FOOD AND AGRICULTURE SECTOR STRATEGY FOR HAITI
Forward and Transmittal by USAID/Haiti Mission Director

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FOOD AND AGRICULTURE SECTOR STRATEGY FOR HAITI

Executive Summary

Prepared for the U.S. Agency for International Development
Port-au-Prince, Haiti

December 23, 1981

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EXECUTIVE SUMMARY

In September 1981 the Director of the USAID Mission to Haiti requested that a multi-disciplinary team of experts be recruited to formulate options and recommendations for a food and agricultural development strategy for the U.S. economic assistance program in Haiti. The strategy was to focus on the next five years, 1982-86, but was also to consider the longer-run implications for U.S. assistance and Haitian food and agricultural development prospects to the year 2000.

From November 28 to December 23, 1981, a 14 member team drawn from universities, consulting firms, international institutions and A.I.D. met and worked with Government of Haiti (GOH) officials, Haitian and foreign private business representatives, USAID/Haiti staff and other international aid donors to analyze food and agricultural development constraints and potentials in Haiti and to formulate strategic program options and recommendations. This constitutes the Executive Summary of the team's report. The team wishes to express its appreciation to Government officials and USAID staff as well as to private sector and donor representatives who shared their time and expertise. Responsibility for analysis and conclusions rests with the team, however. A list of the team members and leaders will be found at the end of the report.

The Executive Summary will focus on the major conclusions and recommendations of the main sections of the report: policy and fiscal framework; agricultural production and marketing; private enterprise role; spatial characteristics; institutional options; and role of PL 480 food aid.

The setting for these recommendations is that of a serious food and agricultural crisis, including severe and possibly worsening malnutrition. There is a cumulative retrogression in Haitian agriculture caused by a combination of population growth against limited arable land and an eroding natural resource base, static peasant technology, unsecured land tenure arrangments, stagnant capital investment, massive rural-to-urban migration and a long history of policy and budgetary neglect of agriculture. If these

causal factors are not addressed by the Government of Haiti with the supportive, but vital, help of external donors in a far more concerted manner than in the past, Haiti's achievement of food and agricultural self-reliance will not only be delayed well beyond the current generation, but tragic consequences in terms of hunger, death and disruption of a Malthusian nature may arise for the current generation.

The strategy team believes, however, that the implementation of sound GOH policies that assure adequate production incentives and efficient resource allocation can with the responsive help of external donors and the increased efforts of Haitian and foreign private enterprise and voluntary organizations, reverse the retrogressive process and eventually achieve food security for the entire Haitian population.

The team proposes the following overall objective for U.S. economic assistance for food and agricultural development in Haiti:

-- to assist Haiti promote sustained and sustainable (i.e., ecologically sound) growth in the productivity, employment and incomes of peasants and the poor majority of the rural and urban population, leading ultimately to food security for the entire population.

Food security implies sufficient agricultural production and generation of employment and incomes so that families can purchase or otherwise obtain the food they need for nutritional adequacy. For Haiti this will not mean "food self-sufficiency" in a narrow sense, but food and agricultural self-reliance; that is, the capacity to satisfy the population's food requirements through a combination of production for domestic consumption and importation of food at commercial terms paid from export earnings. Adequate purchasing power will require sectorally-balanced, labor-intensive growth in both agriculture and industry, including re-export assembly industry.

The goal of the food and agricultural development assistance program recommended by the team may be summarized as follows:

Over the Next Five Years

-- Significant change in policy environment for small farmer production and for agro-industrial and other private enterprise that encourages increased investment, production, employment and incomes, and a more ecologically sound pattern of land use.

-- Development of technological packages adapted to Haitian peasant systems capable of producing substantial yield increases in grains, pulses and tree crops together with the institutional capacity to deliver these packages intensively to key selected regions.

-- Placement in the field of competent staff with adequate support, resulting in constructive interaction with peasants and expanding dissemination and utilization of improved technological packages.

-- Improvement in financing facilities and investment and market information that stimulate private enterprise growth.

-- Additional construction of rural roads and improvement of maintenance capacity.

-- Substantial expansion and increased effectiveness and utilization of Haiti's rural health system and family planning programs in accordance with a clear set of objectives and strategy.

-- Control to acceptable levels of malaria incidence.

-- Support for key policy reforms, improvements in the efficiency of food storage and distribution systems, and significant additional foreign exchange saving and additional local currency generation to provide counterpart for the above and related efforts from the PL 480 food aid sales program (Title I and/or Title III).

-- Improved nutritional impact from a continued PL 480 Title II food aid donation program.

-- Establishment (or strengthening) and effective functioning of an institution or institutions that develop and disseminate technical packages to peasants, build roads and irrigation systems, re-forest watersheds, etc.

-- Through a combination of A.I.D and country efforts, including the GOH, PVOs, private enterprise and local peasant organizations, significant, measurable progress at the end of five years in selected areas in increasing productivity and incomes among the rural and urban poor, improving health and nutritional status, checking erosion of the natural resource base, and increased foreign exchange earnings.

Between 1986-2000

-- Expansion of many of the above mentioned policy, institutional development, program and private enterprise efforts.

-- Firmly established and ever widening productivity and income growth, nutritional and health improvement, and reduced environmental degradation on a national scale.

-- Significant decline in the overall rate of population growth.

-- Phasing down of PL 480 food aid, as domestic food production and commercial food import capacity expand.

Chapter I -- Policy and Fiscal Framework

Improvement in the Government's economic and fiscal policies, while not sufficient in itself, is nonetheless fundamental to reversing the retrogression in the Haitian food and agricultural sector. There are important short and long-run dimensions to the economic policy framework. The Government has made significant progress in pursuing actions intended to resolve the current short-run economic crisis, although it is still too early to conclude that the crisis has been resolved. Decisions that should have a positive impact on long-run food and agricultural development have also been taken and additional measures are under consideration. Consistent and vigorous implementation of these measures is essential, however. Additional measures need to be undertaken. Fulfillment of these longer-term requirements is even more important to sustained development than the recent short-term progress.

The long-term policy requirements relate both to revenues and expenditures of the public sector. They also directly affect private sector investment and production incentives. Major conclusions and recommendations of the team are:

1. -- It is imperative that the GOH pursue measures already announced (in the Presidential Message of August 8, 1981) or initiated to increase revenues and public savings.

2. -- Additional revenues must be mobilized in ways that are consistent with development objectives. Production and investment incentives should not be discouraged and revenue raising should not increase the relative burden on those with low ability to pay. Indeed, the tax structure should be changed so as to encourage production and shift the burden to those with greater ability to pay.

3. -- The relatively heavy tax burden on the numerous peasant coffee producers (who along with family members constitute more than a quarter of Haiti's population) should be reduced, both on production and equity grounds. The current tax rate might be halved, from 25 percent to 12.5 percent of the export price. The short-run revenue loss would in part be offset by reduction in smuggling to the Dominican Republic. Remaining loss could be covered by increased income and rental taxes as well as

implementation of ad valorem duties and sales taxes with higher rates on non-essential and luxury items. In the longer term increased production should generate sufficient revenues to more than make up for the short run revenue loss. Complementary improvements in coffee research, extension and marketing are also required (see Chapter II).

4. -- Current high taxes on sugar, essential oils, cotton and other potential agricultural exports should be either reduced or eliminated, and taxes on new or expanded export product lines avoided.

5. -- Tax incentives to investment should not be unnecessarily generous, thus depriving the government of revenue. A seven to eight year tax holiday in all regions (compared to the current exemption of 15 years for regions outside Port-au-Prince) would appear ample.

6. -- Excessive and prolonged protection of local industry encourages monopoly and waste, and should be avoided or phased out. Potential competitors are disadvantaged and consumers are indirectly taxed and penalized by high protection.

There has been insufficient attention to the establishment of budget priorities, to actual as opposed to planned expenditures and to project implementation capacity.

7. -- The relatively high development expenditure shares slated for agriculture in the 1981-86 Five Year Plan need to be defended and implemented.

8. -- The share of recurrent or operating expenditures intended for agriculture should be increased.

9. -- Public sector project preparation should be improved through strengthened Ministry of Plan staff and line Ministry planning staffs. Shadow-pricing should be employed to permit ranking of project proposals in terms of their benefit to the economy as a whole. This ranking should determine public expenditure allocation.

10. -- Recommendations on administrative reform, including questions of staffing and decentralization, now being considered by the GOH should be accepted and implemented. Their adoption is critical to improved implementation capacity.

If the Government's initial positive performance in improving economic and administrative management is maintained, Haiti's food and agricultural development prospects could markedly improve. But this will only be possible if a substantial increase in Official Development Assistance (ODA) from bilateral and multi-lateral donors is made available to support and complement the Government's major policy changes and related efforts.

11. -- Even under relatively optimistic assumptions regarding improvement in economic and resource allocation policies, projections indicate that U.S. and other donor assistance would have to increase by 1986 to an annual level almost seventy percent higher than in 1981 in order to produce agricultural growth of modest proportions (2.5 percent a year). (Based on World Bank projections.)

Chapter II -- Agricultural Production and Marketing

For many years the agricultural sector in Haiti has been characterized by slow growth in total production and actual decreases in production per capita. Urban areas have become increasingly dependent on wheat imports, which periodically have to be supplemented with imports of other food grains. Recent increases in the price of most domestically produced food crops seem to be having some impact on food crop production, but available data are highly unreliable and sometimes contradictory.

The lack of dynamism in Haiti's agricultural sector arises from a complex set of interrelated technical and institutional factors: (1) low yielding cropping systems; (2) increasing degradation of the soil and water resource base; (3) high field and post-harvest crop losses; (4) unsecured land tenure arrangments; (5) weak institutional and financial support of the agricultural sector; (6) poorly developed infrastructure in rural areas; and (7) socio-economic policies which distort and greatly reduce production incentives at the farm level; (8) sustained high levels of fertility/population growth which offset any gains in production and income. The net result of these factors has been a rapid shift in the country's population toward urban areas, especially Port-au-Prince, and a dangerously low and possibly declining level of nutritional well-being in rural and low-income urban areas.

It is also the case, however, that the Haitian rural economy has traditionally been highly monetized and that the Haitian farmer has responded quickly to economic opportunity, including new technology, when there were adequate incentives and supportive public investments. The evolution of a system of incentives and technical packages that will encourage agricultural production will require a better understanding of how the farmer operates his farm than currently exists. It will also be necessary to adjust to the ecological diversity encountered in Haiti. This implies a substantial shift

in the focus of activity from Ministry of Agriculture headquarters at Damien to the field and the adoption of a farming systems approach to agricultural research. Increased public investments in the rural areas and in agriculture in particular must accompany this research and extension effort.

Of particular importance is the need to encourage through pricing policy and supporting infrastructure and services a more balanced pattern of production that would increase planting of tree crops on steeper slopes and keep annual food crops in areas where their cultivation is less likely to contribute to erosion. With adequate incentives, research, and public investment it seems clear that yields of many annual and perennial crops could be increased two to three times over current practice.

-- rice: Existing production trends indicate that Haiti should be self-sufficient in rice by 1985. There appears to be no reason why, with improved varieties and adequate extension efforts, yields in the Artibonite Valley cannot be increased from 2.5 ton/ha. to 4 ton/ha. Current domestic production is 66,500 (1980-1981) and imports 23,600 metric tons.

-- maize: Current yields of 1,000 kg/ha. could be raised to 3,000 kg/ha. when improved local varieties come on stream within the next two to three years. 1980 production was about 260,000 metric tons accounting for 35-40% of cereal consumption.

-- sorghum: Production trends are down and no relief can be expected in the short term due to the lack of improved varieties. In 1980 production was estimated at 120,000 metric tons, or about 25% of cereal consumption.

These represent the major grain crops in Haiti and although it seems unlikely that increased production will entirely halt the shift in demand toward imported wheat (20% of cereal consumption in 1981 and growing at 15% a year), improved availability of rice and maize will have a significant impact on levels of food consumption and nutrition. The team was also optimistic about the potential for production increases in root crops, bananas, pulses, and peanuts.

Industrial crops also offer considerable potential. In these crops the constraints appear to be centered on marketing problems (e.g., transport).

-- coffee: Coffee occupies 17% of all cultivated land in Haiti and constitutes a major small farmer cash crop, but yields have remained virtually stagnant at levels half of those attained in the Dominican Republic. An improved technical package would have a significant impact on yields and income but not without important changes in tax policy and the structure of coffee marketing.

The picture painted for coffee is replicated in other cash crops such as cocoa, sugar, essential oils and cotton. The lack of public investment in research, disincentive policies and a tendency toward monopsonistic marketing practices in any major export crop combine to produce stagnant production and severely limit the potential for improved farm income. It is particularly important that efforts to stimulate such industrial cash crops be balanced, however, by efforts to improve the productivity of food crops with which they may compete for land in order to avoid potentially harmful nutritional effects.

Livestock is an important component of the Haitian farming system but lack of forage/fodder constrains increased production. It should also be noted that in Haiti, as elsewhere, ruminant livestock (e.g., goats) can contribute to erosion problems. There is, however, potential for improvement and better management of the livestock component of farming systems. In addition, the surplus capacity in the new feed-mill suggests the potential for experimentation with a cooperative, integrated arrangement between the mill and small farmers with 50-100 bird flocks.

The marketing system for grains and vegetables is labor intensive, highly competitive, and relatively efficient -- allowing for high transportation costs. The considerable variation in farmgate prices over the year combined with the fact that many farmers both sell and buy grain at different seasons, indicates the utility of investment in on-farm or community level storage facilities.

The major problems in marketing occur in coffee. The data available indicate that the margins of exporters are considerably higher than previously reported -- but certainly the returns to farmers do not exceed 50% of FOB price. In addition, the absolute margins of the exporters have grown with increasing world prices since 1977 (the absolute margins of intermediaries have increased an average 275% between 1971-76 to 1977-81). The evidence of monopsonistic collusion among exporters is clear and this considerably dampens incentives to coffee producers. In addition, high government coffee taxes, high for the region and in comparison with those in the Dominican Republic, are not matched by any government attempt to stabilize prices for the coffee producer, any signficant government investment in rural areas, or a supportive research and extension program. Thus, the tax structure combines with the monoposonistic practices of exporters to reduce incentives (also the case in sugar and cotton). The effect of these disincentives go beyond stagnant coffee production and, as will be indicated below, impact on the erosion problem.

The problems of erosion dominate consideration of an agricultural strategy for Haiti. Over 60% of Haitian land has a slope exceeding 30%. An important contributing factor to this erosion has been the replacement of tree crops with grain on these hillsides due to disincentives encountered by the farmer in such crops as coffee and cocoa. An adequate response to the erosion problem must lie in a strategy that combines improved incentives with farming systems research which provides superior techniques of integrating tree crop, grain, livestock, and other crops in a profitable and ecologically viable system. Any such strategy will also have to deal with the immediate risks, loss of income, and nutritional problems encountered by the farmer in restoring a substantial portion of his hillside land to tree crops. Food for work programs are an obvious method of accomplishing this but the team warns of the potential effect of setting wage levels at the national minimum wage level for rural works, fearing that public works will begin to compete for essential agricultural labor. Rural works wage rates should be set rather at levels close to those being paid to agricultural labor in the local labor market.

For the accomplishment of this farming systems approach the existing extenson system is ill prepared, with little improved technology to extend, inadequate incentives to staff, excessive concentration of staff in Damien, and centralization of decision making. A long term commitment to the improvement and decentralization of the research and extension system is required.

The team also addressed problems encountered in land tenure, irrigation, grain storage, farm to market roads, credit, and agricultural research.

General Recommendations

1. -- The focus of A.I.D.'s efforts in agriculture should be at the building the support system at the level of the Agricultural District to sustain watershed level projects. This focus will be consistent with the need to adapt technology and support to the ecology of the region, to move decision making and services closer to the farmer to assure adequate responsiveness, and with the criterion of "manageability" inherent in the "field project" approach recommended in Chapter 5.

2. -- A.I.D.'s approach should be a farm-oriented, farming systems methodology that recognizes the complexity of the small farm enterprise, the interactions of environmental, economic and agronomic considerations, and the requirements of assuring the farmer adequate food security in any evolution to an improved cropping strategy.

3. -- Continuation of A.I.D. support for building a research capacity at Damien and the expansion of that A.I.D. supported research effort to include key crops other than grains. The frequency with which the lack of an appropriate improved crop variety appears as a factor in explaining low productivity makes this a high priority.

4. -- A condition for increased or continued A.I.D. support in the agricultural sector should be policy reforms which substantially reduce coffee taxes.

5. -- A long term effort to stimulate coffee (and other cash crop) cooperatives in order to introduce greater competitiveness in export markets is essential to the long term improvement of farm incomes in Haiti. This is an undertaking that is particularly well suited to either PVO or agri-business collaboration.

6. -- Improvement in the extension service is required. The following specific goals are recommended:

-- increase modestly the operational resources available to the District Agronomes and also their operational discretion, and focus donor assistance increasingly at the district/project level.

-- develop and implement an extension management system.

-- develop site specific district level training programs for extension agents.

Specific Recommendations

(a) -- Research should be commissioned to explore in some depth the cross elasticity of demand for wheat with respect to maize so that policy recommendations can be made with some confidence regarding the appropriate level for wheat taxes.

(b) -- Particular attention should be given to experimentation with peanut production in Haiti as a source of vegetable oil and as a supply for the new oilseed plant.

(c) -- The mission may wish to experiment with cooperative arrangements in poultry production between the feed-mill and farmers with small 50-100 bird flocks.

(d) -- Although more analysis may be required it appears that A.I.D. should experiment with payments at the prevailing agricultural wage rate in food for work or reforestation projects rather than at the established minimum wage.

(e) -- The difficulty of establishing tenurial rights in Haiti appears to represent a strong disincentive to investments in significant soil conservation practices (e.g., terracing). The cost of a cadaster is excessive, however, except in such areas as the irrigated perimeters of the Artibonite Valley. A.I.D. should explore alternative approaches for dealing with this problem.

(f) -- On-field and post-harvest grain losses are substantial. The team recommends extension of the existing research results of the Vertebrate Pest Control project in Haiti, which, if adopted, could result in on-field savings of 10% in rice and 20% in maize. Post-harvest losses estimated between 10-40% have been reported. Efforts in support of the FAO farm-storage activities are encouraged. (See PL 480 section below for further discussion.)

(g) -- Farm to market roads continue to be high priority investments in Haiti. Care should be taken, however, to integrate such infrastructure efforts with nutritional monitoring (as labor and crop patterns shift), and improvements in land tenure (as land values rise).

(h) -- A.I.D. should strongly support the proposal that the BCA (Bureau of Agricultural Credit) absorb the small farmer credit program of IDAI (Institute of Agricultural and Industrial Development) and might provide support in the rural credit area to assist in reducing managment costs and inefficiencies and in improving savings mobilization. A.I.D. support to the agricultural research program at Damien should be continued and in Phase II of the Agricultural Development Support Project, an entomologist, a plant pathologist, a microbiologist, and a plant physiologist are required.

Chapter III -- Private Enterprise Role

Dynamic growth of private enterprise -- both agricultural and industrial -- is fundamental to the accomplishment of the objectives envisioned by the strategy team: sustained and sustainable increases in the productivity and incomes of Haitian peasants and urban poor leading to food and agricultural self-reliance and adequate levels of nutrition. Private enterprise, private voluntary organizations and public sector institutions play vital complementary roles in sustained development.

The strategy team focused particularly on traditional and newer agro-industries (sugar, sisal, cotton, essential oils, wheat, flour-milling, tabacco, alcoholic beverages, pasta, cocoa, beef, dairy and leather products, rice milling, canning and tomato processing, vinegar and edible oils), on small-scale enterprise (up to 50 employees per firm) in all sectors, and on labor-intensive assembly export industry. The latter, after spectacular growth over the last decade, now provides a livelihood for up to 25 percent of the 1 million population of metropolitan Port-au-Prince. The continued growth of the re-export industry is crucial to the employment and income generation objectives of the strategy. Its workforce constitutes a significant source of demand for agricultural and agro-industrial products.

Private enterprise in these areas contributes value added to agriculture, to employment and incomes-off-as well as on the farm, to a better market for agricultural products, to foreign exchange savings and earnings, and to a positive multiplier effect throughout the economy. Private entrepreneurship is a source of capital and innovation as well as efficiency in the use of scarce resources. A healthy, expanding domestic private secto is also essential to attracting foreign private investment.

Haitian private entrepreneurship is moving into a new stage that requires increasing amounts of institutional credit, access to improved technology and management expertise. The role of the Government of Haiti is critical in assisting private enterprise growth during this transition phase, especially the growth of relatively labor-intensive, small and medium-size enterprise.

Haitian and foreign private enterprise representatives interviewed by the strategy team identified three major inter-related constraints to expansion: information, financing and government policies and procedures.

The team's recommendations also focus on these three areas:

A. -- Information. This included lack of knowldege by Haitian business people of international markets, of alternative improved technologies, of ways of developing and testing new ideas, and of foreign contacts who might assist. Potential U.S. investors lack sufficient information on how to go about investing and doing business in Haiti.

Recommendations:

1. -- Creation of a revolving "pre-investment study fund" exclusively for the private sector with A.I.D. and other donor initial support. Could be located in the proposed private sector Development Finance Corporation. Would permit investors to hire ONAPI (National Office of Investment Promotion) or private consulting firms to study project ideas and to prepare them for financing.

2. -- Increase private sector participation on ONAPI Board of Directors; strengthen ONAPI linkages with the national Chamber of Commerce, the Haitian-American Chamber of Commerce (HAMCHAM), Association of Haitian Industrialists (ADIH), Inter-American Businessmen's Association (AIHE), Development Finance Company (if created), State of Florida, private consulting firms, and other private sector groups.

3. -- Encourage new capacity for undertaking pre-feasibility and feasibility studies, such as private consulting firms and inclusion of Haiti in A.I.D. Latin American Regional Project Identification Development Assistance Program (PIDAP) and IFC Caribbean Investment Promotion Program.

4. -- Establish joint Haitian-U.S. private sector promotion board with representation both in Haiti and U.S.

5. -- Place full-time representative of State of Florida in USAID Haiti.

6. -- A.I.D. support for business informational and promotional materials, such as, "Doing Business in Haiti" and "Investment Opportunities in Haiti."

7. -- Establish Haitian-American Agribusiness Council with Haitian and American membership. Could be chaired by USAID-Florida representative. A.I.D. to fund travel and meeting expenses.

8. -- Draw on specialized U.S. business expertise for advice on technical and U.S. market viability assessments for a specific product area.

B. -- Financing. Serious lack of medium-term (2 to 4 or 5 years) and long-term (5 to 10 years) credit.

Recommendations:

1. -- Revive plan to create Development Finance Company to focus exclusively on private sector. Would have widespread ownership.

2. -- Enlarge rediscount and guarantee program of FDI (Industrial Development Fund). Include special window for small enterprise to be financed by Haitian Development Foundation (HDF).

3. -- Expedite streamlining and expansion of HDF (see below).

C. -- Revise current government disincentive policies, such as: application of tax and duty exemptions in a way that discourages or excludes competitors; slow and nonresponsive processing of loans by public sector financial institutions, such as IDAI (Institute for Agricultural and Industrial Development); other policies such as taxation on exports, which discourage private sector investment in agriculture.

Recommendations:

-- A.I.D. should raise these concerns in policy dialogue with the GOH and consider technical assistance for GOH policy analysis and review of relationships with private sector.

D. -- Other Areas

1. High risk. Design and implement crop insurance program; assist enterprises in provision of infrastructure enjoyed beyond boundaries of the enterprise; special exemptions from U.S. law and regulations for U.S. investors in Haiti, such as waiving of OPIC premiums; 2 to 5 day seminars on a range of management topics for Haitian business people.

2. Export Promotion. Create (1) artisan marketing company and (2) trading company with offices in Haiti and in U.S. cities with large Haitian populations.

3. Infrastructure and Social Services in Regional Cities. Roads and power are not a serious current constraint but power would become a serious constraint with any significant enterprise expansion. Large firms, at higher cost, build their own power capacity. Services such as schools and hospitals are location factors, especially for larger Haitian firms and for foreign enterprise.

Special Recommendations for USAID Support of Small Enterprise Growth

1. Technical assistance to HDF to move toward "maximizing its loan portfolio through maximizing its profits"; monitor HDF performance over 5 year period; expand USAID support to HDF.

2. Encourage and assist PVO's to expand their activities on behalf of small enterprise.

3. Establish "Technical Information Service" to support HDF, other PVOs and DFI, providing a suitable candidate can be recruited.

Chapter IV -- Spatial Characteristics

Although the net population growth rate for Haiti estimated at only 2.2%, this increase is very unevenly distributed. The urban growth rate averages 4.1% and the growth of Port-au-Prince may well exceed 7%. If this continues there may well be a net loss of population from the rural areas to Port-au-Prince and by the end of this century the population of the capital city could exceed 2.2 million.

Wealth and economic activity is excessively concentrated in Port-au-Prince. Over 90% of all manufacturing activity is concentrated there. Income levels in the capital are on average about 3.5 times the national average. In 1975-1976 almost 83% of public fiscal expenditures were concentrated in the city and 50% of development expenditures were located there.

Agriculture contributes 45% of GDP and provided livelihood to 75% of the population. Yet it is estimated that 94% of the rural population in 1976 were below a poverty line of $195 per capita per year. The team wishes to stress that one of the most important reasons for the existence of such imbalances in urban and rural conditons of life has been government action or inaction. Public investment outside the capital is minimal. The maintenance of free convertability between the gourde and the dollar has encouraged urban trade

but not agro-industry based on local production. Rural credit institutions are almost non-existent. Only 2% of the children in rural areas complete primary school. The public administrative structure and services are heavily concentrated in Port-au-Prince.

As a consequence of rural poverty and the concentration of economic opportunity, rural Haiti has for some time been characterized by a high level of migration (out migration of at least 0.4% a year). It is evident that a major effort will be required to alter this pattern of rural neglect and urban migration. It should be recognized that there is little liklihood that this rural-urban shift can be halted, but it could be slowed down with efficacious effects on rural and urban conditions alike.

The team observed that there is no particular area of rural Haiti that deserves special attention by virtue of either its extreme poverty or its out-migration. Both are evenly distributed throughout Haiti, roughly in proportion to population distribution. With the exception of a corridor running from Les Cayes in the south through Port-au-Prince and Gonaives to Cap Haitien in the north, there is uniform lack of investment or services. The important point is that A.I.D. should start <u>somewhere</u> to rectify this gap.

Even the most optimistic scenarios regarding rural investment and increased agricultural production will not in all probability halt the migration entirely. It is essential, therefore, that any agricultural growth strategy be linked to a development of industrial job expansion in the urban areas. Donor activity is already preparing the way for this with investments in power, transport, water supply, industrial parks, port facilities, etc. in the secondary cities (e.g., Gonaive, Les Cayes, Cap Haitien). There seems to be little need for A.I.D. to invest in major infrastructure for the intermediate term. There will be a need for some donor to provide assistance in provision of essential services to promote private investment -- especially in the smaller towns. It also appears that encouragement to agro-business would exploit linkages between increased rural investment and the growth of the urban industrial sector.

In so-far-as the decentralization effort depends on support from the public sector, it should be recognized that it is the stated policy of the Government of Haiti to encourage such deconcentration. Nevertheless, the initiative will require central support services on the one hand and the reform of fiscal and personnel procedures on the other. Ultimately the effort will be short-lived unless means can be found to relieve these central constraints on the development process.

Notwithstanding earlier comments about the distribution of poverty within Haiti, there are two regions which demand early attention -- the Southern Peninsula and the Northwestern Peninsula.

The Southern Peninsula suffers from high population density and out-migration. Today it contains about 1.1 million people (1971 census). Most of the projected growth of Port-au-Prince over the next 20 years will come out of this region (with a potential drop in population to as low as 491,000). Although the area suffers a lack of infrastructure, it has considerable agricultural potential, including irrigated agriculture in the Les Cayes plain. Industrial potential is promising at both Cayes and Jérémie.

The Northwestern Peninsula suffers from low and erratic rainfall has little public infrastructure and its agricultural potential is considerably less than the Southwest . Nevertheless, there are areas with some promise. It is the most thinly populated region of Haiti but much of the population is concentrated in the Trois Rivieres and Jean Rabel areas which have both agricultural and irrigation potential. The Port de Paix - St. Louis du Nord area also has potential as a growth center but investment in the region is more likely to be centered on Gonaives. The claim of the region to attention, however, lies mostly in the extreme vulnerability of the population to drought and the fact that modest investments could greatly increase food security.

Recommendations

1. -- The team recommends a concentration of A.I.D.'s activities in the agricultural sector in the Southwestern region. This area has high absolute levels of poverty due to population density and is severely disadvantaged in terms of infrastructure and services. In spite of

this, however, it has considerable agricultural potential and promises a good return on investment. Unless other donors can be persuaded to support this initiative, however, A.I.D. must be prepared to launch a multi-sectoral effort in the region -- including rural roads, agro-business development, . agricultural production, health (especially malaria erradication, and nutrition programs to support the possible short-term loss of income associate with reforestation programs), and disaster preparedness programs (due to the hurricane risk in the region).

2. -- A much more modest effort might be justified in the Trois Rivieres and Jean Rabel areas but it should be recognized that the absorption potential here will be small and that without major improvements in transport, market constraints may severely constrain a significant increase in commercial agriculture in the region. A food security approach should perhaps take first priority.

3. -- There is clearly a good case to be made for small investments elsewhere in Haiti, especially in reforestation and farming systems research/extension in the watersheds of the existing irrigation perimeters sponsored by other donors. These substantial investments are currently in considerable danger from erosion and flooding and complementary investments by A.I.D. at a modest level could have important payoffs.

4. -- A major A.I.D. effort to support industrial and business expansion in the secondary towns, independent of any particular region, is an essential complement to any agricultural development strategy. Given the mobility of labor in Haiti it does not appear critical where this activity is located so long as it is labor absorbing. Nevertheless, it is evident that agro-based industry focused on Cayes, Jeremie, Gonaives, and Port de Paix would be highly supportive of any regionally focused strategy.

5. -- A.I.D. should recognize, however, that the system-wide constraints of the administrative and fiscal system place serious limitations on any deconcentration program in the intermediate and long term. Serious efforts should be made now to relieve these constraints. Some recommendations have already been made in the report of the Administrative Reform Team and others are found in Chapter 5 of this report on Institutional Options.

Chapter V -- Institutional Options

Implementation problems place severe constraints on any food sector strategy in Haiti. Staff and public facilities are heavily concentrated in Port-au-Prince and there seems to be little prospect that this situation will be rectified in the intermediate term. The absence of counterpart staff and frequent transfers are commonly cited as reasons for long delays in project implementation. The financial management system makes accountability difficult and inhibits the smooth flow of funds for project implementation. These problems are encountered almost universally by donors and in all

ministries. The major point to be made, however, is that their consequences are particularly serious in the Ministry of Agriculture and Natural Resources which should be at the forefront of development efforts in rural areas.

In consequence of the above observations, a priority of the A.I.D. food sector strategy must be to overcome basic management constraints characteristic in the current Haitian system. The team strongly recommends that the A.I.D. strategy emphasize the immediate but gradual increase of basic investments and extension services at the level of the agricultural district — focusing on the integrated development of specific watersheds. The effort should be to move Haitian technical extension staff to the District level and to provide them directly, with as few procedural constraints as possible, and a gradually increasing level of resources.

The key to such an effort should be the "field project" described in some detail in Chapter 5. The essence of this concept is that the project should be located close to the farmer, be responsive directly to his needs, be of modest size and within the management capacity of the existing, or slightly expanded, district staff. Clearly, there could be a significant number of these project units if sufficient Haitian staff could be moved to the District level and if the project could be kept "manageable".

The key to the District level project would be investment in access roads, reforestation, farming systems research/extension, and perhaps some minor irrigation. It is the judgement of the team that such projects, focused on specific watersheds, are within the technical capcity of the existing District staff -- they lack only sufficient numbers, resources, improved plant varieties, and experience in working on an interactive basis with farmers to evolve improved farming systems.

The problem which then arises is how to provide technical support in the development and implementation of such field projects and how to provide a facile mechanism for funding them. It is these management and support problems which suggest to the team the desirability of a regional concentration of A.I.D.'s agricultural sector efforts rather than questions of the incidence of poverty or the characteristics of agricultural production

within Haiti. The argument is that some sort of regional development organization could move decisions closer to the district level, focus U.S. sponsored technical assistance, and, in collaboration with the proposed regional planning units of the Ministry of Plan, facilitate planned linkages among the several sectoral investments which will be required.

What is proposed is a strategy of building the institutional capacity of DARNDR (Ministry of Agriculture) from the "bottom up" by strengthening its field organization and operation in a specific region (e.g., the Southwest) combined with the establishment of some form of regional organization which could facilitate product design and funding, technical support, and planning (especially inter-sectoral and cross-ministry planning).

The team urges that the regional development organization not be viewed as an implementing agency, but as a support and planning organization. Chapter 5 discusses two major options for the organization of such a regional development organization. The first is an organization under the management of the Ministry of Agriculture, several forms of which are currently operating in Haiti. The second, an independent Regional Development Corporation that would involve multi-ministerial supervision and a broader range of functions. The preference of the team is for the latter. The advantages of the regional development corporation appear to be that (a) it might facilitate inter-ministerial cooperation in a coherent regional development effort, (b) the regional development "plan" would consist of actual fundable "field projects" funded by the regional organization, (c) although based upon support to the field staffs of the ministries of development, the organization would have the option of funding field projects proposed by local communities and PVOs, thus expanding the overall absorption capability of the region, (d) the organization could enter into "performance contracts" with both government and private entities for the implementation of field projects, and (e) the organization could encourage "institutional development" in the region without supplanting the government or taking over all governmental functions.

The team wishes to stress that the goal of long-term institutional development of Government of Haiti field capacities is not inconsistent with the utilization and encouragement of alternative private or PVO based projects. The advantage of such a regional development corporation would be

its ability to flexibly utilize a variety of implementing agencies as performance and capacity dictate.

In support of this decentralized regional effort, two major institutional development efforts at the center will be required. First, A.I.D. should support to the fullest the continuing improvement of the agricultural research capacity at Damien and at appropriate experiment stations throughout the country. The development of appropriate biological materials to support the farming systems research is essential, as is its testing throughout the country. Second, A.I.D. may wish to assist the Ministry of Agriculture in a systematic improvement in its management systems. This would include improvements in financial management and personnel management as recommended by the MASI Report[1]. Attention should also be given to the development of an improved extension management system as described in Chapter II.

Finally, A.I.D. should make every effort to encourage the development of community and farmer organizations, appropriate for Haitian conditions, which can encourage local self-help, provide alternative instruments for project implementation, and begin to maintain rural infrastructure and services. Of particular importance is the encouragement of agricultural marketing "cooperatives", especially the export crops. These need to be built from small local associations but should be linked to broader regional or national associations or could be tied to agro-business marketing outlets.

Recommendations

1. -- The basis of an A.I.D. institutional development and agricultural development strategy should be the "field project" approach focused on the existing agricultural district.

2. -- Management considerations regarding technical support and funding suggest the advisability of focusing these A.I.D. activities regionally -- perhaps in the Southwest.

3. -- A regional development corporation with considerable independence and flexibility should be established to plan, assist project development and provide technical support in implementation, and provide inter-sectoral cooperation. But it should not be an implementing agency.

1.MASI; Analysis of Institutional Capability of Haitian Ministry of Agriculture (DARNDR, Govt. of Haiti)

4. -- To increase absorption capacity, all appropriate implementing agencies should be exploited for field project implementation -- Agricultural Districts, community organizations, PVOs, private sector. This requires a regional organization with the flexiblity to execute performance contracts with varied implementing agencies and to shift funds flexibly to respond to performance.

5. -- Institution building at the national level should receive high priority in two areas -- (a) the management systems of the Ministry of Agriculture, and (b) the national agricultural research system.

6. -- The development of community organizations and marketing cooperatives should receive priority attention.

Other recommendations

a. -- the A.I.D. commitment must be long-term -- at least to the full 10-year period currently permitted.

b. -- maximum effort must be made in project design, management, and regional planning to create an "institutional learning" environment as described in Chapter 5.

c. -- payment of supplemental salary to Haitian field staff is clearly a mixed blessing and deserves careful attention.

d. -- the implementation of the proposed regional planning units of the Ministry of Plan should be encouraged with an emphasis on the role of the regional unit as a technical secretariat of the regional development corporation.

Chapter VI -- Role of PL 480 Food Aid Programs

The team foresees a continuing and growing need for concessional food imports to Haiti in the short and medium term. The reasons for this include:

-- to help save foreign exchange in the face of continuing expansion in the demand for development imports relative to exports;

-- a growing demand for wheat flour and bakery products resulting not only from higher urban incomes but also from increasing preference for wheat products as a convenience food and as a saving by households throughout the country on energy required for preparation of traditional cereals;

-- a very substantial short-run demand for oilseeds to meet the needs of new domestic semi-refined capacity (SODEXOL) and an expected increasing demand for feedgrains.

The team also believes PL 480 can and should play a cost-effective role in improving food consumption and alleviating malnutrition. In addition, local currency proceeds from the Title I sales program should continue to provide

vital counterpart funds for agricultural development-related projects that create rural infrastructure, provide technical assistance and generate employment.

-- Title I Recommendations

1. -- recommended commodities include milling wheat, rice, soybeans and feed grains. (Soybeans and feedgrains for a possible Title III program.)

2. -- projections of demand and supply suggest needed tonnages of Title I wheat should increase from 34, 487 MT in 1982 to about 40,000 in 1985.

3. -- the need for Title I rice imports is expected to decline to zero by 1985, with increasing domestic production.

4. -- if 75 percent of soybean requirements were to be covered by PL 480, this would imply about 97,500 MT a year over the next three years. As domestic production of oilseeds, such as peanuts, expanded, the need for imports including PL 480, would decline. The team believes certain conditions should be attached to provision of soybeans under PL 480 that might make it suitable for a Title III program. These are indicated in the Title III section below.

5. -- a modest amount of yellow dent corn could be provided for the feed mill complex as part of a Title III program (about 5000 MT a year over the next three years).

-- Title III Recommendations

The Title I program might be negotiated into a Title III program, including the provision of soybeans for the SODEXOL refining facility. The team recommends the following objectives be mutually agreed by the GOH and USAID for a Title III program:

1. -- phase-up Title III program over a 5 year period and phase-down Title I program, so as to protect development projects now dependent upon Title I proceeds for counterpart;

2. -- implement agricultural pricing and tax structure reforms, especially for coffee and other export crops as outlined in Chapters I and II;

3. -- a negotiated reduction in vegetable oil prices to the consumer;

4. -- an agreement by the GOH to contribute refined oil to Haitian and international PVO feeding programs;

5. -- an agreement to use a portion of oilseed (soy) meal to produce specialized high-nutrition food products, including weaning foods, to be sold through existing private channels and distributed through public programs (hospitals, clinics, etc.);

6. -- introduce soy flour into bakery products to add to the nutritional value of convenience bakery products and introduce corn flour to increase incomes of Haitian peasants;

7. -- gradual increase, in step with world prices, of import duties on wheat and wheat flour;

8. -- provide feedmill technical assistance and access to small poultry and livestock producers; and

9. -- improve efficiency of wheat flour distribution and marketing by permitting wholesalers, bakers and other purchasers to buy flour directly from the Minoterie flour mill.

The average annual potential Title III magnitudes by commodity arising from the above proposals over the next three years are:

Commodity	Metric Tons	Counterpart Funds
Wheat	36,211	$ 6.3 million
Rice	2,000	1.0 million
Soybeans	97,500	26.8 million
Feed Grains	5,000	0.7 million
Total	140,711	$ 34.8 million

-- Use of Title I (III) Counterpart Funds

Counterpart funds generated from Title I (III) will be of even greater importance to agricultural development if the strategy recommended in this report is adopted. They should be allocated to priority agricultural development projects, such as the program emphases recommended in previous Chapters of this report. In addition this Chapter makes the following specific recommendations regarding PL 480 counterpart:

1. -- a portion of Title I (III) proceeds should be set aside for an agricultural production and marketing economist expert in such areas as commodity situation analysis for PL 480 commodities; marketing and distribution problems; and effects on production incentives for domestically produced commodities. This expert would be expected to assist in the design, implementation and monitoring of the Title III recommendations indicated above.

2. -- a modest amount of Title I (III) counterpart funds should be set aside for new and continuing applied research, demonstration and extension efforts on reduction of post-harvest losses and field losses (at a total cost of about $1.1 million a year).

-- Title II Food Donation Programs

It is the objective of the PL 480, Title II Program to provide supplemental foods of high nutrient value to improve the nutritional status of the malnourished and to enhance the general development process through the provision of a nutritional incentive. In Haiti, as in many developing nations, Title II foods are almost entirely directed twoard three programs: School Feeding (about 70% of recipients), Food for Work (14%) and Maternal Child Health (16%). Four major U.S. PVOs are heavily involved in implementing these programs. About 1 million Haitians or 20% of the population receives some assistance from Title II programs. School Feeding programs also provide an incentive for regular and alert school attendance. Food for Work projects also create local facilities and productive infrastructure through small-scale, labor-intensive projects that generate employment and real incomes. All three programs experience administrative difficulties. MCH programs are targetted more directly on nutritionally-at-risk groups than are the other two types of programs.

-- Recommendations for Title II Programs

1. -- redirect Title II resources toward those in greatest nutritional need, through the GOH Rural Health Delivery System and through maternal-child health (MCH) efforts in PVO and private centers;

2. -- if total Title II resources increase, hold School Feeding Programs constant and increase MCH efforts; if Title II remains constant, reduce School Feeding to permit some increase in MCH efforts;

3. -- same approac to Food for Work as for School Feeding but focus Food for Work o food and agriculture production-related activity (e.g., feeder roads, irrigation, soil conservation, reforestation);

4. -- focus on nation as a whole rather than specific region(s), since malnutrition is serious nationwide; and

5. -- establish a council of private voluntary organizations to improve sharing of information and planning to improve coordination and effectiveness; A.I.D. should be prepared to provide technical assistance to this PVO council.

INTRODUCTION

In September 1981 the Director of the USAID Mission to Haiti requested that a multi-sectoral team of experts be recruited to formulate options and recommendations for a food and agricultural development strategy for the U.S. economic assistance program in Haiti. The strategy was to focus on the next five years, 1982-86, but was also to consider the longer-term implications for U.S. assistance and Haitian food and agricultural development prospects to the year 2000.

From November 28 to December 23, 1981, a 14 member team drawn from universities, consulting firms, international institutions and AID met and worked with Government of Haiti (GOH) officials, Haitian and foreign private business representatives, USAID/Haiti staff and other international aid donors to analyze food and agricultural development constraints and potentials in Haiti and to formulate strategic program options and recommendations. This constitutes the report of the team. The team wishes to express its appreciation to Government officials and USAID staff as well as to private sector and donor representatives who shared their time and expertise. Responsibility for analysis and conclusions rests with the team, however. A list of the team members and leaders will be found at the end of the report.

The introduction will summarize: cross-cutting strategic elements; the food and agricultural crisis; the nutritional situation; some positive developmental accomplishments; strategy objectives, sectoral emphases and timeframe; and relationship to GOH food and agricultural development plans. This will be followed by the major components of the report: I - policy and fiscal framework, II -agricultural production and marketing for domestic consumption and export, III - private enterprise role, IV - spatial characteristics, V - institutional options, and VI- role and potential for PL 480 food aid and its components (Titles I/III and II). These elements comprise an integrated analysis of most aspects of food and agricultural development. Nutrition and consumption considerations are explicitly considered in the introduction and in chapters II and VI. Annex A of the report provides greater detail on "Regional Resources and Development Potential" and Annex B summarizes the history of AID assistance to food and agriculture in Haiti.

Cross-cutting Elements

Three critical, inter-related elements that receive considerable attention in the strategy deserve to be highlighted at the outset. They are: (1) the government policy framework; (2) the role of institutions, particularly those undertaking adaptive research in the countryside and dissemination of productive agricultural technology to Haitian peasants; and (3) the role of the Haitian and American private enterprise and voluntary sectors in acceleratingfood and agricultural development. The experience of AID and developing countries around the world over the last thirty years have shown these elements to be vital for the establishment of food and agricultural self-reliance. These countries include Taiwan, South Korea, Malaysia, Ivory Coast and Brazil as well as countries that are approaching self-reliance, such as India, Thailand and the Philippines (although it should be noted that several of these countries still have large proportions of their populations seriously undernourished, and that more widely shared growth would stimulate a sharp increase in the demand for food).

This experience led AID to highlight these elements in its Food and Agricultural Development Policy Paper (Washington, D.C.: January 1982). The strategy team found these elements to be extremely important in Haiti. They are consequently stressed in almost every section of the report.

-- policy framework

An appropriate policy framework is fundamental to sustained food and agricultural development in Haiti. Without such a framework, all other efforts, including those of international donors, will fail. Sound policies:

(1) provide adequate production incentives, largely through reliance on free markets, and equitable access to resources so that the broad majority of peasants, entrepreneurs and workers, men and women, have expanding opportunities for productive employment, saving and investment;

(2) encourage private enterprise growth in agricultural production, marketing and agro-industry;

(3) give sufficient resource mobilization and staffing priority to complementary public sector infrastructure and institutions that reach out to rural areas where 80% of Haiti's population lives; and

(4) help ensure the effective utilization for development of external assistance resources, including U.S. financial, technical and food assistance.

— institutional capacity

Institutions that provide effective access by both farmers and by entrepreneurs to productive inputs and services — and will continue to do so after the involvement of external donor assistance -- are also essential to sustained food and agricultural development. The strategy team identified a particular need to strengthen the capacity of food and agricultural development institutions in the rural regions of Haiti, especially for adaptive biological and farming systems research and for the cost-effective dissemination to peasants of more productive technologies.

-- private sector

The team also identified a substantial need and potential for sharply expanded Haitian and American private business enterprise involvement in food and agricultural development. The private sector can provide a dynamic, innovative and efficient source of productivity growth and employment generation in Haiti, provided it is permitted to operate under a framework of market-oriented policies, incentives and regulations, and that public sector infrastructure (roads and ports, power, communications, water, etc.) and institutions (e.g., financial, research and training) complement and encourage the private sector.

American and Haitian non-profit, private and voluntary organizations (PVOs) have played a long-standing and important role in Haiti in distributing food (largely from the PL 480 Title II food aid donation program), improving nutrition, generating employment and checking degradation of the natural

resource base. PVO strengths in Haiti include flexible, low-cost approaches that take local attitudes and conditions into account and that organize local initiatives to provide development and social services and resources. AID should continue to encourage these strengths.

Food and Agricultural Crisis

Haiti is a country facing a severe, protracted and apparently cumulative economic crisis. In the food and agriculture sector thishas been reflected in official statistics indicating virtual stagnation in overall agricultural production during the last five years. Per capita food and agricultural production has been declining for the last decade, if not longer.

There are four critical, inter-related variables involved in this cumulative retrogression: population growth, the natural resource base, capital investment and technology. If these are not addressed by the Government of Haiti with the supportive, but vital, help of external donors in a far more concerted manner than in the past, Haiti's achievement of food and agricultural self-reliance that will enable it to meet the basic needs of its population on a sustained basis will not only be delayed well beyond the current generation, but tragic consequences in terms of hunger, death and disruption of a Malthusian nature may arise for the current generation. The fact is that continued and accelerating population growth (officially reported near two percent a year) against limited land resources has produced one of the highest population densities on agricultural land of any country in the world (345 per sq. km). This situation, combined with Haiti's mountainous topography, a peasant agricultural technology that has remained essentially static in many areas of the country for the last century-and-a-half and a corresponding failure of government to give adequate policy and budgetary attention and priority to agriculture have resulted in: declining productivity and incomes; extreme fragmentation of peasant land holdings; unsecured land tenure arrangements; a rate of depletion of topsoil estimated at 5 to 6 per cent a year; a crisis of confidence in the private sector; an unprecedented net drain of foreign exchange vital for public and private sector development efforts; an accelerating concentration of population in Port-au-Prince (approaching one million and growing at least 6-7 percent annually, with

massive economic and social costs); an increasing desire, borne of desperation, to emigrate from Haiti; and a continuing and probably worsening nutritional and health status for the bulk of the population (40 percent suffering from moderate to severe malnutrition -- over 3 times the proportion for the Dominican Republic -- and a national infant mortality rate of 130 per 1000 -- 8 times greater than in Jamaica). The following sub-section provides additional description and analysis of the nutrition situation in Haiti.

Nutritional Status

The magnitude of the "nutrition problem" in a country is accurately reflected by the nutrition status of its most vulnerable groups -- preschool age children (0-59 months), and pregnant and lactating women. Measures of body mass and linear growth -- anthropmetric measures -- are key indices for nutritional status. A national baseline nutrition status survey undertaken in 1978 by the Government of Haiti's Bureau of Nutrition with assistance from the U.S. Center for Disease Control indicated the following levels of acute and chronic undernutrition in Haitian children less than 5 years of age:

Percentage Distribution of Preschool Children by Various Anthropometric Indices (percent of population under 5 years of age)

Region	Wasted[a]	Stunted[b]	Protein-Calorie[c] Malnutrition
Northwest	5.3	26.6	25.8
North	6.8	33.4	34.2
Artibonite	6.9	29.2	30.8
West*	5.1	27.1	26.1
South**	7.3	26.9	29.5
Port-au-Prince	3.8	25.8	14.6
National	6.0	26.6	27.3

a. Wasted = Acute undernutrition = a height for age value less than 80% of the reference population.
b. Stunted = Chronic undernutrition = a height for age value less than 90% of the reference population.
c. Protein calorie malnutrition = 2nd and 3rd degree Gomez Classifications less than 75% weight for age of reference population.
This is a summary measure of acute and chronic undernutrition.

*West Region = Cul de Sac Plain excluding Port-au-Prince, Districts of Jacmel and Petit Goâve.

**South Region = Southwest, Districts of Les Cayes, Jeremie

In Haiti both acute and chronic undernutrition are substantial problems. Approximately 30% of all Haitian children in 1978 were chronically undernourished, due to frequent episodes of food deprivation, a sustained period of inadequate nutritional intake and/or recurrent episodes of infections and parasitic diseases. Six percent of Haitian children were severely and acutely malnourished at the time of the survey. Using the same parameter of acute malnutrition an additional 9% of the under 5 population is "moderately" malnourished.

While the 1978 survey showed differences among the rural regions and Port-au-Prince, the only statistically significant difference is a rural-urban one. That is, the prevalence of malnutrition, both acute and chronic, is higher in the rural areas than in Port-au-Prince and there is no significant difference in the prevalence of malnutrition among the rural areas.

Two more recent nutrition surveys suggest that malnutrition in both rural areas and Port-au-Prince may be increasing. A 1981 reassessment of the nutritional status of children in the Southwest (using the same sample as the 1978 survey) indicates a significant increase in acute undernutrition together with sustained levels of chronic undernutrition. A 1980 survey of one of the poorest areas in Port-au-Prince, Cité Simone, shows both acute and chronic malnutrition at levels significantly higher than the national sample of the 1978 survey.

Another important difference highlighted by the 1980 study of Cité Simone is the pattern of onset of malnutrition. Malnutrition appears at an earlier age in Cité Simone than in rural areas. These higher levels of malnutrition together with earlier onset may be a function of changing breastfeeding and weaning practices, less sanitary conditions, and higher disease rates for Cité Simone and/or a reduction in the purchasing power of people totally dependent on the market for food.

The following table illustrates actual consumption against the Bureau of Nutrition's recommended minimum cost adequate diet.

Food Group	Recommended (kgs/yr)	Actual (kgs/yr)	Percent of Recommended Being met
Cereals	89	63.0	71
Roots, tubers, plantains	38.8	105.9	273
Sugar	16.5	26.3	159
Beans and Oil Seeds	29.9	25.6	86
Vegetables	103.7	43.0	41
Fruits	69.6	109.1	157
Meats and Fish	10.8	9.8	91
Eggs	.9	.9	100
Milk	49.1	11.2	23
Oil and Fats	29.6	6.6	22
Others	-	1.3	

While the make-up of the minimum cost adequate diet may be debated, the pattern of consumption is relevant. It is clear that roots, tubers, plantains, sugar and fruit-foods of low nutritional value constitute a disproportionate percentage of calorie intake as opposed to foods also locally produced and of higher nutritional value, eg., cereals, beans, oil seeds, etc. It should also be noted that the figures presented here are national in scope and would show greater imbalances if limited to rural areas and nutritionally vulnerable groups.

The high levels of malnutrition in the nutritionally vulnerable groups, the low level of per capita consumption and the worsening trends in consumption, production and malnutrition contribute to Haiti's high mortality rates especially for children (45/1000), infants (149/1000) and pregnant women (15/1000). The extremely high infant and child mortality rates also contribute to Haiti's high fertility rate (57/1000), as poor Haitians understand the need to produce up to twice the number of desired children to assure that one half of them survive to adulthood. It is these high death rates in Haiti that have maintained the populationgrowth rate at a reasonably low level (1.8). With improvements in services that may lower these death rates, a concomitant surge in population growth may be anticipated, creating increased pressure in the already depleted land resources and perpetuating high levels of malnutrition.

In addition to contributing to high levels of mortality, the continuation of malnutrition and morbidity from various communicable diseases (malaria, tuberculosis, diarrheal disease) have serious deleterious effects on labor productivity and educational potential, two important factors for the desired improvements in agricultural production and employment generation presented in this strategy.

While adequacy and reliability of food supply as well as income that enables purchasing adequate food are basic determinants of nutritional status in Haiti, unsanitary conditions and unsafe drinking water facilitate the spread of diseases that reduce the ability of people to absorb and utilize available nutrients. Thus, improvements in drinking water and sanitation and other public health measures, as well as hygiene and nutrition education, are important complementary elements of food strategy.

Positive Developmental Accomplishments

The previous sections paint a grim picture, but there are also positive signs. There is increasing awareness of the seriousness of the situation on the part of the Government. The 1981-1986 Five Year Plan (Plan Quinquennal de Développement Economique et Social, 1981-1986) recognizes that agricultural growth has been "insufficient to meet the needs of the population," that export and agro-industrial crops have stagnated to a "disquieting degree," and that the "accelerated degradation of soil, water and forest resources has reached an alarming level." (Tome II, pp. 1-2). The Plan also cites "the deterioration of the level and conditions of life of peasants and other inhabitants of rural areas who constitute almost 80% of the national population," and the "waste of human resources with attendant unemployment and under-employment, under-nutrition and malnutrition and inadequate and low levels of education and literacy." (Tome I, p. 17)

There are other hopeful signs. GOH progress towards resolving the recent balance of payments and related public finance crises will be summarized in a subsequent section of the report as will progress and plans regarding longer term budgetary and administrative reform.

Despite numerous false starts and uneven progress, there have been significant accomplishments in certain parts of the country and in certain elements that contribute to a foundation for sustained agricultural progress. These include long-standing and continuing GOH efforts, assisted by a range of external donors, to expand the productive potential of the Artibonite Valley. The combined production of the Artibonite, and other areas now promise to make Haiti self-sufficient in rice by 1984 or 1985. This will, however, be self-sufficiency in a market sense — at the existing distribution of income — and does not imply adequacy of basic grain supply from a nutritional point of view. Other hopeful signs, in which the U.S. along with other donors have played a significant role, include substantial upgrading of the quality and maintenance of Haiti's trunk highways and rural feeder roads and rural electrification (primarily World Bank for electrification). Major additional improvements are required in these infrastructural elements vital to agricultural progress.

The Ministry of Agriculture has been building, with USAID assistance, a competent cadre of technical personnel capable of leading farming research systems and extension efforts that will permit the Haitian peasant and small plantation owner, given market incentives and security of tenure, to apply improved technology for sustained increases in production and incomes. The proven responsiveness of the Haitian peasant is facilitated by the substantial market participation of peasant agriculture which already exisits. Agricultural credit to permit acquisition of more costly modern inputs is being expanded by such institutions as the Institute for Agricultural and Industrial Development (IDAI) and the Bureau for Agricultural Credit of the Ministry of Agriculture. But greater budget commitment to support field personnel as well as a large volume of credit and greater efficiency in its provision, are also required. Similarly, the high level of awareness of environmental degradation is being translated into new public and PVO and private enterprise efforts to plant hillside and watershed trees and crops that begin to check erosion and reverse soil fertility depletion, the silting up of irrigation and hydro-electric facilities and the exhaustion of fuelwood, on which 70% or more of the population depends for its energy needs.

There are also hopeful signs in the Haitian private sector: increased interest in agro-business-related investment, not only around Port-au-Prince but elsewhere in the country, and for export as well as for domestic production; an evolving group of dynamic entrepreneurs, concerned individually and in industrial and commericial associations with the broader aspects of national development; new private sector financing initiatives, such as the Haitian Development Foundation (with AID and IDB support) and the Industrial Development Fund (with World Bank support); as well as renewed discussion of a proposed private Development Finance Corporation (Financiera); and finally, increasing appreciation of the need to make maximum productive use of Haiti's most abundant and ultimately most valuable resource, its human resources -- both men and women.

There is also increasing experimentation with and emergence of a range of local groupings of peasants, organized for infrastructure construction and maintenance, production and/or marketing purposes, occasionally federated into associations (e.g., the Afe-Neg Coumbite (Cooperative) Association in the area between Kenscoff and Jacmel, with support from Catholic Relief Services, and the CANO (Centre Artisanal pour le Nord d'Ouest) cottage industry cooperative in the Northwest with support from CARE, HACHO (Haitian American Community Organization) and the GOH. The chapters of the report on agricultural production and marketing and on institutional options discuss the importance for attainment of food and agricultural development objectives of local organizations in which Haitian peasants participate in program and project identification, design, implementation and evaluation. (Additional description of USAID and other donor assistance to Haitian food and agricultural development is provided in Annexes A and B.)

A related development is the growing awareness by each of these "sectors" -- government, private enterprise, voluntary, cooperative or peasant society -- of the important positive contribution each has to make to resolving Haiti's food and agricultural development crisis and of the need to develop complementary relationships. Examples include the relatively recent formation of the Haitian Development Foundation (a Haitian PVO to assist small private

enterprise), the Industrial Development Fund (FDI) (a GOH rediscounting facility to encourage commercial banks to extend medium and long-term credit to small and medium Haitian private industrial enterprise), and the National Office of Investment Promotion (ONAPI) (a GOH agency to promote domestic and foreign investment in Haiti). Also, the Ministry of Plan and the Ministry of Agriculture have increased their efforts to encourage and work with local peasant and community organizations. These initiatives require both strengthening and continuity of support.

These examples of positive accomplishments will be analyzed in greater depth in the various component sections of the report. Several have been briefly outlined here to suggest the team's basis for believing that sufficient commitment and determination by the GOH, cooperating international donors and Haitian and foreign private investors and voluntary organizations can in time reverse the process of cumulative retrogression in food and agriculture and achieve the objectives set forth below.

Strategy Objectives, Sectoral Emphases and Timeframe

The team proposes the following overall objective for U.S. economic assistance for food and agricultural development in Haiti:

— to assist Haiti promote sustained and sustainable (i.e., ecologically sound) growth in the productivity, employment and incomes of peasants and the poor majority of the rural and urban population, leading ultimately to food security for the entire population.

Food security is defined as sufficient agricultural production and generation of employment and incomes so that families can purchase or otherwise obtain the food they need to provide adequate levels of nutrition. Food security as defined here does not imply food self-sufficiency but rather food and agricultural self-reliance, the capacity to satisfy the population's food requirements through a combination of production for domestic consumption and importation of food at commercial terms paid from export earnings.

— sectoral emphases

In the short and medium-term, Haiti cannot, given its desperate need for developmental and food imports, afford to overlook foreign exchange earning potentials in any sector, including agriculture. In the longer-term, the path to food and agricultural self-reliance for Haiti must be similar to that of other economically successful, relatively small countries: a heavy but not exclusive reliance on international trade. For example, without a biological research breakthrough, Haiti will never be able to produce at reasonable cost a commodity like wheat in sufficient volume to satisfy domestic demand. Conversely, Haiti's agricultural hinterland should continue to provide significant potential and actual comparative advantage for the export of tropical agricultural products to large temperate country markets. Thus, the team believes that food and agricultural production for both domestic consumption and export must be pursued in the short and long run.[1]

Clearly, the subsistence foods of the poor (maize, sorghum, pulses, and tubers) which are produced and consumed domestically must be given priority. Nevertheless as Chapter II on agriculture will indicate, long-term food self-reliance requires a more effective integration of food and tree (export) crops if Haiti's farming systems are to be ecologically viable.

By the same token, Haiti cannot afford to overlook the potential to generate productive employment in any economic sector, including industry and services, given the high population density and an estimated rate of open unemployment in the urban labor force of Port-au-Prince of more than 50% (and a nationwide rate of underemployment estimated at 65%). Relatively labor-intensive re-export assembly industry in Port-au-Prince has grown at a real annual rate (annual value added growth for 1970-77 adjusted for inflation) of about 17 percent and has created by various estimates from 40,000 to 60,000 jobs over the last decade and is currently creating about

1. World agricultural markets are subject in some cases to wide fluctuations, but broad diversification of exports should mitigate the aggregate effect of these fluctuations.

5,000 jobs a year.[1] The re-export industry thus provides livelihood for 15 to 30 percent of the population of Port-au-Prince (assuming 3 to 4 dependents per worker). Although re-export industry has been criticized for having insufficient "input-output" linkages to the rest of the Haitian economy, its substantial workforce has created an important and growing source of effective demand for the products of Haitian agriculture and industry. The team therefore believes this phemonenal growth should continue to be pursued. In other words, a sectorally balanced, labor-intensive development strategy which includes re-export industry must be pursued in Haiti.[2]

-- timeframe

The objective of food and agricultural self-reliance for Haiti cannot be achieved in five years. However, the team believes that concerted and focussed efforts by the GOH, donors and private enterprise and voluntary organizations can, along with a significant increase in public and private resources, -- even in the next five years -- produce some tangible progress toward the above objectives in selected areas of the country. A continuation of such efforts beyond five years, which should include continuing efforts to strengthen the country's overall public and private sector planning and administrative capacities, should firmly establish by the year 2000 sustained progress toward food and agricultural self-reliance on a national scale. For both the medium and long term, the importance of sound policies that assure adequate production incentives and efficient resource allocation and utilization cannot be over-emphasized. If these and related program measures, with the help of external donors, are not undertaken vigorously now, Haiti's food and agricultural situation will continue to deteriorate and will, with continuing erosion of the natural resource base, require even more-costly, difficult and time-consuming efforts to reverse at a later date.

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1. Derived from American Embassy, Port-au-Prince and World Bank, Haiti: Economic Memorandum, February 1981, p. 23. The 1970-77 annual growth rate of net exports (a proxy for value added) was corrected by the inflation factor for total manufactured exports for 1970-77.)

2. See the most recent Memorandum of the Haitian Economy, issued by the World Bank (Washington: May 13, 1981) for a similar conclusion, pp. 18-20.

The goals of the recommended food and agricultural development assistance program may be summarized as follows:

Over the Next Five Years

- Significant change in policy environment for small farmer production and for agro-industrial and other private enterprise that encourages increased investment, production, employment and incomes, and a more ecologically sound pattern of land use.

- Development of technological packages adapted to Haitian peasant systems capable of producing substantial yield increases in grains, pulses and tree crops together with the institutional capacity to deliver these packages intensively to key selected regions.

- Placement in the field of competent staff with adequate support, resulting in constructive interaction with peasants and expanding dissemination and utilization of improved technological packages.

- Improvement in financing services and investment and market information, that stimulate private enterprise growth.

- Additional construction of rural roads and improvement of maintenance capacity.

- Substantial expansion and increased effectiveness and utilization of Haiti's rural health system and family planning programs in accordance with a clear set of objectives and strategy.

- Control to acceptable levels of malaria incidence.

- Support for key policy reforms, improvements in the efficiency of food storage and distribution systems, and significant additional foreign exchange saving and additional local currency generation to provide counterpart for the above and related efforts from the PL 480 food aid sales program (Title I and/or Title III).

- Improved nutritional impact from a continued PL 480 Title II food aid donation program.

- Establishment (or strengthening) and effective functioning of an institution or institutions that develop and disseminate technical packages to peasants, build roads and irrigation systems, re-forest watersheds, etc.

- Through a combination of AID and country efforts, including the GOH, PVOs, private enterprise and local peasant organizations, significant, measurable progress at the end of five years in selected areas in increasing productivity and incomes among the rural and urban poor, improving health and nutritional status, checking erosion of the natural resource base, and increased foreign exchange earnings.

Between 1986 - 2000

- Expansion of many of the above mentioned policy, institutional development, program and private enterprise efforts.

- Firmly established and ever widening productivity and income growth, nutritional and health improvement, and reduced environmental degradation on a national scale.

- Significant decline in the overall rate of population growth.

- Phasing down of PL 480 food aid, as domestic food production and commercial food import capacity expand.

Several of the above goals deal with health and population planning efforts. These activities are closely related to the prospects for agricultural production and income growth as well as reversal of environmental degradation. Malaria, for example, impacts severely on productive capacity of peasants, particularly in the Southwest. Greater commitment to family planning now is required in order to reduce fertility and population growth during the next two decades, thereby reducing pressure on the fragile natural resource base, slowing labor force growth and releasing resources for investment that increases per capita incomes. Improved drinking water and sanitation, along with primary health care, including nutrition and hygiene education, will improve the quality and absorption of nutrients.

The team believes that PL 480 food aid should continue to play a substantial role in Haitian food and agricultural development efforts well into the next decade. Future PL 480 assistance should be linked more closely than in the past to nutritional needs, especially in the case of Title II donation programs, and to improvements in the efficiency of food storage and distribution and to other agricultural development policy and program efforts in the case of Title I (and/or Title III) sales programs. Providing the GOH is prepared to undertake needed major policy measures related to food and agricultural development, the team recommends that a new PL 480 Title III program with multi-year commitment and dollar debt forgiveness, be explored. A Title III program that increased in amount over a five-year period in step with a gradual phase-down of Title I would provide for a net increase in urgently needed concessional resources, and at the same time provide counterpart funds for continuing development projects now supported from Title I local currency proceeds.

GOH Objectives and Plans

The primary documentary source of GOH objectives and plans for food and agricultural development is the recently-issued Plan Quinquiennal de Développement Economique et Social, 1981-1986, Secrétaire d'Etat du Plan (Tome I, July 1981, and Tome II, August 1981).

The general objectives of this Five-Year Plan are very consistent with those set out in this report. The preface to the "Global Strategy" section of the Plan states (pp. 88-89, Tome I):

> The general principle which in some ways governs all others, is that in order to realize economic growth and achieve genuine national development, all measures ought to be formulated within the framework of a liberal economy, founded on a free market, open and transparent. In such a system, the private sector takes charge of industrialization and has responsiblity for virtually all production of goods and services.
>
> Nevertheless, taking account of the numerous socio-economic obstacles to national progress, the Government of Haiti cannot maintain "the sterile attitude of a spectator," but must play an active role that consists of:
>
> (i) establishing institutions and construction of infrastructure indispensable to the growth of marketable agricultural production and the extension to all regions of the country an articulated network of mannfacturing enterprises;
>
> (ii) encouraging and supporting of private initiative through credit policy and a coherent budget policy;
>
> (iii) assuring rational administration of external aid and cooperation in order to realize maximum benefit.
>
> Major "fundamental objectives" are then set forth as follows:
>
> Priority is accorded to the production of current consumption goods and the creation of employment, premised entirely on a development strategy oriented to the satisfaction of the basic needs of population (p. 90)
>
> The objective is to increase the production of popular consumption goods through industry oriented to the internal market. Without neglecting the significant role that should be reserved to the assembly industry and efforts to intensify cultivation of traditional exports, priority is given to food production. Indeed, the high proportion of the Haitian population who, in all regions, suffers undernutrition and malnutrition, poses a grave challenge to the national conscience. Average caloric consumption is only 1900 calories a day per person, and the diet of the majority of Haitians is characterized by a serious lack of proteins, vitamins and mineral salts.

> This state of under-nutrition and malnutrition of a population growing at an annual rate of 1.8%, menaces the health of affected persons from birth, causes a deficiency in intellectual capacity and constitutes one of the important obstacles to increased productivity. The situation is all the more worrisome in view of the
> fact that, over the course of the coming years, the world food crisis will reach the point where the major food producing countries will not have sufficient surpluses, particularly of cereals, to avoid famine in the less developed regions of the world.

These general principles and objectives contain many of the essential elements of a framework to guide Haitian development over the next five years and beyond.

Subsequent chapters in the strategy section of the plan deal with production, employment and human resources, regional development, administrative reform and the role of science and technology. The serious national problem of natural resource degradation receives, however, almost no attention in these chapters, except for a passing reference to soil conservation in the chapter on science and technology.

The Plan contains a fairly extensive discussion and recommendations for administrative reform and includes the following strong statements on regional decentralization:

> Centralization, to the almost exclusive benefit of Port-au-Prince, has indeed tended to asphyxiate outlying regions with strong potential, regions that could make a fundamental contribution to development...
>
> This decentralization is urgent when one recognizes that the metropolitan area of Port-au-Prince receives 80% of public investment, 92% of industrial employment, half of all hospitals, and all university facilities. To implement this policy (of decentralization), the Plan recommends the creation of planning and development regions, and the creation of a system of urban areas according to the importance of their socio-economic and administrative functions. (pp. 95-96)

The Plan also provides brief policy narratives on monetary policy, trade, fiscal policy, population, human resources and employment, food and nutrition, and the welfare of children. While the food and nutrition policy section is rather general and very brief, it does take an integrated approach, describing objectives and sub-programs for (1) agriculture (crop and animal food commodities, food security and distribution, and research); (2) health (extension, vaccination, potable water and sanitation); (3) education (nutrition education for teachers, nutrition education materials, and radio

and TV programming); and (4) planning (research and coordination). On the production side, however, this section focusses exclusively on food production and does not discuss the income effect on food consumption of agricultural export earnings.

There is a separate sectoral volume (Tome II) which contains an agricultural chapter, among others. The following areas are emphasized:

-- new and improved small and medium irrigation schemes (places mentioned, include Dubreuil in the Southwest; Marigot in the South, the Cul-de-Sac, Tomazeau and Gonaives in the Center-west; Jean-Rabel in the Northwest, and the Pleine du Nord in the North);

-- reforestation, drainage and soil conservation (Limbe in the North and Morne de la Selle in the Southeast are mentioned);

-- establishment of storage facilities (Cul-de-Sac and Belladere in the Center-west are mentioned);

-- rationalization of services for agricultural credit, marketing and extension (no geographical areas mentioned);

-- working with Conseils Communitaires and other groups of farmers or farmer representatives (Jacmel in the South, Pleines du Nord in the North and the Southwest region are mentioned);

-- an expansion from 13 to 20 Agricultural Districts, nationwide, to implement and coordinate the above programs.

There is also a financial breakdown of the five-year 1981-86 public investment budget for agriculture into the following categories:

	Gdes Million	%
Crop Production	350	(27%)
Livestock	177	(14%)
Natural Resources	169	(13%)
Agricultural Research	30	(2%)
Economics and Statistics	45	(4%)
Rural Organizations	10	(1%)
Integrated Regional Projects	339	(26%)
Institutional Development	180	(14%)
Total	Gdes 1300	(100%)

(Source: Plan Quinquennal, 1981-1986, op.cit., Tome II)

It is not possible in the Plan to trace the relationship between these planning amounts and the previously described narrative emphases, nor are annual breakdowns provided. Furthermore, the categories are probably not mutually exclusive. For example, it would appear that the amount allocated to agricultural research is extremely low. But this may be limited to central research at Damien (the headquarters of the Ministry of Agriculture) rather than adaptive field research which is likely to be included in other categories (such as "integrated regional projects"). Also, there will undoubtedly be shifts in emphases over the course of implementation. For example, the IFAD (International Fund for Agricultural Development) and the GOH are planning a major irrigation-reforestation effort in the watershed of the Peligre Reservoir near Beladere and the border with the Dominican Republic. This reservoir, critical to irrigation of the upper Artibonite and to power generation, is being silted up from serious erosion of the watershed.

There is also a lack of integration between the food and nutrition policy section of the Plan, on the one hand, and the agricultural section, on the other (in fact they are located in separate volumes). Future analytical work would be improved through a more integrated effort. For example, further research might be done on the food consumption patterns of peasants shifting from domestic food crops to export crops.

The Five Year Plan projects a 4.0% annual growth rate for Gross Domestic Product (GDP) for 1981-86, as compared with an estimated 2.3% annual growth for the 1976-81 period. The main structural reason for the projected acceleration is a sharp proposed improvement in agricultural performance relative to 1976-81. Given the substantial weight of agriculture in GDP (34% in 1980/81), improved agricultural growth has a significant influence on overall GDP growth, as revealed by the following Plan data:

Average Annual Real Growth Rates of GDP (%)

	1976/81 (est.)	1981/86 (planned)
Agriculture	0.1	3.0
Industry (incl. artisans)	9.0	7.0
Economic Infrastructure[1]	11.6	6.1
Other (services, etc.)	-0.9	1.2
Total GDP	2.3	4.0

Source: Plan Quinquennal, op.cit., Tome I, p. 140

1. Energy, Potable Water, Construction, Transport and Communications

To help produce this remarkable projected acceleration in agricultural growth, the Plan proposes a sharp absolute and relative increase in public investment in agriculture, from an average annual level of Gourdes (Gdes) 15 million (11.3% of total public investment) during 1970-75 to Gdes 118 million (14.9% of the total) during 1976-79, and to a planned level of Gdes 260 million (20.0% of the total) during 1981-86 (all in current prices).

Another major shift over the 70s and 80s that provides additional insight into proposed changes in public investment priorities is the marked planned decline in the share allocated to investment in transportation infrastructure. From high historical shares of 37% during the 1972-76 and 1976-79 periods, this category is expected to decline to 15.7% during 1981-86. While in absolute terms transportation increased from an average annual level of Gdes 81 million during 1972-76 to Gdes 213 million during 1976-79, it is projected to decline slightly to Gdes 204 million during 1981-86. Investment in transportation has consisted primarily of trunk highways and rural feeder roads that comprise an extremely important element of agricultural development.[1]

Some cautionary notes should be added about these projections. To begin with, planned shifts in expenditures are often not realized. The World Bank reports that historically, only 60% of planned public investment or "development" expenditures have been realized in Haiti.[3] This has been true for agriculture as well. Secondly, these figures do not include recurrent, or operating expenditures that are often just as essential for development as "investment" expenditures. The share of total operating

1. 1981-86 data are from Tome II of the Plan Quinquennal, op.cit., page 2. 1978-79 data are from World Bank, Memorandum of the Haitian Economy, Tables 10, page 23 and Table A-9, page 37 (May 13, 1981). 1972-79 data are from World Bank, Current Economic Position and Prospects of Haiti, Volume II, Table 5.7, page 150 (December 12, 1978). 1970-75 data are from Clarence Zuvekas, Agricultural Development in Haiti (Washington: AID, May, 1978), page 46.
3. World Bank, May 13, 1981, op. cit., Table 10, page 23.

expenditures allocated to agriculture has been far less than for investment expenditures. Both these issues will be discussed further in Chapter I below.

Third, neither quantitative nor qualitative linkages are shown for the relationships between (1) the projected rates of overall agricultural growth and the indicated agricultural investment figures; and (2) the specific crop growth projections shown in the sectoral volume of the Plan (Tome II), and the costs and specific measures required to produce these results. In fact, the strategy team expresses strong reservations about the realism of those crop projections (see Chapter II below).

Finally, reforms in agricultural pricing and related taxation policies are critical to improved performance, especially for sugar, coffee and other potential or actual agricultural crops. These and other supportive measures (better information, medium and long term credit, infrastructure) are critical steps the Government must take to encourage expanded private enterprise investment and production in the food and agricultural development sector. These questions will be discussed in considerable depth in the following Chapters (especially I - III).

It should be noted here that the Ministry of Plan is currently working intensively with line agencies and ministries to develop in greater detail some 24 "major" projects or groupings of projects, at a total estimated cost of $891 million over the 1981-86 period, including 5 in agriculture. The latter include (1) "Production of Food Crops (rice, maize, millet and beans) and of Export and Agro-Industrial Crops (coffee, oilseeds, cocoa, and sugar cane)" = $90/million U.S. -- various locations in the Southwest, South, Artibonite and Northwest; (2) "Rural Infrastructure" (rehabilitation, construction and studies of irrigation systems) = $65/million -- various locations; (3) "Cattle and Pig Breeding" (includes eradication of African Swine Fever) = $70/million -- nationwide; (4) "Conservation of Natural Resources" (systematic reforestation and tree crop planting intended to check erosion and restore soil fertility) $112,000/million -- nationwide; and (5) "Integrated Rural Development" (improve living conditions of the population of Grande Anse in the Southwest through increased agricultural production, public

works, health, education, etc.) = $8/million in the Grand Anse area of the Southwest. All five projects are to be implemented by the Ministry of Agriculture during the 1981-86 period. Each involves a range of activities, such as inputs, credit, construction, research and extension. Each is to have external support although only one donor is identified (the EEC for the Grand Anse Integrated Rural Development Project). A related project to be undertaken by the Ministry of Public Works is the construction of 1500 kms in various parts of the country of "Secondary Agricultural Roads" for $70/million (the proposed USAID "Secondary Roads" project would provide significant support at $18/million to this effort.)

Other agriculture-related or regional project proposals included among the 24 major projects are: a textile complex ($50 million -- to be located in the Artibonite Valley near Gonaives); production of anhydrous alcohol to use sugar cane ($2 million - near Port-au-Prince); industrial parks in Cap Haitien and Port-au-Prince ($16 million); a fertilizer mixing plant ($3 million - to be located near Gonaives); a plant to manufacture compressed blocks from rice and sugar waste ($1.2 million -- in the Artibonite); a cement plant in Gonaives ($100 million); an Industrial Development Bank ($20 million - Port-au-Prince); primary school construction -- including 1,000 classrooms ($53 million - nationwide); construction of 23 "first cycle" and 8 "second cycle" technical training schools ($28 million - various locations, including the Southwest and Northwest); strengthening health services ($29 million - nationwide with a 1986 objective to cover 70% of the population - probably related to the USAID rural health project.) Most of these proposed projects are in preliminary stages of development, but a few are in more advanced stages of preparation (textile complex, industrial parks, fertilizer mixing plant, cement plant and health service strengthening).

Chapter I: Policy and Fiscal Framework

Improvement in the Government's economic and fiscal policies, while not sufficient in itself, is nonetheless fundamental to reversing the retrogression in the Haitian food and agricultural sector. There are important short and long-run dimensions to the economic policy framework. The Government has made significant progress in pursuing actions intended to resolve the current short-run economic crisis although it is still too early to conclude that the crisis has been resolved. Decisions that should have a positive impact on long-run food and agricultural development have also been taken and additional measures are under consideration. Consistent and vigorous implementation of these measures is essential, however.

Several of these actions require short-run costs and relative sacrifice of economic privileges enjoyed by the affluent minority. Data on income distribution reported by the World Bank indicate that the affluent minority should be able to share a higher burden of the costs of development. In 1976, the wealthiest 0.44% of the income distribution was estimated to have received 44% of the national income. These percentages suggest an extremely skewed pattern of income distribution relative to that found in most developing countries.[1] Some real tests of the Government's commitment to a broadly-based development strategy are thus yet to come.

The sub-sections below analyze aspects of the short and long-run policy and fiscal frameworks and conclude with a discussion of external financing requirements.

Short-Run Developments

Economic growth in Haiti has been dominated by agriculture which in turn has been dominated by such major export crops as coffee and sugar. Fluctuations in these crops induced by shifts in international prices, weather, government policies and other factors tend to be reflected in

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1. Haiti data from World Bank, 5/13/81, op. cit., p. 6. Comparisons with other countries are available in World Bank, World Development Report 1981 (Washington, August 1981), Table 25, pp. 182-183. For example, among 20 developing countries for which income distribution data are shown, only three show an income share of more than 44 per cent for the wealthiest ten per cent of the population.

movements of overall GDP. These fluctuations show up clearly in the data presented in Tables I-1 and I-2 below (not withstanding the variations according to source). The relatively rapid growth of manufacturing, including export assembly industry, has tended to dampen the effect on GDP of agricultural fluctuations (see Table I-1) and differing movements among crops have tended to dampen fluctuations within agriculture (see, for example, coffee and sugar in 1978 and 1979 in Table I-2).

-- the crisis of 1981

A combination of external and internal factors produced a serious economy-wide crisis in 1981. This crisis was manifested by a stagnation (and likely decline) in GDP (see Table I-1) and in a more dramatic way by net declines in foreigh exchange reserves in 1980 and 1981 (see Table I-3 below) which resulted by the fall of 1981 in a net negative foreign exchange reserve position in the Central Bank (Banque de la Republique d' Haiti).

TABLE I-1

Haiti, Gross Domestic Product by Sector
(million 1976 Gourdes)

GDP (market prices)	1976	1977	1978	1979	1980	1981
Plan	4395	4376	4571	4786	5059	4909
IMF	4395	4477	4686	4854	5116	5123
World Bank	4395	4376	4759	4827	5165±	5165±
GDP (% change)						
Plan	6.9	-0.4	4.4	4.7	5.7	-3.0
IMF	8.4	1.9	4.7	3.6	5.4	0.1
World Bank	8.5	2.3	5.9	1.4	7.0±	0.0±
Agriculture (% change)(est. share of GDP in 1981 = 31%, IMF)						
Plan	na	-6.2	2.1	4.6	5.1	-5.2
IMF	4.9	-5.2	1.0	-0.6	5.1	-4.7
World Bank	7.0	-3.0	7.8	-2.0	na	na
Manufacturing (% change)(est. share of GDP in 1981 = 17%, IMF)						
Plan	na	16.7	12.1	12.0	5.5	-1.2
IMF	21.5	9.9	8.4	3.8	[illegible].0	4.5
World Bank	21.5	7.1	0.4	8.0	na	na

Sources:
Plan: Plan Quinqennal, op. cit., Tome I, Tas. A-1 to A-6, pp. 50-55.
IMF: Table on Industrial Origin of GDP, prepared 9/30/81 for forthcoming country paper.
World Bank: Memorandum of the Haitian Economy, op. cit., May 13, 1981, Ta. A-1, p. 29 and p. 5, paras.13-14.

Dates refer to fiscal year, ending September 30. Discrepancies between the Plan data and World Bank data arise from a revision reflected in the former by the Haitian Institute of Statistics (IHS).

TABLE I-2

Haiti, Agricultural GDP (percent change, 1976 prices)

	1977	1978	1979	1980	1981
Agriculture	-6.2	2.1	4.6	5.1	-5.2
Coffee (10% of total in 1976)	-23.3	13.8	-18.7	50.4	-33.5
Sugar Cane (5% of total in 1976)	--	-6.4	30.9	1.6	-3.5

Source: Plan Quinquennal, op. cit., Tome I, Ta. A-6, p. 55. Dates refer to fiscal year ending September 1.

An excellent coffee crop in the fiscal year ended September 30, 1980, was followed by a decline resulting at least in part from poor weather, including damage caused by Hurricane Allen and from a weakening in world prices (see Ta. I-2). At the same time, other external economic factors that have adversely affected many developing countries also impacted negatively upon Haiti; namely, (1) continued escalation in the world prices of petroleum products and other essential imports; (2) deepening recession in industrial countries; and (3) an unprecedented rise in interest rates in the United States.[1]

1. op. cit., p. 179

Table I-3

Haiti, Balance of Payments (million $)

	1979 (actual)		1980 (prelim.)		1981 (estim.)	
	credit	net	credit	net	credit	net
1. Good & Services Balance (less travel & investment income)	148	-181	224	-177	169	-230
2. Official Capital & Transfers	94	86	98	88	122	113
3. Private Capital, Transfers & Investment Income (Private Transfers)	115 (77)	54 (32)	123 (88)	19 (31)	133 (98)	38 (38)
4. Travel	61	48	64	51	57	45
5. Total Balance on Current, Transfers & Capital Accounts	418	7	516	-19	481	-34
6. Not Allocated	7	7	7	7	--	1
7. Net Change in International Reserves (increase = -)	--	-14	--	12	--	33

Source: IMF, derived from table prepared in Fall 1981 for forthcoming country report.

2. includes IMF "Trust Fund" allocations.
3. includes "Short-term Official Capital" since this is Government-guaranteed private loans, also includes "Errors & Omissions" based on assumption that private capital movements account for most errors and omissions.
6. includes "other unrequited earnings" (reportedly windfall profits on changes in the value of official gold holdings) and SDR allocations.

Dates refer to fiscal years ending September 30.

Compounding the impact of these external shocks were some very large extra-budgetary expenditures incurred inspite of beginning steps to centralize all revenue collection and expenditures authorization within the Ministry of Finance, under budgeting and accounting reforms promulgated in 1978 and early 1981. A major apparent reason for these expenditures was to provide support for several major industrial projects undertaken jointly by the Government and domestic and foreign private interests. These projects have been the subject

of critical appraisal of their economic and financial viability, especially in view of their apparent, high capital and import-intensities.[1] While the Government argues that these projects are nonetheless justified in order to promote the industrial development and economic independence of the country, it is clear that the timing and magnitude of these expenditures aggravated the country's economic crisis. They had the effect of drawing down foreign exchange reserves that had accumulated from the high coffee exports of 1980, reserves that normally would have been held to cushion the decline in coffee earnings that typically follows an increase (in a cyclical pattern). These expenditures also abrogated the conditions of the existing EFF (Extended Fund Facility) agreement with the IMF and caused curtailed access to the IMF's foreign exchange resources.

The combined effect of external shocks and internal policies produced the current, unsustainable foreign exchange crisis: a net negative offical foreign exchange position in which current liabilities exceed current holdings.[2] These developments illustrate the strong linkages between the balance of payments situation and public finance. A close relationship is to be expected in an economy where exports account for almost 30% of GDP and imports, almost 40% (1979-80). When exports suffer, so do government revenues, given the heavy reliance on export taxes. When major capital-intensive expenditures are incurred, these are typically translated into major increased demands for imports and foreign exchange.

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1. The World Bank report, Haiti: Economic Memorandum, February 17, 1981, contains an extensive discussion of these projects. Three projects -- a sugar mill, edible oil processing plant and a motor-powered fishing fleet -- are under development or already in operation. Pre-feasibility and feasibility studies are being conducted for two additional projects: a new cement plant and a textile mill.

2. A parallel market for the Gourde is apparently now developing. Money exchanges in Port-au-Prince have reportedly recently been offering 5.1 to the dollar with higher rates available informally (the long-standing offical rate is 5.0:1) and the going rate at the Miami Airport is about 5.6:1. The delay in the appearance of a parallel market in the face of an offical foreign exchange shortage is explained by the existence of a large amount of dollars (up to 40%) in the money supply in circulation. These dollars have been drained out of the money supply for imports and for deposit abroad during the last year.

These factors have also produced a government budget crisis, as shown in Table I-4. Current and capital expenditures increased by large increments in 1980 and 1981, while revenues (excluding public enterprise receipts) declined in 1981, producing not only a sharply escalating overall public sector deficit but also a declining current account surplus. The current account surplus, which may also be viewed as "public sector saving," has declined continuously since 1978 and is projected to become negative in 1981 (see Ta. I-4).

These developments illustrate the strong linkages between the balance of payments situation and public finance. A close relationship is to be expected in an economy where exports account for almost 30% of GDP and imports, almost 40% (1969-80). When exports suffer, so do government revenues, given the heavy reliance on export taxes. When major capital-intensive expenditures are incurred, the are typically translated into major increased demands for imports and foreign exchange.

Table I-4

Haiti: Public Sector Accounts
(Gourdes million)(fiscal year ending 9/30)

		1977	1978	1979	1980	1981
1.	Current Revenues (excl. 5 public enterprises)	516	549	570	691	658
2.	Current Expenditures (excl. public enterprises)	411	469	544	728	835
3.	Current account surplus or deficit (-) (1-2)	105	80	26	-37	-178
4.	5 Main public enterprises; current account surplus or deficit (-)	40	67	53	68	102
5.	Overall public sector current-account surplus or deficit (-) (3+4)	145	147	79	32	-75
6.	General capital expenditures (excl. 7)	416	441	417	553	615
7.	Capital expenditures of 5 main public enterprises	152	129	110	103	142
8.	Grants-in-aid	163	196	239	230	310
9.	Nonconsolidated (residual) public sector surplus or deficit (-)	18	-18	-13	15	23
10.	Overall public sector surplus or deficit (-)(5+8+9-6-7)	-242	-245	-223	-379	-500

Source: Re-arranged from table prepared by IMF in November 1981 for forthcoming country report. Totals may not add owing to rounding. The five main public enterprises are the telecommunications company, the water supply company, port administration, electricity company, and flour mill.

Finally, there is an important indirect, but no less real, impact of the current crisis. The shortage of foreign exchange and credit has not only made it difficult for the private sector in Haiti to conduct current activity, but has undoubtedly deterred new investment and provoked a flight of short-term capital. Moreover, a country in the throes of an economic crisis may be relatively less attractive to tourists than a healthy, growing economy.[1]

1.2 — recent progress

The Government of Haiti would appear to be well aware of the multiple, inter-related roots of the current short-term economic crisis and of the measures the Government needs to take to help resolve the crisis. The recently issued 1981-1986 Five Year Plan and recent speeches by President Duvalier attest to such understanding, as do strategy team discussions with GOH and other donor officials.[2] This understanding includes increased appreciation of the strong inter-relationships between fiscal policy and the balance of payments.

This understanding is in the process of being translated into performance. In an address of August 8, 1981, President Duvalier called for an economic austerity plan to increase Haiti's ability to finance its own development through increased domestic savings, improved management of public funds, fiscal discipline, further limitations on imports and promotion of exports. The President set forth a number of specific steps requiring initial action or continued implementation efforts:

1. Note the decline in travel receipts projected for 1981 in Haiti's balance of payments in Table I-3, after a period of impressive and continuous growth since 1976 (from IMF table cited in Ta. I-3). This decline may well also be caused by an overall decline in tourism from the U.S., in view of the current U.S. recession.
2. See, for example, the section on Fiscal Policy, p. 184, Tome I, in the Plan Quinquennal, op.cit. Also see Message Presidentiel, August 8, 1981, (GOH, Ministry of Information and Public Relations.) and Presidential budget message of September 8, 1981.

-- Reaffirmation of decrees issued in February 1981, to centralize all government revenues, including those collected by the Regie du Tabac et des Allumettes (Tobacco and Match Monopoly), within the Ministry of Finance.

-- Integration of all public expenses into the national budget so that "unforseen expenditures will not upset the equilibrium of the budgetary program."

-- Reduction of non-salary current expenditures of GOH Ministries by 20%.

-- Holding other budget spending for 1981-82 to 1980-81 levels.

-- Strict regulation and institutionalization of the process for selection, financing and execution of government productive projects.

-- Reaffirmation of a May 1981 decision to accelerate tariff reform with the objective of simplifying and unifying the tariff structure and converting all duties to an ad valorem basis.

-- Suppression of all tariff exemptions, with the exception of those resulting from international agreements or granted to charitable or similar organizations.

-- A surtax of 20% on individual and business incomes in higher categories.

-- An increase of 20% on tariffs on imported luxury items.

-- Several specific measures limiting importation of certain products, including some items produced locally, and a one-year reduction of 30% in the automobile import quota.

-- Several specified domestic tax increases, including on alcoholic beverages and automobile inspections.

-- Creation of a "special brigade" of tariff and tax inspectors of "sufficient quality and with sufficient renumeration to assure efficient and strict regularity in the recovery of duties and taxes."

-- Immediate steps by the Central Bank (BRH) and National Credit Bank to "intervene" in exchange transfers conducted "at the fringe" of current banking legislation.

-- Strict "programming" of imports by categories of products.

-- Studies to evaluate the above measures and to propose further reforms in the fiscal system.

In addition to this impressive list of enacted and proposed measures, which parallel several recommendations of a 1979 IMF study of taxation in

Haiti,[1] the President gave explicit high priority to upcoming negotiations with the IMF intended to improve the foreign exchange situation. These negotiations led to agreement by the GOH to meet monthly fiscal targets as a condition of obtaining a CFF (Compensatory Financing Facility) to compensate for the 1980 decline in coffee earnings. These targets, which entail strict limitations on the budget deficit, were met in October and November 1981, and subsequently led to IMF approval of a $20 million CFF (at its December 23 Executive Board meeting). The IMF negotiations also involved agreement on the specific uses to be made of the CFF, primarily to cover foreign exchange arrears.

It is still too early to indicate when and to what degree Haiti will emerge from its short-term economic crisis. It is estimeated that the CFF will improve, but may not bring back to zero the official foreign exchange reserve position. Hoped for economic developments with a positive foreign exchange impact include a good 1981/82 rice harvest that would sharply reduce the need for rice imports, and a recovery in coffee production from a 1981 level of roughly 400,000 bags (60 kg. each) total production and 200,000 bags exported, to as high as 575-625,000 bags in 1982 (350-375,000 bags exported).[2]

However, the level of private sector confidence still remains shaky and no reversal in short-term private capital flight is yet in sight.
It also appears as though the 1981-82 tourist season will be depressed -- as a result both of the U.S. recession and possibly a negative image conveyed by news of Haiti's economic problems and the illegal immigration to the U.S.

Additional, substantial support from the IMF in the form of a Stand-By credit will be discussed during negotiations now scheduled for the first quarter of 1982. In the meantime, the IMF is continuing to evaluate short-term fiscal performance and is assisting the GOH to develop improved procedures for foreign exchange management and forward budgeting.

1. IMF, Fiscal Affairs Department, "Taxation in Haiti," September 13, 1979.
2. This compares with peak production of 762,000 bags and export of 545,000 bags in 1962. See IMF, "Taxation in Haiti," op. cit., Table 32, p. 91.

2. Long-Term Requirements

Many of the decisions announced in the President's Message of August 1981, and in the new Five Year Plan are also relevant to long-term development. Important steps must still be taken and continued attention to implementation is also required. These measures are as important, if not more important, to sustained food and agricultural development as the short-term performance described above. A sense of commitment and urgency must infuse their implementation if the retrogression in food and agriculture is to be reversed.

The following discussion of long-term policy requirements is divided into those affecting public sector revenues and those affecting public sector expenditures. The following section as well as Chapter III also discuss the impact of public policy on private sector production and investment.

-- public sector revenues

It is imperative that the GOH find ways to increase revenues and public savings. Major positive steps have been taken with the already-cited decisions to unify, rationalize and improve the management of both revenue collection and the allocation of revenues among competing uses.

Among the most significant of these decisions are those that bring the various revenue collection and expenditure functions acquired by the Regie du Tabac since its establishment in 1948 back into the regular budgetary process and the Ministry of Finance and the various line Ministries. Before the 1978-79 Budget and Accounting Law, the Regie held a monopoly over the marketing of almost 50 locally produced and imported products, from which it received commissions -- in effect excise taxes or duties. Some idea of the magnitude of Regie and other "special account" and "non-tax" revenues can be gleaned from examination of the bottom row of Table I-5, below. These functions have subsequently been progressively reduced although implementation has been uneven and subject to delays. The Regie now charges commissions on only five products: sugar, flour, cement, cigarettes and matches -- although these products accounted for well over half of the Regie's pre-1979 income.

Table I-5

Haiti, General Government Revenue
(Gdes million, fiscal year ending September 30)

	1977	1978	1979	1980	1981
Total Revenue	639	723	751	(not available)	
Tax Revenue	442	472	500	641	567
Taxes on Net Income and Profits	65	74	78	88	116
Taxes on Property	8	10	10	10	11
Taxes on Goods and Services	67	72	83	96	110
Taxes on International Trade	275	287	295	404	287
Import Duties	(162)	(170)	(196)	(239)	(235)
Coffee Export Tax	(77)	(81)	(50)	(116)	(46)
Bauxite Export Tax	(35)	(35)	(46)	(43)	(3)
Other Export Taxes	(1)	(2)	(3)	(5)	(2)
Other Taxes	27	29	34	44	45
Unidentified and "Nontax" Revenues	197	251	237	(not available)	

Sources: All data from table prepared in November, 1981, by IMF for forthcoming country report, except "Total Revenue" and "Unidentified and Nontax Revenue" rows. These rows were estimated by employing the ratio of tax revenue to total revenue implied for 1978 by Table 1, p. 15, of the April 1979 IMF study, "Taxation in Haiti." Unidentified revenues include estimates of Regie du Tabac commissions. Figures for 1980 and 1981 were not calculated since an undetermined amount of Regie and special account revenues were centralized into the Treasury.

The IMF, at the request of the Government, undertook a study in 1979, of taxation in Haiti and made a number of recommendatons intended to increase revenue generating capacity and increase the efficiency of tax

administration.[1] The main recommendations dealt with consolidation and simplification of taxes on domestically and internationally traded goods and services, including a substantial reduction in earmarking of taxes, and moving from a system based on a mixture of specific and ad valorem taxes to a relatively uniform ad valorem approach, with limited differentiation for degree of necessity and protection of local industry. Several recommendations were also made to increase the yields of individual and corporate income taxes. A common objective of these recommendations was to improve the responsiveness (elasticity) of the tax structure to increases in income and/or GDP. A significant recommendation was to implement a uniform sales tax on domestic manufacturing firms that would replace the multiplicity of excise taxes and commissions. A reduced rate would apply to selected essential or basic consumption items. Over time the coverage of the tax would be expanded to additional firms and to selected services (electricity, telecommunications, water, etc.). The strategy team would hope, in view of their reponsiveness both to yield and equity considerations, that these recommendations are taken up by the GOH.

Two important criteria that must be kept in mind in seeking new sources of revenue are: (1) the potential impact on production and investment incentives, and (2) the potential impact on equity and ability to pay. In the case of coffee, both production and equity considerations apply. As shown in Table I-5, taxes on coffee exports continue to constitute a major, if highly variable, share of total tax revenues (18% in 1980 and 8% in 1981). Over a quarter (perhaps as high as 40%) of the Haitian population depends on coffee for its livelihood — some 300,000 growers or 1.5-1.8 million people, including family members, plus rural marketers and their families. A major issue has been whether the taxes on coffee exports, which consitituted 25% of the fob price, on average, during the 1971-78 period and which were undoubtedly passed back to growers on at least a proportional basis, constitutes both a burden on growers and a serious obstacle to increased production and incomes. These issues will be discussed further in Chapter II, below.

1. "Taxation in Haiti," September 13, 1979.

The conclusions of the previously cited IMF Study on Taxation in Haiti (September 13, 1979) are relevant to the discussion here.

> Even though most producers may have income from other crops, the effective rate of tax on this generally poor sector is probably still much higher than on other groups with greater ability to pay. (p. 89)

> It may be in Haiti's interest to establish marketing coops to make less costly the collection and marketing of coffee. (p. 93).

;Nonetheless, the study concludes:

> Taking all these considerations into account and with the difficulty of finding alternative sources of revenue, the mission does not recommend an immediate reduction in the taxation of coffee exports in Haiti. In the longer term, however, the export tax should be substantially reduced to expand the output of coffee and ease the relatively heavy tax burden on the coffee producers. This should be done as soon as superior sources of revenue are available. The development of the proposed sales tax may offer the authorities the opportunity necessary to reduce their heavy reliance on export taxes. (p. 93).

Similar observations to those made above for coffee can be made for several other agricultural export crops. For example, a promising expansion of exports of essential oils has subsequently almost disappeared owing in part to tax and Government marketing policy that discouraged production and the replacement of outdated equipment. The words of the 1979 IMF study were prophetic:

> It is particularly important, in view of what happened to sugar exports ;also terminated, in part because of tax policy, that the price received by the producer is sufficient to make production and sale of these essential oils profitable in the long term. (p. 96).

From a narrow public finance point of view, the critical question is the impact of an agricultural export tax reduction on revenues. The new Five Year Plan poses the issue very succinctly:

> "A policy for export taxes ought to encourage production by assuring producers the opportunity to realize satisfactory profits. In the case of coffee, the problem is complicated, for if lower duties imply more income to producers, they entail at the same time a reduction of government revenues. This ought therefore, to be compensated by higher duties on certain imports and on exports that cause a scarcity of the product on the domestic market." (Tome I, p. 182)

Production of essential oils is at such a low level that if reduction in the tax rate stimulated an increase in production, tax revenues would probably increase as well. In the case of coffee, however, at least a short-run loss in revenue is to be expected, although expansion of production should in the longer run tend to offset this loss. Reduction in the reported substantial smuggling of coffee into the Dominican Republic could have a more immediate compensating impact on tax revenues.

An examination of the various sources of tax revenue indicated in Table I-5 suggests possible sources of additional revenue to offset a short-run reduction in revenues from a cut in coffee taxes. A reduction in the latter that cut average tax returns in half, for example, would have implied an average annual tax return from coffee of Gdes. 37 million rather than Gdes. 74 million during 1977-81. The previously cited IMF study (1979) estimated that an additional annual Gdes 20 million could be raised by implementation of recommendations for taxes on net income and profits. These measures plus implementation of a sales tax and conversion of customs duties to an ad valorem basis, with higher rates for luxury and non-essential items, should more than make up for a short-term decline in coffee tax revenues.

Table I-5 also reveals a sharp decline in what had become a significant source of tax revenue: bauxite exports. Continued exploitation has become uneconomic, so this source of foreign exchange and revenue will dry up. Even allowing for this decline, however, it would appear there are structural and rate changes in the tax system that could compensate for a reduction in agricultural export taxes and which would, at a minimum, not discourage producton incentives nor worsen equity.

Another aspect of government revenues are those foregone as a result of the current system of incentives in the form of tax and duty exemptions intended to encourage foreign and domestic private investment in "new industries." While the 1979 IMF study recognizes the contribution of these incentives to industrial output and employment, it questions whether they are more generous than required to attract investment. The study recommends:

-- reducing tax exemptions from 9 to 5 years and for outlying areas (from Port-au-Prince) from 15 to 8 years;
-- abolishing the exemption from income tax on the dividends of shareholders in "new" industrial enterprises;

-- abolishing the provision for establishing quotas on imports that compete with locally produced goods in "new industries," recognizing that the duty-free importation of inputs already protects local industries and that quotas prevent competition at any price from imports, enabling domestic firms to raise costs and selling prices.

These are important considerations as noted in Chapter III below. The strategy team concluded that a tax exemption of 7 to 8 years was ample to encourage investment. Anything beyond this would unnecessarily deprive the Government of revenue. Similarly, excessive and prolonged protection of local industry encourages monopoly and imposes an implicit penalty or tax on potential competitors and on consumers, who pay higher prices than would prevail with greater competition.[1]

-- public sector expenditures

Two important aspects of expenditures are: (1) establishing sectoral and project priorities, and (2) follow-through in terms of actual expenditure of funds and commitment of staff in accordance with planned priorities.

As noted in the Introduction, agriculture has been given a higher priority in recent development budgets and in the new Five Year Plan than in the actual development or public investment expenditure patterns of the 1970's.[2] This shift is confirmed in Table I-6 below. The share of development expenditures for transport infrastructure--which are in part related to agriculture--are projected to decline, but shares for energy, education and health show modest projected increases. Providing administration is efficient and the choice of technology or method is appropriate, operating or current expenditures in such areas as agriculture, education and health are just as essential to developmental effectiveness as public investment expenditures.

1. The Plan Quinquennal recognizes this danger when it calls for the "efficient protection" of local industry, without assuring "too comfortable or permanent a position to monopoly." (p. 182, Tome I).
2. See note at bottom of Table I-6 for discussion of the distinction between "development expenditures" and "public investment" as defined by the GOH.

Table I-6

Haiti, Structure of GOH Development Expenditures, 1976-86 (per cent) (fiscal years ending 9-30)

	1976-79 (actual)	1980-81 (budgeted)	1981-86 (projected)
Total	100.0	100.0	100.0
"Productive" Sectors	17.9	29.2	27.0
Agriculture	14.2	20.3	20.0
Industry, handicrafts	2.6	7.3	5.0
Mining	1.1	1.6	2.0
Economic Infrastructure	57.7	35.8	42.3
Energy	13.5	11.6	18.1
Water Supply	2.8	4.5	3.9
Transport	37.4	16.2	15.7
Communication	4.0	3.5	4.6
Human Resources & Shelter Sectors	11.8	21.5	20.8
Education	6.4	9.1	7.7
Health	5.2	7.6	8.0
Urban Development & Housing	0.2	4.8	5.1
Other	12.5	12.6	9.9
Community Development	9.2	7.9	5.0
Tourism	0.2	0.5	1.0
Information & Statistics, Social Affairs, Youth & Sports, Other Admin.	3.1	4.2	3.9

Sources: Four major groupings and 1981-86 data from Plan Quinquennal, op. cit., Tome I, Ta. B-9, p. 159. 1980-81 data from World Bank, 5-13-81, op. cit., Ta. A-9, p. 37. 1976-79 data from World Bank, 2-17-81, Ta. 1.8, p. 93. Some portion of "development expenditures" as defined in this table may include current expenses associated with capital investment. The Plan Quinquennal (Tome I, Ta. B-9, p. 159) assumes that 75% of total projected "development expenditures" are "public investment."

Table I-7

Haiti, Operating or Current Expenditures (percent)
(fiscal years ending 9-30)

		1978	1979	1980
	Total (1+2)	100.0	100.0	100.0
1.	Budgeted (3+4+5+6+7)	58.5	61.6	66.4
2.	Not Budgeted (extra budgetary)	41.5	38.4	33.6
3.	Productive Sectors	5.5	5.1	6.6
	(% of total)			
	Agriculture	4.4	3.0	4.4
	Mines & Energy Resources	-	1.0	1.0
	Commerce & Industry	1.1	1.1	1.2
4.	Economic Infrastructure			
	Public Works	5.1	5.3	4.4
5.	Human Resources	15.9	20.6	18.8
	National Education	7.0	8.6	10.4
	Public Health	8.9	12.0	8.4
6.	Finance, Economic Affairs, Planning	7.1	8.1	8.4
7.	Miscellaneous	24.9	22.5	28.2
	Interior, National Defense, Armed Forces	16.4	12.6	13.9
	Information, Public Affairs	-	-	4.8
	Other [1]	8.5	9.9	9.5

Source: World Bank, 5-13-81, op. cit., Ta. A-8, p. 36. Groupings and categories differ slightly from Ta. I-6, above.

However, the structure of GOH current expenditures in recent years, as shown in Table I-7, below, suggests that current expenditures allocated to agriculture, at 3 to 4 1/2 percent of total current expenditures, are inordinately low. Given the basic importance of agriculture for Haiti's short-run and long-run sustained development, the current expenditure budget should be the subject of periodic, rigorous review for possible reallocations in favor of agriculture and other development-oriented categories. The categories under the headings.

1. Presidency and Legislation (1980 only), Foreign Affairs, Local Affairs, Religious Affairs, Justice, Planning, Youth & Sports, Coordination, Unallocated.

"Miscellaneous" and "Not Budgeted (extra budgetary)" account for over 60% of current expenditures shown in Table I-7 in contrast to less than 40% allocated to categories under the Productive Sectors, Economic Infrastructure, Human Resources, and Finance, Economic Affairs, Planning headings.

Table I-8 shows very low planned or budgeted current expenditure shares for agriculture (1981-82) as well as low actual shares (1978-80). This table also permits comparisons between budgeted and actual development expenditures for the same years, 1978 and 1979. A significant gap between budgeted and actual expenditures is shown, ranging between 20 and 40 percent for both total and agriculture development expenditures.

In the case of agriculture, this gap is at least in part a manifestation of absorptive capacity problems, and the low share of operating expenditures received by agriculture may well translate into low absorptive capacity for development expenditures. The World Bank, in noting that average annual expected disbursements for the 1982-84 project inventory for agriculture imply an 85 percent nominal increase over the 1980-81 period, raises the following questions:

Table I-8

Haiti: Current and Development Expenditures, Actual and Planned, Total and for Agriculture
(million Gourdes, current prices, and percent, fiscal years ending 9-30)
(1978-80 Actual unless noted; 1981-82 budgeted)

		1978	1979	1980	1981	1982
Total Current Expenditures	m.Gdes	469	568	706	784	855
Agriculture	m.Gdes	21	18	31	33	29
(% of total)		(4.5)	(3.2)	(4.4)	(4.2)	(3.4)
Total Development Expenditures						
Actual	m.Gdes	706	614	-	-	-
Budgeted	m.Gdes	897	985*	985	1094	982
Agriculture						
Actual	m.Gdes	113	135	-	-	-
(% of total)		(16)	(22)			
Budgeted	m.Gdes	198	167*	256	170	240
(% of total)		(22)	(17)	(26)	(16)	(24)

*Plan estimates.

Sources: 1978-80 current, 1978-79 development-actual and 1980 development-budgeted from World Bank, 5-13-81, op. cit., Tables 10, A-8 and A-9, Total development-actual amounts for 1978-79 and budgeted amount for 1980 calculated from agriculture amounts and percentages. 1978-79 budgeted amounts from World Bank, Current Economic Position & Prospects of Haiti, 12-22-78, Volume II, p. 152. 1979 figures are converted to current prices, using inflation factors given in table. All 1981-82 data from U.S. Embassy, Port au Prince (A-53, 10-30-81).

> (i) the absorptive capacity of the sector which should have first priority in the country's development and the ways and means to improve it; (ii) the relative weights of the programs;
> (iii) the regional priorities; and (iv) the identification and preparation of projects in this critically important sector. [1]

Chapters II, IV and V will deal with specific aspects of absorptive capacity problems in agriculture, including planning, budgeting, staffing and implementation procedures. Team discussions did reveal inadequate project identification and appraisal to be a problem affecting much of the public sector, including agriculture. This is also a growing problem for private sector firms in need of medium and long-term institutional credit, and is discussed further in Chapter III.

The GOH is aware of both these public and private sector problems and is taking and/or considering actions intended to improve the situation. In the public sector, attention is being given to strengthening the programming units in the line Ministries as well as their coordination with the Ministry of Plan. In addition, consideration is being given to strengthening and unifying, Government-wide, the procedures by which the socio-economic feasibility and desirability of proposed public sector projects are appraised. Relatively simple procedures for pricing foreign exchange and labor in terms of their cost to the economy as a whole are being considered. Such techniques can improve efficiency in the allocation of scarce public resources. In addition, discounting should be applied in the cost-benefit analysis of projects, applying an economy-wide "opportunity cost of capital." This will permit the periodic ranking of proposed and on-going public sector projects and can help to prevent the displacement of higher priority projects by projects with less (or even negative) net benefit to the economy.

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1. World Bank, 5-13-81, op. cit., p. 24.

Annex B of this report cites several instances where inadequate project appraisal and design, including planning for implementation and utilization, as well as overall policies and actual implementation, resulted in ineffective USAID support to previous Haitian food and agricultural development projects that consequently did not accomplish their intended objectives. While development inherently involves risk-taking, there is considerable scope for improvement of previous performance. The strategy team believes this performance can and must be improved in the context of responsive international assistance to Haiti.

External Financing Requirements

If the Government's initial positive performance on its commitment to improve its economic management and increase revenues for development purposes is maintained, Haiti's food and agricultural development prospects could markedly improve. But this will only be possible if a substantial increase in Official Development Assistance (ODA) from bilateral and multilateral donors is made available to support and complement the Government's major policy changes and related efforts.

Haiti's current foreign exchange and budget crisis implies a sharp reduction in GOH ability to finance the public sector development budget. Table I-9 below shows a net decline in budgeted nominal development expenditures from 1981 to 1982 and that only the modest projected increase in external financing prevented the overall decline from being even greater. Furthermore, apart from the relatively small amount of domestic financing provided by PL480 Title I local currency proceeds, the public sector current account deficit projected for 1981 in Table I-4, above, implies that the domestically financed portion of development expenditures has come from borrowing rather than from tax revenues.

The potential and prognosis for increasing domestic revenues have already been discussed. Some indication of the potential for increased financing on the external side, based on recent experience, is indicated in the Balance of Payments groupings for 1979-81 shown in Table I-3, above. An increase in

official capital and transfers would of course provide direct financing for public sector capital expenditures. Improvement in exports, net travel (mainly tourism) and net private capital transfers and net investment income would provide indirect relief by increasing trade and income-related tax revenues as well as increased private sector financing. However, the large gap shown between the "credit" and "net" columns of Table I-3 for the third row, "Private Capital Transfers and Investment Income," indicates signficant outflows as well as inflows in these categories and should caution against excessive optimism regarding net private sector flows.

Table I-9

Haiti: Budgeted Development Expenditures and Domestic and External Financing, 1981-82

(million Gourdes and U.S. dollars in current prices, fiscal years ending 9-30)

	1981	1982
Total Budgeted Development Expenditures		
(million Gdes)	1094	982
(million U.S.$)	219	196
Domestically Financed		
(million Gdes)	438	290
(million $ incl. $9 million each year in PL 480 Title I proceeds)	88	58
(per cent of total)	(40%)	(30%)
Externally Financed		
(million Gdes)	657	692
(million $)	131	138
(percent of total)	(60%)	(70%)

Source: U.S. Embassy, Port au Prince.

For example, much has been made of private remittances from Haitians living abroad. The officially recorded figures in Table I-3 show an estimated inflow of about $100 million in this category in 1981 and the addition of unrecorded inflows might as much as double the figure. Table I-3 also indicates, however, that officially recorded outgoing private transfers resulted in net inflows less than half the levels of gross inflows. While current efforts to initiate control of private capital flight may have some

success, the most important check on capital flight will be improved health of the Haitian economy (as well as renewed economic growth and lower interest rates in the U.S. economy).

Thus, although external donor resources provided to Haiti are substantial in relation to the public sector development budget, the need for a growing level of such resources remains great, especially under the current circumstances of fiscal constraints and corresponding reduction in counterpart development and operating funds available from domestic sources. In the medium-term, from 1981 to 1986, even though the Five Year Plan projects significant increases in private and public domestic saving resulting from both policy measures and increased growth, the need for net external financing to help produce a 4 percent GDP growth rate is also projected to increase sharply (by 171 percent), from Gdes 505 million to $101 million in FY 1981 (80-81) to Gdes 1369 million or $274 million (in current prices) in FY 1986 (85/86).[1] The Plan assumes that U.S. bilateral assistance will fluctuate between 21 and 23% from FY 1982 to FY 1986, or about 22 percent on average.[2] A constant share of 22 percent would imply more than a doubling of requirements for U.S. bilateral assistance, from estimated USAID resource flows (including PL 480) of $33 million in FY 1981 to about $89 million by FY 1986.[3]

Analysis prepared by the World Bank in its most recent Economic Memorandum yields roughly similar orders of magnitude, namely, an increase from $113 million in total net aid in FY 1981 to $241 million in FY 1986 (current prices) to yield a 3.6% rate of GDP growth, and to $381 million in FY 1986 to yield a 4.6% rate of GDP growth.[4] Assuming a constant share for U.S. bilateral assistance, these increases would imply a growth in USAID growth flows from $33 million in FY 1981 to $70 million in FY 1986 under the 3.6% growth rate scenario, and to $111 million under the 4.6% scenario.

1. Plan Quinquennal, Tome I, Tables B-17 and B-26, pp. 166 and 173.
2. Loc. cit., Ta. 1, p. 150.
3. 1981 USAID resource flow figure taken from the draft USAID/Haiti FY 1983 Presentation to Congress, p.2 (November 6, 1981). There are unexplained, but not substantial, discrepancies between the FY 82 figures projected by the GOH Five Year Plan and those shown in the Congressional Presentation.
4. Calculated from World Bank, 5-13-81, op. cit., para. 40 and Ta. 3, pp. 14-15. See Table I-10 in text, below, for further detail.

As a variant of the 3.6% growth rate scenario, the Bank analysis considers a reorientation of investment toward agriculture. The resulting projected reduction in imports of inputs for industry and increase in agricultural exports yields a significant reduction in external financing requirements projected for FY 1986 from $241 million to possibly as low as $190 million.[1] At a constant U.S. bilateral share, this would imply an increase in U.S. bilateral aid from gross flows of $33 million in FY 81 to about $55 million in FY 86.

These various projections are summarized in Table I-10 below. They suggest that annual U.S. bilateral assistance to Haiti should at a minimum increase by 1986 to a level over $20 million higher than in 1981 in order to yield modest though significant results, assuming other donors increase their assistance by similar proportions. As suggested by the World Bank analyses summarized above, the performance of Haiti's food and agricultural sector will play a major role in determining whether external assistance can help yield its intended overall results.

Table I-10

Haiti, Net External Financing Projections
1981-86 (fiscal years ending 9-30)
(current million Gourdes and U.S. dollars)

	Annual GDP growth assumption	1981	1986	(% increase)
GOH Five Year Plan	(4%)			
All donors (m. Gdes)		505	1369	(171%)
All donors (m. $)		101	274	"
U.S. bilateral gross flows (m$)		33	89	"
World Bank	(3.6%)			
All donors (m. $)		113	241	(113%)
U.S. bilateral (m.$)		33	70	
World Bank	(4.6%)			
All donors (m. $)		113	381	(237%)
U.S. bilateral (m.$)		33	111	"
World Bank	(3.6% GDP growth with agric. emphasis)			
All donors (m.$)		113	190	(68%)
U.S. bilateral (m.$)		33	55	"

Sources: GOH, Plan Quinquennal, op. cit., Tome I, Tables B-17 and B-26, pp. 166 and 173. World Bank, 5-13-81, op. cit., paras. 40 and 47 and Tables 3 and 6, pp. 14-15 and 18-19. 1986 World Bank figures calculated by interpolation of compound growth rates. All Gourde figures converted into dollar figures and vice-versa at the official 5:1 exchange rate. 1981 World Bank "all donor" figures from IMF table prepared in Fall 1981 for forthcoming country report. 1981 U.S. figure from FY 1983 draft USAID/Haiti Congressional Presentation to Congress, November 6, 1981, p.2.

1. Based on World Bank, loc. cit., para. 47 and Table 6, pp. 18-19. The agricultural rural development scenario projects annual agricultural growth of 2.5% and industrial growth of 4.2% compared to agricultural growth of 1.8% and industrial growth of 5.6% for the original 3.6% of GDP growth scenario.

The information and analysis on which these projects are based are very rough. If inflation or other external factors are more adverse or less beneficient than assumed, the needs for external financing will be greater. If they are favorable and the Government vigorously implements appropriate fiscal and other economic policy measures, including the enhancement of private sector production incentives, the projected external financing suggested above will help produce tangible, impressive development results over the next five years and beyond.

Chapter II Agricultural Production and Marketing

For many years the agricultural sector in Haiti has been characterized by slow growth in total production and actual decreases in production per capita (USDA, 1980). Urban areas have become increasingly dependent on wheat imports, which periodically have to be supplemented with imports of other food grains. Recent increases in the price of most domestically produced food crops seem to be having some impact on food crop production, but available data are highly unreliable and sometimes contradictory.

The lack of dynamism in Haiti's agricultural sector arises from a complex set of interrelated technical and institutional factors: (1) low yielding cropping systems; (2) increasing degradation of the soil and water resource base; (3) high field and post-harvest crop losses; (4) unsecured land tenure arrangements; (5) weak institutional and financial support of the agricultural sector; (6) poorly developed infrastructure in rural areas; and (7) socio-economic policies which distort and greatly reduce production incentives at the farm level; (8) sustained high levels of fertility/population growth which offset any gains in production and income. The net result of these factors has been a rapid shift in the country's population toward urban areas, especially Port-au-Prince, and a a dangerously low and possibly declining level of nutritional well-being in rural and low-income urban areas.

These problems can be corrected. Haitian peasants have proven time and again that when appropriate technical packages are offered to them and incentives, markets, and infrastructure are in place, increased production follows rapidly. Over the longer-term, however, these factors alone will not halt the deterioration of the country's resource base. Unless soil conservation measures on a massive scale are undertaken soon, and economic incentives to maintain them are adopted, a good deal of Haiti's agricultural land may be permanently lost to crop production.

Evolving technical packages and a system of incentives that will encourage increased agricultural production will require a better understanding of how a Haitian peasant farmer operates his farm as a system. In eraction between

permanent and annual crops, between livestock and cropping activities and between farm and non-farm activities all need to be understood, especially as they relate to reducing risk and uncertainty and providing income and savings over time. Achieving such an understanding of peasant farming systems requires focusing as much on why farmers do what they do as on what they do or do not do. With this understanding in hand, researchers and extension agents can develop production techniques and cropping systems that will be acceptable to farmers while respecting broader economic and ecological objectives.

2.1 Agricultural Production Potential

Both the history of Haitian agriculture and the most casual drive through the countryside reveal that Haiti is a land of much greater agricultural potential than that realized at present. For many crops, the technology for increasing yields two to three times over present levels exists either in Haiti or in ecologically similar areas of the world. What Haiti has been lacking is a system of economic incentives and supporting infrastructure that encourages its peasants to exploit that potential. Recently food prices have been rising and now prices are such that the use of fertilizer on improved varieties of most food grains common in Haiti is economical in all but remote rural areas. This is less clear with regard to coffee and cocoa where taxing policies and market imperfections have kept producer prices low. This has distorted the structure of agricultural production away from tree crops, in which Haiti has a clear long run comparative advantage, toward annual food crops. The latter are increasingly grown on steep mountain slopes much more suitable for tree crops and are accelerating an already severe erosion of the country's soil resource base.

This is not to say that Haiti should discourage food crop production. Rather it should concentrate on intensifying food production in areas suitable for annual cropping and provide incentives to put steeper areas in tree crops. This does not mean blind pursuit of short run comparative advantage. Rather, it means pursuing a set of policies that will lead to agricultural self-reliance consistent with the structure of costs and returns that are likely to prevail once the country has developed its infrastructure and realized its agricultural potential.

2.1.1 Food Crops

Wheat -- Haiti grows no wheat and there is little evidence it ever will or should. In 1981, 164,222 metric tons (wheat and wheat-equivalent of flour) were imported. Demand for wheat has been growing at 15% per year and is expected to continue growing at this rate in the foreseeable future. At the present time, wheat provides about 20% of the country's supply of cereal calories. Wheat imports are taxed at an effective rate of 16% and are left free to equilibriate supply and demand for cereals in the Haitian market. As such, wheat prices determine the entire structure of cereals prices, with the possible exception of rice which is also imported on a regular basis.

Available evidence suggests a high correlation between maize prices and wheat imports. The cross elasticity of demand for wheat with respect to the price of maize appears close to one but the relationship to sorghum is much weaker. The relationship between wheat prices and demand for rice is unknown. Until more is known about cost of production for major cereals and cross elasticities between important cereal crops and between cereals and plantains, roots,and tubers, it would be rash to pass judgement on the wisdom of current levels of taxation on wheat. We can say with some confidence, however, that it is not too high from the point of view of the domestic resource cost of producing cereals, plantains, roots and tubers in Haiti.

Rice - In recent years production of milled rice has averaged somewhere around 65,000 metric tons and has been growing very erratically at about 2.5% per year. (DARNDR 1980) Approximately 50,000 hectares are devoted to rice cultivation. Yields in the Artibonite Valley average 2.5 ton/ha. Work underway on rehabilitating existing irrigation systems and diffusing improved varieties developed by the Taiwanese in the Artibonite Valley suggests that future growth will be more rapid and self-sufficiency in rice

production by 1985 is likely under current relative prices.[1] Phase II of the ODN project will extend some of the gains already being realized in the Artibonite to the northern plains.[2] Additional extension efforts will be needed to achieve similar gains in rice producing areas of the South (15% of national rice production is estimated to come from the South). Increasing rice yields to an average of 4,000 kg/ha, which is possible with existing technology, would increase production costs from $100/ha to $150/ha and raise net returns per hectare from $760 to $1,210 (World Bank, 1978). These are among the largest net gains to be made on any crop in Haiti.

After 1985 accumulating domestic supplies should begin putting pressure on producer prices and the current 40% tax on imported milled rice would become redundant. Haiti should then have little difficulty supplying local needs at consumer prices less than 20% above C.I.F. import equivalent prices.

Maize - Maize is another food crop with excellent potential for increased production. Average yields at 1,000 kilograms per hectare are about one-third of those which should be possible with locally adapted improved varieties and methods. In 1980 maize production was around 260,000 tons and accounted for 35-40% of cereal calories in Haiti (USDA, 1980).

Total production during the 1970s has been highly variable. The average annual rate of growth for the period as a whole has been 1.2%. Major increases cannot be expected until imrpoved varieties are identified and disseminated to farmers. An increase of yields to 3,000 kg/ha would raise net returns per hectare from $93 to $460. In area terms, maize is the most important crop in Haiti. Improvement in yields would have a major national impact on food availability and farmer incomes. It would also reduce pressure to expand planted area to steep slopes.

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1. At the present time improved varieties of rice yield about 50% more per hectare than average production in the Artibonite, where only about 15% of the area is under intensive management and only 35% has been completely rehabilitated. The Artibonite valley is the largest rice producing area in Haiti.
2. ODN is the implementing agency (Office pour le Developpement du Nord) for the Northern Region rural development program.

Sorghum - Production in 1980 was abut 120,000 tons. Yields are on the order of 900 kilograms per hectare. It accounted for around 25% of total cereal calories and is second only to maize in importance to local diets. Production since the early 1970s appears to have been in a general but highly erratic downward trend that is expected to continue.

Production gains for sorghum will be harder to come by than for maize since the body of improved plant material from which to choose is more limited and local yields are not as far below potential as for maize. The major gains will come from development of short season varieties than can assure a harvest in dry years. This would improve food availability considerably in such years. Selection work currently under way at DARNDR is quite encouraging in this regard.

Root crops - Root and tubers account for an unknown proportion of total calories in Haitian diets. Production estimates from one source to another vary by as much as 300%. They are especially important in the North and the Northwest. A major constraint on increasing production appears to be high transport costs to distant urban markets. According to informed observers, real prices for tubers have been rising through the 1970s. Increased production of root crops goes a long way toward explaining why wheat imports have not grown even more rapidly than they have in the face of rapid urbanization and less than dynamic growth in cereal production. Average cassava and sweet potato yields of four to five tons per hectare suggest there is still considerable room for increasing production.

Bananas and Plantains - Production estimates for bananas and plantains are as varied as those for roots and tubers. Available data show little change in production over the 1971-1975 period but observers of markets in Port-au-Prince note a general rise in prices over the last half of the decade.

Bananas have good production potential in many areas of Haiti and producers have demonstrated that they can respond rapidly to incentives and markets (Benoit, 1953). Availability of markets appears to be the key factor affecting production.

Pulses - Pulses have good production potential and are an important element in Haitian diets. Red beans, pigeon peas, and cowpeas are the most important species. They are cultivated on some 82,000 hectares. Red bean yields average 600 kilograms per hectare. Production and storage is subject to several pest problems, but yields could be improved with better varieties. The Bas Boen project in the Cul-de-Sac Plain reports red bean yields of 1.5 tons per hectare using imported varieties. With such yields, returns per hectare rise from approximately $300 to $700. Pigeon peas and cowpea yields could also be improved by introducing improved varieties from ICRISAT and IITA.[1] A major agronomic interest in pulses is their potential for fixing nitrogen in the soil, thereby making it available to cereal crops grown in association or in rotation with them. Soil and plant conditions in Haiti are such that payoffs to nitrogen fixation research offers to be quite high.

Peanuts - Peanut production in Haiti is small but with the new oilseeds plant (SODEXOL), the market is vast. The major problems in expanding production are unknown. High yielding, high-oil content varieties are available and could probably be adapted to Haiti with little difficulty. The major question surrounding groundnuts is whether they can compete with other crops for farm resources. Current prices in Haiti suggest that they would be very competitive with sorghum production.

While production potential in food crops is very good, it should be noted that the specific crop objectives set in the 1981-86 agricultural development plan appear to be extremely unrealistic, especially considering the recent performance of the agricultural sector. Given the available technical knowledge and the level of national resources devoted to the agricultural sector, average annual production increases of 6.8% for maize, 6.3% for rice, and 5.0% for sorghum are not likely to be achieved during the plan period.

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1. International agricultural research centers in India and Nigeria, respectively.

2.1.2 Industrial Crops

Coffee the most important cash crop, provides income to perhaps as high as 50% of the rural population and represents 80% of agricultural exports. According to DARNDR estimates, coffee occupies about 17% of all cultivated land. From 1970-1979 production increased at approximately 2% per annum while exports fell by 1.5% per annum. Yields have remained low and stagnant at approximately 200-250 kg/ha with a pronounced two-year cycle due to harvesting techniques.

Production potential appears to be very good in montainous areas at altitudes above 300 m. Average worldwide yields, and those in the neighboring Dominican Republic, are double those attained in Haiti. Yields of over 1,000 kg/ha are attained in Brazil under intensive cultivation techniques. The major technical constraints to increased production are rudimentary cultivation techniques, low-yielding varieties, and the lack of adequate research to identify proven technical packages adapted to Haitian peasant farming conditions. Research on both regeneration of existing stands and improved varieties is needed before mounting any major extension efforts. A sound technical package that raised yields to the Dominican level could raise net returns from $200/ha to $375/ha. The major institutional constraints are excessive export taxes and an oligopsonistic marketing structure. Distorted incentives have led to a shift from coffee to foodcrop production. In addition to a likely economic comparative advantage in coffee production, the key role that tree crops might play in reducing erosion suggests that improved coffee production should be promoted in the most agronomically and climatically appropriate areas.

Cocoa - production has remained stagnant at the low level of 3,000 metric tons since 1970. Cocoa exports represent approximately 1% of agricultural exports. Cocoa occupies less than 1% of cultivated area and yields are on the order of 200 kg/ha. The important producing areas are the Port Margot-Bayeux region of the North and the Dame Maire region of the South.

Production potential is good, but more geographically limited than that for coffee (humid area below 300 m). A recent study in the North estimates that introduction of new varieties and improved cultural practices could raise yields to the 750 kg/ha level. A 5-year, research and extension project to raise yields to this level would have an internal rate of return of 13% including research costs ($450,000) and 21% including only extension costs ($550,000). (BDPA, 1981) Rat infestations currently reduce yields considerably. A major technical constraint is the absence of research on improved varieties and the place of cocoa in peasant farming systems. Cocoa production is less labor intensive than coffee production and will be in competition for land with higher value alternative uses than will coffee. If the appropriate technical package is made available, the recently improved internal marketing structure for cocoa should lead to the gradual shift of some lowland coffee areas to a more productive use in cocoa.

Sugar - Although there is good potential for increasing sugar production by planting cane varieties with a higher sugar content and by giving more attention to the use of fertilizer and irrigation water, farm level incentives to do this are weak and sugar production in Haiti has essentially remaine stagnant for the past twenty years. At the same time domestic consumption has been rising rapidly and has effectively eliminated exports of this once very important export commodity.

Sugarcane is grown throughout the country and is estimated to occupy 10% of cultivated land. Less than one quarter of this area produces cane for the three major sugarmills. Cane from the remainder of the land is used for clairin (alcohol) distillation, direct human consumption, and artisanal production of rapadou (rough sugar). Yields are extremely low; in the plains they average 40-45 tons/ha. Improvement of yields to the level of those in the Dominican Republic would double production without bringing more land into sugar cultivation.

Under present prices and technologies cane is facing stiff competition from higher valued crops such as vegetables, rice and tobacco. Prices at the farm level are usually well below equivalent world market levels

so there is considerable room to raise prices to stimulate production. However, unless production technologies for food crops are improved simultaneously, increased sugar production will be partly at the expense of food crop production with a concomitant negative nutritional impact.

Cotton production has declined by 25% since 1970 and imports have been required since 1966. Current production is approximately 3,000 metric tons. Yields are on the order of 350 kg/ha. The major technical problems are low fertilizer and insecticide use. Production potential exists but it is not clear that, at current monopsonistic prices set by IDAI, cotton can compete with alternative crops such as sorghum.

Essential Oils represented a rapidly increasing share of agricultural exports until 1978 when a government marketing monopoly was created. Vetiver is the single most important crop (67% of essential oil exports in 1978/79) followed by lime, amyris and bitter orange. Vetiver occupies less than 1% of total area cultivated but was rapidly increasing, especially in the South, until recently. Yields have been about 2 tons/ha roots with 1.2% essential oil (World Bank 1978). Considerable production potential remains. The major constraints are government tax and marketing policy. Production of vetiver oil has all but ceased and current exports are based on unsold production stockpiled in recent years. This has caused considerable loss of income to peasant producers who, responding to price incentives, moved into vetiver production. Lime production merits further investigation as an element in an integrated tree cropping system for hill areas. Amyris production should be phased out because of its deforestation effects. Considerable credit would be needed to modernize existing extraction plants and to shift them from reliance on fuelwood for energy needs.

Sisal is grown in dry areas on both plantations and on small holdings. It occupies approximately 1% of cultivated area. Fiber production and exports have been falling because of low world prices. There is some room for expansion of artisanal production of sisal goods for the tourist trade. Small sisal holdings represent a source of cash income during bad years in semi-arid regions.

New High Value Crops may have a large potential in Haiti because of its low-cost labor and locational advantages. Every effort should be made to identify new crops which may be of higher value than Haiti's traditional export crops and allow it to avoid over-dependence on one or two crops. Private investors with experience in the crop(s) under consideration should be encouraged to examine the feasibility of production and processing in Haiti. Good knowledge of market prospects and market organization would be essential for considering the introduction of new crops. It is strongly recommended that any agro-industrial processing of such crops be oriented towards exports as well as import substitution since (1) the size of the Haitian market is small and (2) the high degree of protection provided to some industries (e.g., tomato paste canning) is extremely costly to low-income consumers. Orienting such production toward export markets would provide the discipline necessary to encourage efficient operation.

2.1.3 Livestock

In 1970 average livestock holdings per rural household were 0.7 draft animals, 1.0 bovine, 1.4 small ruminants, 1.7 swine and 6.0 chickens (Zuvekas, 1978). Livestock are an important source of rural savings and represent a relatively liquid asset available to cushion the impact of bad crop years and to finance special events such as marriages and funerals. Most ruminants are found in traditional management systems that offer little potential for expansion. The absolute numbers of ruminants in Haiti declined slightly between 1950 and 1970.

Because of population density livestock production based on grazing systems has reached its limit in all but bush areas where some expansion of goat production may be possible.

Inspite of this limited availability of forage for ruminants, there appears to be some potential for developing a peasant dairy industry based on stallfeeding upgraded dairy cattle as steeper slopes are put in tree crops and forage crops in order to control soil erosion.

Peasant production of poultry for live meat and egg sales in the larger urban markets also appears to offer some potential. Given the management required for modern poultry breeds there would be a need for intensive extension support of such a program. It may be possible to interest the feed-mill in working with peasants having 50-100 bird flocks in much the same way as is done with peasant tomato producers at the present time. The very large unused capacity at the feedmill in Port-au-Prince would provide an economic incentive for the owners to work with peasants, provided production could be concentrated in selected areas. Such a program apparently operates quite successfully in the Dominican Republic.

Production of rabbits for on-farm consumption has been tried with some success and warrants closer examination. Fish ponds may be worth another try once management problems at the hatcheries are addressed on a permanent basis. The large number of ponds which have been taken out of production due to an inadequate supply of fingerlings suggests that the marginal returns to a rehabilitation may be quite high. Combining rabbit or poultry production with fish ponds would help alleviate feed constraints on fish production by providing manure for fish feed.

2.2 Agricultural Marketing

2.2.1 Traditional System for Domestic Food Crops

The marketing of domestically produced food is labor intensive and highly competitive. Transport costs are high but the system functions relatively efficiently. Seasonal price variations in Port-au-Prince have declined somewhat from those reported in 1975 but are still substantial. Over the 1978-1981 period the average seasonal price variation for maize has been $0.14/kg, for sorghum $0.17/kg, for rice $0.26/kg, and for red beans $0.23/kg. Large price fluctuations are still reported for most grains in rural producing areas. Provision of technical assistance and credit for local storage of grains by farmers is warranted. Given the above price variation, a cost of $50 for a storage drum with 800 kg capacity and variable expenses of $0.01/kg, the rate of return to maize storage would be 93% in the first year alone.

Port-au-Prince Monthly Grain Price Index (1978-81 averages)

	$/kg	J	F	M	A	M	J	J	A	S	O	N	D
Maize (grain)	.24	100	111	117	123	122	130	106	90	86	83	84	86
Sorghum (pilé)	.40	100	99	102	111	118	124	126	117	121	125	117	103
Red beans	.76	100	109	110	115	106	109	93	91	103	111	105	98
Rice (Mme. Gougouse)	.88	100	103	116	116	101	97	107	101	101	95	102	106

Prices for major grains in regional urban markets are highly correlated with those in Port-au-Prince. Insufficient information is available on transport costs to evaluate the returns on investment in transport vechicles. The immediate role of the public sector lies in road (and possibly port) construction and maintenance. As the degree of urbanization increases the provision of credit to farmers or intermediary groups for transport may have high returns.

The traditional marketing system for fruits, vegetables, and other perishables is much more segmented. Large spatial price variations exist because of transport costs and physical losses. Any promotion of fruit and vegetable production needs to be based on development of an assured market.

2.2.2 Marketing of Industrial Crops

Coffee is sold by producers to licensed intermediaries, ("speculateurs"), unlicensed intermediaries or local consumers. Brokers resell to one of twenty-five exporters. There are a large number of "speculateurs" but most of them are tied by credit arrangements to individual exporters. Producer prices, as reported by OPRODEX, are highly correlated with F.O.B. prices. (See Table II-1, below.)

Table II-1
SHARES IN FOB PRICES OF HAITIAN COFFEE, 1972-1981

	FOB	Taxes		Intermediaries		Producers	
	$/kg	$/kg	%	$/kg	%	$/kg	%
1972	0.86	0.27	32%	0.21	25%	0.37	43%
1973	1.08	0.28	26%	0.25	23%	0.55	51%
1973	1.31	0.31	24%	0.33	25%	0.67	51%
1975	1.06	0.28	26%	0.36	34%	0.42	40%
1976	1.70	0.36	21%	0.29	17%	1.05	62%
1977	4.08	0.97	24%	0.92	23%	2.18	54%
1978	3.23	0.85	26%	0.84	25%	1.54	48%
1979	2.97	0.72	24%	0.74	25%	1.50	51%
1980	3.63	0.94	26%	0.86	24%	1.82	50%
1981	2.24	0.58	26%	0.60	27%	1.06	47%
Average			26%		25%		49%

Source: OPRODEX Annual Statistical Reports

There appears to be some collusion among coffee exporters. Recent evidence (Girault 1981) suggests, however, that the pre-1977 profit margins of exporters may be considerably larger those that previously reported (JWK, 1976). Irrespective of pre-1977 profit margins, the dramatic increase in world coffee prices in 1977 has been accompanied by large increases in exporter margins. The general trend in the 1950-70 period was decreasing world prices and increasing absolute margins for Haitian exporters, reportedly to cover increasing transport and other costs. When the world price quadrupled between 1975 and 1977, however, exporters maintained and continue to maintain the same percentage share of the F.O.B. price. Thus the average absolute margin of intermediaries increased by 275% from 1972-76 to 1977-81. There is no indication that exporter costs increased by anywhere near this amount during the period. Spatial price differentials also exist which appear to be related to collusion among exporters in a given region, rather than to transport costs. To maximize the likelihood of increasing producer incomes, the team recommends continuing support of coffee marketing cooperatives rather than government regulation of coffee marketing. Although such cooperatives currently account for only a small share of the market (less than 5%), they could, with increasing levels of production, become significant. Once adequately organized, coffee cooperatives might investigate the possibilities of exporting their high quality coffee as a speciality product (high quality Jamaican coffee currently receives a large premium).

A far more serious problem than oligopsonistic practices by exporters is the high level of the coffee export tax. Although West-African producers are often taxed more heavily than Haitian producers, Haitian coffee taxes (26% of F.O.B.) are higher than those of most producers in the Western Hemisphere. The export tax on coffee in the Dominican Republic (10-30% progressive rate at FOB prices above US $1.76/lb) for example is lower than that in Haiti and a fixed portion of the tax can be used only for activities to benefit the coffee sector. Current production prices are 60-70% higher there than in Haiti and large amounts of Haitian coffee are known to be smuggled to the Dominican Republic. The current 5% tax differential for washed coffee has not been sufficient to bring about investment in coffee washing facilities. The combination of high coffee export taxes and some import protection for cereals has shifted farmer incentives against Haiti's long-term comparative advantage and contributed to the rapid degradation of the natural resource base by encouraging annual crop cultivation on steep mountain slopes.

Comparison of tables II-2 and II-3 suggests that the shares of the fob price taken by tax and exporter-middleman margins in Haiti are relatively high although the data are not clear cut. Grower shares for Haiti (1971-78 average) are below those for 3 of the 6 countries shown in Table II-2. Tax shares for Haiti are above those for only 2 of the 6 countries, while exporter-middleman shares are above those for 5 countries. The distinction between grower, tax and intermediary shares is difficult to disentangle where the government plays a major marketing board role, as in the Ivory Coast. Table II-3 suggests that Haitian grower shares fluctuate more sharply than tax and exporter-middleman shares, especially for downward fluctuations, but again the data do not present a clear, unambiguous pattern. It should be noted, however, that the inter-country comparison presented in Table II-2, drawn from IMF sources, is highly selective. It is also questionable to compare Haiti with countries like the Ivory Coast where public intervention is extensively utilized to stabilize prices and subsidize inputs.

It should also be noted that the IMF data in Table II-2 compare prices and market shares in 1977. This was a year in which coffee prices increased substantially. In countries where the government stabilizes coffee prices (perhaps while it subsidizes inputs), the producer's percentage share of the FOB price would be particularly low in a year of high world prices.

Table II - 2

Coffee, Comparative Cost Structures, Haiti and other Countries (U.S. $ per 60 Kg. bag)

	Export Price	Grower Share (%)	Tax (%)	
	Export Price	Share	Tax(%)	
Brazil, 1977 cif	$487	$300 (62)	$134 (27)	$ 53 (11)
Burundi, 1971/72-75/76 avg., fob		(58)	(18)	(24)
Columbia, 1977 fob	$416	$117 (28)	$274 (66)	$ 25 (6)
El Salvador, 1977 fob	$396	$240 (61)	$110 (28)	$ 46 (11)
Ivory Coast, 1976/77 cif	$387	$ 46 (12)	$ 14 (4)	$327 (84)*
Mexico, 1977 cif	$416	$182 (44)	$180 (43)	$ 54 (13)
Haiti, 1977 fob	$245	$131 (53)	$ 59 (24)	$ 55 (23)
1971-78		(48)	(25)	(26)
1971-78 minimum - maximum range		(39-62)	(21-32)	(17-34)

Source: Derived from IMF, "Taxation in Haiti," September 13, 1979, Tables 29 & 31, pp. 87 & 90.

* 70% of the cif coffee price in 1976/77 went into the Ivory Coast Coffee Stabilization Fund.

Low absolute price for Haiti is believed to result from under-valuation.

The IMF data do not include the Dominican Republic, where producers regularly receive 70% of the FOB price and where large amounts of Haitian coffee are smuggled. Furthermore, notwithstanding the ambiguities in the IMF data, the "public goods" in terms of infrastructure, agricultural research and extension, etc., received by the Haitian coffee grower are probably significantly less than those received by other Latin American producers. In other words, the returns received by the Haitian coffee grower relative to the share he in effect pays of export taxes are less than in other Latin American coffee growing countries.

Finally, analysis by the IMF of the complicated structure of coffee taxation indicates several price ranges (around Gdes. 2.25 - 2.30, 3.60 - 3.65, and 7.25 - 7.30 per pound) over which the increase in the tax take per pound actually exceeds the increase in price.[1] Price fluctuations in these ranges could well have a dampening if not perverse impact on production incentives. Continued progress toward eliminating the specific tax element in the coffee tax structure and establishing a uniform ad valorem rate should eliminate this problem, however.

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1. (IMF, Fiscal Affairs Department, "Taxation in Haiti," September 13, 1979, p. 85. Per lb. prices calculated from per bag prices at 60 Kg. per bag. U.S.)

Table II-3

Haiti, Coffee Grower, Middleman and Tax Margins (U.S. $)

	1971	1972 (% change)	1973 (% change)
Price/lb. (fob)	$ .40	$ .39	$ .49
Price/bag (60kg)	$52.38	$51.59 (-2%)	$65 (26%)
Grower revenue/bag	$19	$22 (16%)	$33 (50%)
(% of price)	(37%)	(43%)	(51%)
Exporter & middleman revenue/bag	$16	$13 (-19%)	$15. (15%)
(% of price)	(30%)	(25%)	(23%)
Tax revenue/bag	$17	$16 (-6%)	$17. (6%)
(% of price)	(32%)	(32%)	(26%)

	1974 (% change)	1975 (% change)	1976 (% change)
Price/lb.	.60	.47	.77
Price/bag (60 Kg.)	$79 (22%)	$63 (22%)	$102 (64%)
Grower Revenue/bag	$40 (21%)	$25 (38%)	$ 63 (153%)
(%of price)	(51%)	(39%)	(62%)
Exporters & middleman revenue/bag	$20 (33%)	$22 (10%)	$17 (-23%)
(% of price)	(25 %)	(34%)	(17%)
Tax Revenue/bag	$18 (6%)	$17 (-6%)	$22 (29%)
(% of price)	(24%)	(26%)	(21%)

	1977 (% of change)	1978 (% change)	1971-78 avg.
Price/lb.	$ 1.93	$ 1.47	
Price/bag (60 Kg.)	$244 (151 %)	$194 (-24%)	
Grower revenue/bag	$131 (108%)	$ 92 (-30%)	
(% of price)	(53%)	(48%)	(48%)
Exporter & middleman revenue/bag	$55 (224%)	$50 (-9%)	
(% of price)	(23%)	(26%)	(25%)
Tax revenue/bag	$59 (168%)	$51 (-14%)	
(% of price)	(24%)	(26%)	(26%)

Source: Derived from IMF, "Taxation in Haiti," September 13, 1979, Table 29, p. 87. dollar prices may be obtained by dividing by 5.

Cocoa marketing has been similar to that for coffee since the government granted export monopoly was rescinded in 1978. Producer prices have risen considerably since that time but there are few exporters and the margins of intermediaries appear to be quite high (43% of F.O.B.). Cocoa export taxes remain low (7% of F.O.B.). Producers receive the residual (50% of F.O.B.).

A U.S. firm with extensive experience in cocoa cultivation in the Caribbean is reportedly considering providing technical assistance, inputs, and a guaranteed market to Haitian cocoa producers. Such an endeavor should be encouraged.

Sugar is sold directly to artisanal alcohol and rough sugar mills and to the three central sugar mills. Cane prices paid by artisanal mills are reported to be higher than the $13/ton paid by the central mills. Producer prices for cane, and ex-factory, wholesale, and retail prices for sugar are set by the Regie du Tabac. Producer prices have been consistently below economic farmgate prices and prices paid elsewhere in the Caribbean. At 1981 F.O.B prices of $60/ton, sugar yields of 9%, and cane transport costs of $3/ton, the economic farmgate price of cane would be $32/ton. It should be noted that the low price paid to cane producers is not passed on to sugar consumers; wholesale prices for raw sugar (local "sucre rouge") are set at $704/ton. Cane is purchased by weight instead of by sugar yield so their is no incentive for producers to grow high sugar yielding varieties. Sugar recovery rates are among the lowest in the world. While the new mill under construction in the Leogane plain will provide a sure market for new production in that area, higher value alternative crops will limit increases in cane production.

Essential oils are produced in a large number of small oil extraction plants throughout the country. The oil producers purchase vetiver, limes, bitter orange peels, and bois chandelle directly from peasant producers. Until 1978 many of the oil producers exported their product directly. The Essential Oils Marketing Office was set up in 1978 and given monopoly export rights. The combination of increased Indonesian competition,

inefficient operation by the Marketing Office, and high export taxes (20% of F.O.B.) have virtually halted extraction of vetiver oil, formerly the second most important agricultural export. Recent exports have been based solely on unsold stockpiles. Production of lime oil and amyris has decreased slightly since the creation of the Marketing Office. Reduction of the export tax would thus actually raise government revenue since the current tax and marketing situation has effectively halted production of vetiver oil.

Cotton is sold directly to IDAI which has monopsony purchasing rights. Purchase prices have consistently been below economic farmgate prices. Prices were recently raised to .20 cents/lb. but it is not clear that this price will make cotton cultivation more profitable than alternative food crops. At the 1981 F.O.B. list price of $1.95/kg, estimated ginning costs of $0.22/kg, 36% lint yield, and $0.04/kg cotton transport costs, the economic farmgate price would be $0.58/kg (excluding the value of the cottonseed).

In general, government intervention via tax policy, price policy, and direct marketing has been disastrous to Haiti's agricultural export sector. Coffee taxes and essential oil marketing have been particularly detrimental to the Haitian economy in general and peasant producers in particular.

2.2.3 Agricultural Input Marketing

Haitian farmers use a very low level of purchased inputs. With the exception of the immediate Port-au-Prince area, the Artibonite Valley, and agro-industrial ventures, the most important distribution channel for small farmers is DARNDR. The minimal quantities distributed by DARNDR reflect the limited resources devoted to it by the ministry and the very low level of demand in rural areas (194t maize seed, 98t sorghum seed, 642t pulses seed, 412t fertilizers, 15t insecticides).

There appears to be strong, unmet demand for seed, particularly pulses, maize and sorghum. The problem is one of credit-availability and post-harvest losses as well as one of seed availability. Numerous cases have been reported of land left unplanted because of an inability/unwillingness to make large cash expenditures for high priced local seed at planting times. Problems of post-harvest losses are so severe that some farmers have adopted

the strategy of planting an "off-season" crop in which they merely expect to harvest the quantity of seed planted, in order to have seed available for the main season. The adaptive research on food crops begun at DARNDR under PDAI should allow the Ministry to rapidly shift from the importation of U.S. hybrid seed to the multiplication and distribution of local or locally screened open pollinated varieties, which are more adapted to local agronomic and climatic conditions.

Fertilizer and insecticide demand is currently quite low. Even with improved technical packages available, demand is likely to grow slowly because of the riskiness of making large cash outlays on crop production. Use is likely to grow most quickly on rice, maize, and pulses. If profitable packages are available and credit and inputs are available, there is ample evidence that Haitian small farmers will adopt production techniques which involve greater use of purchased inputs. Tomato production around Cavaillon is a case in point: small farmer participation more than doubled from 1980-1981 (and is expected to do so again in 1982) using production techniques which entail cash expenditures on the order of $730/ha but for which returns to land (after costing family labor at approximately $1.0/day) are almost three times those of the best alternate use.

Given the low level of current use, however, even rather rapid growth in demand for purchased inputs will still involve relatively small quantities. The only distribution network to provide these inputs in the near future will be the "agronomat" system of DARDNDR. If post-harvest losses can be reduced and emphasis shifted from imported hybird seed to local production of selected varieties, private farmers can be expected to move into seed multiplication rapidly. This could be encouraged by initial contract arrangements with farmers for seed multiplication.

2.3 Soil Conservation and Natural Resources

Over 60% of Haiti's land has a slope greater than 30%. Such land is suitable only for grazing, forests or tree crops. Over time population pressures have forced much of this land into annual cultivation, leading to increased soil erosion and declining agricultural productivity. If allowed to

continue under annual crops much of this land will, in time, become totally unusable for agricultural purposes, including tree crops and forests.

Shifting land use on hillsides to tree crops presents several problems. Hurricanes are a real problem in the southwest, depressing tree crop output for much longer periods than annual crops and forcing periodic reinvestment in new plant material. The principle cost of such investment and reinvestment is the food production program. This may be a high cost to bear for peasants with very small farms. Making such a shift gradually and maintaining foodcrop intercropping at least until tree crops are in full production would reduce this problem greatly. Alternatively, providing food aid or wage employment through building terraces and other soil conservation structures on the land of other farmers could provide a source of income for the household until trees come into production. It would, of course, be wise to move ahead on improved food crop production systems at the same time in order to minimize any short term nutritional costs of such a shift. In any event the real choice facing many farmers is one of food in the short-run and nothing in the long-run unless something is done to control soil erosion on hillsides.

Planting non-food tree crops on slopes to replace annual foodcrops may exacerbate existing nutrition problems. Does income received as cash translate into calories as easily as food income accruing to peasant households? Is the food purchased with cash of the same nutritional value as the food produced on the farm which it replaces? Due to the potential for negative nutritional effects, baseline nutritional and income/production data should be collected for the areas affected. Continued monitoring will be necessary and corrective measures will need to be developed and implemented by extension agents working with nutritionists to correct for deficiencies in nutrient availability and related losses in food production. Another aspect of the problem is the reduction in both food availability and income during the period that traditional food crops are replaced by tree crops that are not yet producing income to the farmer which can be used to replace losses in farm production. One response to this problem is to include donated foods as part of the total agricultural extension package made available to the farmer during the course of transition from food production to tree crop production.

It should be noted that, from a nutritional perspective, it is preferable to provide food rather than cash payments. The food provided will make up for losses in local food availability. Should cash payments be provided instead of food, the effect may be to decrease local food availability, thus increasing local food prices.

The success and benefits of soil conservation measures can be increased substantially by properly integrating them into particular farming systems. For example, planting or shifting tree crops to tree terraces would be more acceptable to farmers if their need for forage or food could be met by planting kudzu or wing beans on the slopes between the trees. At the same time the terraces would requires less maintenance if the forage were cut rather than grazed. This in turn would require shifting to a stallfeeding system for livestock, obviously more labor intensive and only likely to be done if farmers see an economic reason to do so. Protecting tree crops, accumulating manure for food crop fields and preventing theft of a valuable asset would provide such an incentive if a farmer had an upgraded higher-producing dairy cow.

Alternatively, bananas, breadfruit or fruit trees might be grown on tree terraces, possibly interspaced with coffee, providing both a source of food from the hillsides and shade for coffee. Trees that provide fuelwood for characoal and construction materials would obviously be more suitable in dryer areas.

Perhaps the single most important impediment to shifting steep slopes from annual crops to tree crops is the low price farmers receive for the products which the trees produce -- coffee being the most glaring case in point. In the long run soil conservation structures will be built and maintained only if farmers are provided with incentive to do so. In this light, reducing export taxes and eliminating marketing monopsonies for coffee and cocoa, coupled with research and extension to identify and extend improved production technologies and intercropping systems involving these crops are absolutely essential to begin arresting the destruction of soil resources. This would certainly reduce the relative incentive to plant annual crops rather than tree crops on such slopes. Such a shift would be gradual,

however, until farmers saw that they could depend on local markets for dependable food supplies at a reasonable cost. Needless to say, higher prices for these products will also give farmers an incentive to invest in yield increasing cash inputs and cultural practices.

While recognizing the necessity of addressing the soil erosion question, project designers need to be aware of potential problems relating to land tenure. Though most Haitian peasants own at least some land and rent or sharecrop other land with varying degrees of security of tenure, there is little likelihood of much solid conservation work being carried out on insecurely held land unless, as is done at present, peasants are paid for their work. Even if peasants are paid for their work, will they have an incentive to invest in tree crops on insecurely held land? Should the productivity of such land increase dramatically there may be an increasing number of land disputes based on conflicting titles. The experience of the FAC-supported project in L'Azile with regard to a cadaster should be monitored closely.

The form and quantity of payment for soil conservation work as presently done will have a serious disincentive effect on agricultural production if expanded on the scale required to have an impact. The rural roads project faces similar dilemmas. Currently workers on soil conservation projects are paid anything from prevailing rural wage rates to the much higher minimum wage of $2.60 per day. In our field visits we generally observed rural wage rates of 1.00 per day or less. This suggests that expanded soil conservation and rural roads efforts based on paying the national minimum wage will begin drawing labor away from agriculture once they reach the scale required to address the magnitude of the problem.

At the present time opportunities for such work are limited. Those famers fortunate enough to get soil conservation jobs hire wage laborers to do farm work which cannot wait. A larger effort, however, will eventually push up rural wage rates to the point where it will be too costly to prune coffee, apply insecticides, weed crops or perform other directly productive agricultural tasks. There is no doubt at all that the short run economic value of soil conservation measures does not justify such a shift of labor away from direct agricultural production.

In addition to their short run disincentive effect on agricultural production, high wage rates have encouraged favoritism in allocating employment opportunities, kick-backs and other forms of corruption (Smucker, Delatour and Pinchinat, 1979). These practices undermine the very community organizations we need to build up if soil conservation structures are to be maintained on a continuous basis. This suggests some sort of formula payment system that holds wages paid for such work to levels slightly below prevailing rural wage rates.

Haiti is one of the few development countries of which we are aware where the minimum wage in agriculture is the same as in manufacturing and industry. Granted, most rural employers, including semi-autonomous public agencies, pay below the minimum wage. However, there does appear to be a need to formulate a public policy for pricing labor on what amounts to rural public works projects. A simple exemption from minimum wage legislation would be adequate. This would give district agronomes and others overseeing such work more flexibility to adapt to local situations. However continuous monitoring will be required to ensure that piece rates are not set higher than need be, thereby pushing the effective daily wage above the rate paid for a day's work in agriculture.

2.4 Field and Post-harvest Grain Losses

2.4.1 Importance

Field and post-harvest grain losses appear to be substantial and represent large food and income losses to peasant producers. The increase in food production through control of both field and post-harvest losses could also have a dramatic, short-term impact on nutritional status by rapidly increasing food availability to the consumer. Increases in food production through the introduction of high-yielding varieties, improved farming practices, and similar measures can take a number of years before significant results are seen. Control of pests, on the other hand, can lead to immediate gains readily seen and appreciated by the farmer. Pest control, in concert with other longer term improvements in farming systems, thus offers relatively rapid benefits to both production and consumption and, finally, nutritional

status. Data on losses are limited and highly variable. A recent study of the Service National de Commercialisation Agricole (SENACA) estimates 15% losses (about 93,000 MT) after harvest for total production. But no aggregate data are given for pre-harvest losses.

2.4.2 Field Losses

Rice. The major field losses for rice are caused by rodents. Two species are reported, norway rat (*Rattus norvegicus*) and roof rat (*rattus ratters*). Losses from rats and sting bug amount to 10-30% of rice production (Bonnefil, 1954). Monitoring rodent population during plant growth is a prerequisite for any control measures. Baits of zinc phosphate, sweet potato, and oil are reported to give signficant results.

Maize. Fall army worm (*Spodoptera frugiperda*) causes most stand reduction in maize fields. Stem borers (*Diatera sccaralis* and *D. lineolata*) are also reported. Losses from rodents are significant as well. An experiment conducted under the Vertebrate Pest Project showed 20.9% of ears in untreated plots were damaged by rodents compared to 0.01% in fields baited with an anticoagulant (warfarin). Farmers also report large seed losses from rodents. Research is needed to evaluate the relative effectiveness of zinc phosphate and anti-coagulant baits. Emphasis should be put on early treatment to control rat populations prior to grain maturity.

Sorghum and millet present problems similar to those for maize, although fewer data are available concerning diseases, pests or insects.

Beans. Common bean mosaic, viruses and bacterial diseases are reported. Among field insects, *Emposca* sp. is the most damaging, followed by *lamprosema indicata*. No overall estimates of losses are available but they appear to be substantial.

Pre-harvest losses from birds and dogs are also severe. Vertebrate Pest Control experiment plots have shown up to 42% damaged ears, with 60-70%, kernel removal, from birds (*ploceus cucullatus*). In some areas damage from dogs (eating near ripe grain) is reported to be the most serious

problem and the most difficult to deal with because dogs are owned by neighboring peasants and are valued to prevent household thefts.

Extension of the existing research results of the Vertebrate Pest Control Project on a national scale would increase production by 10% for rice and 20% for maize.

2.4.2 Post-harvest Losses

Rural storage systems. Two traditional storage systems are generally employed by farmers. Aerated storage includes thatched huts built on stilts, portable baskets, wooden platforms and bundles of unhusked corn suspended from trees (gouane). Grain weight loss as high as 18.5% is reported for ear corn from the middle portion of "gouane" with more that 18% drop in seed germination after 200 days of storage (Desrouilles, 1981). This is the most widespread storage practice by farmers. Little fumigant or insecticide application is done at farm level, and conditions of grain (moisture content, quality, field infestation) are not known. Among stored product insects reported are *sitophilus* sp., *Tribolium* sp., *Sitotroga cerealella* an *Ephestia* sp. Environmental conditions are also conducive to mold activities in ears stored in "gouane."

Small quantities of threshold grain are stored in nonaerated systems such as, drums (55-gallon oil), granaries, and calebasses.

There is a great need for rural storage system improvement in Haiti. Any changes within the system should be introduced gradually using traditional practices as a basis. Current losses are reported within the range of 10-40%. Accurate data are needed as an index for quantifying any improvement within the system. Discusions with farmers and with DARNDR officials indicate that grain insects and other destructive agents are less significant than rodents. However, since there is no break down on losses caused by these factors, attention should be given to all post-harvest losses.

SENACA/FAO is now undertaking some study of farm-storage systems. The focus to date has been on non-aerated systems where moisture migration and field infestation present major problems in Haiti. Additional emphasis should be given to improving aerated systems.

Central storage facilities. Very little off-farm bulk storage was observed or reported. Storage bins and dryers are in place near Damien and at Mirebalais, Desronville and Gonaives. Storage bins and dryers at Damien have been underutilized. Grain flow through marketing channel shows other short-term storage points (up to 2 weeks) at local markets, residences of Madam Saras and central market depots in Port-au-Prince. Since most bulk storage facilities have not been fully used up to the present time there seems to be no need for any additional warehouses or central storage construction.

2.5 Agricultural Extension

2.5.1 Weaknesses

The major weakness of the DARNDR extension service is that it has little to extend. Proven technical packages adapted to Haitian farming systems are not currently available for any of the major crops except rice. As stressed in the section on individual crops, production potential is good based on use of the existing body of worldwide knowledge, but local adaptive research to work on the technical constraints faced by small farmers has just begun (e.g., PDAI, Madian-Salignac, and proposed ADSII activities).

A second weakness is that agricultural technicans and extension agents are poorly motivated. They receive low salaries, have limited means of transportation, and few concrete services to provide farmers. In addition, few resources are allocated to district level activities and frequent transfers disrupt ongoing projects. All of these issues would need to be addressed directly if a major extension effort were to be attempted through DARNDR.

The Ministry also suffers from heavy centralisation and strong reliance on a one-way, top-down information system. Most district agronomes and many division directors at DARNDR are aware of this problem and have indicated that they would readily support efforts to decentralize and shift more authority to the districts. There is also receptivity to evolving a farming systems approach to research/extension based on greater exchange of information between farmers, agents and researchers at the farm level.

2.5.2 Strengths

The creation of 20 agricultural districts (formerly 13) and the assignment of additional personnel to the districts are positive actions taken by DARNDR within the last year. The capability and motivation of district agronomes also seems to have increased. The vast majority of DARNDR personnel still work at Damien and district agronomes still have few material resources but there is evidence of movement and further steps in this direction should be strongly supported.

2.5.3 Needs

The most urgent needs of the extension system are (1) to give control of more resources to the agricultural districts; (2) to involve farmers, extension agents, district agronomes and researchers in an interactive problem-solving approach to production constraints; (3) to developing and implementing an extension management system; and (4) to site specific district level training programs for extension agents.

The first need can be addressed by focussing greater amounts of donor assistance at the district, or other sub-regional, level and by strongly encouraging the GOH to devote more of its own resources to agricultural development. The intense involvement of district personnel in the research effort to develop technical packages appropriate for peasant production systems would be a major step in addressing the second need. In a larger program, it should be reinforced by site specific, district-level training programs for extension agents.

Once extension agents have some material to work with and to extend, the ministry should seriously consider establishing an extension management system so as to provide a degree of discipline that clearly is now lacking. This would involve monthly work plans with specific dates for site visits intended to be made and topics to be covered. This permits supervisors to ensure that agents program their work efficiently and to monitor their performance.

Obviously such a system needs to be flexible and should not turn into a policing operation. However, more accountability is certainly desirable and monthly programming meetings would also serve as an opportunity to identify problems and bring corrective solutions or resources to bear. To accomplish this, district agronomes will need an independent operating fund to cover transport and purchase of certain materials. It should be reinforced by periodic visits and supervison by central ministry personnel. A set of incentives to reward particularly responsible and effective individuals would also be needed. Design of an extension management system should make use of the USAID experience with the Ministry of Public Health's effort at programming and supervising rural health workers.

Absorptive capacity at the district level is limited but could certainly be increased by additional personnel and financial management services. However, one must be careful to allow the districts to grow from demonstrated strength rather than swamp them with too many resources.

2.6 Infrastructure

2.6.1 Irrigation and Drainage

Many watersheds in Haiti have irrigation systems that have fallen into disrepair and are no longer used or are used at well below capacity. The reasons are varied but include such things as lack of need for irrigation during normal years, poor drainage, damaged head gates, silted main canals, few beneficiaries, insecure tenure and conflicting cropping patterns between far ers.

An important contributor to many of these problems is the uncontrolled run off of water and silt that inundates the systems during the rainy season. This necessitates frequent desilting of main canals and head gate repair. Most district agronomes are simply unable to respond to these kinds of problems because of lack of resources. Soil conservation measures in the drainage basins are clearly an important part of a long term solution, as are operating funds for district agronomes.

There may be a need to impose land use restrictions on certain schemes where there are conflicts in planting dates among farmers. On most Haitian irrigation schemes farmers arrange schedules of water use among themselves and are free to grow whatever crops they choose. Thus, one finds one farmer harvesting rice, ideally done on a dry field, while another next to him has flooded the field for transplanting. Land use systems could reduce the conflicts arising from such situations and, no doubt, generate a much more efficient use of water resources.

Ideally one would hope that irrigation associations could deal with problems such as these as well as system maintenance. There usually are informal associations regulating water use and taxes are collected for system maintenance. However, these taxes are not always used for the purposes intended while the mixture of socioeconomic classes one finds in many schemes does not promote evolution of cohesive associations.

Land tenure presents problems in certain irrigation systems. As systems are rehabilitated and new technical packages become available there will be an incentive to displace renters and replace them with hired laborers and possibly machinery. One can legitimately ask whether USAID should support any process which concentrates the benefits of development in the hands of large rural landowners. It will be necessary to identify important land tenure relationships before deciding on which schemes merit priority consideration. Unless there is a USAID policy, it is likely that the politically powerful in rural areas will garner the lion's share of benefits.

2.6.2 Farm to Market Roads

Isolation of producing areas from important consumption centers makes agricultural development difficult in many parts of Haiti. The difficult terrain means that the only way of evacuating agricultural surpluses and bringing in agricultural inputs is on the head of a peasant. There is virtually a limitless agenda with respect to needed farmer-to-market roads in Haiti. However, it should be noted that improved farm to market roads do not necessarily lead to improved rural nutritional status as a result of increased farmer income. The potential negative nutritional effects would result from (a) unequitable distribution of income benefits from construction of the road, (b) the decrease in availability of food on the local market, and (c) loss of income to market women by displacement. These potential negative effects on nutrition and income distribution should be taken into consideration in the planning for farm to market roads.

Labor intensive techniques are being used on rural roads throughout Haiti, even for reconstructing main roads. With engineering and materials support these efforts could be expanded, utilizing locally available slack season labor. However, care should be taken to avoid the problems discussed earlier, related to paying excessively high wages for public works projects. Furthermore, rural roads should only be built or reconstructed in areas where either the government of Haiti, USAID, or local farmers commit themselves to provide the resources to keep the roads maintained. At this stage it may be too much to expect Haitian farmers to organize and maintain roads without financial and material support.

2.6.3 Credit

Formal credit and other financial services are available to a small percentage of the rural population. Informal channels supply the largest amount of credit in rural areas. Family and neighbors provide some interest-free loans. Marketing intermediaries, merchants, and local money-lenders provide credit at relatively high interest rates but have high default and late payment rates as well. Formal credit is currently provided by the Institute of Agricultural and Industrial Development (IDAI), Bureau of Agricultural Credit (BCA), and the major regional development organizations.

In 1980 IDAI extended agricultural loans for 2.4 million dollars, and the BCA for 1.7 million dollars. Both institutions have high overhead costs and there is no justification for the duplication of their small farmer loan operations. The BCA has shown dramatic improvement on reducing administrative costs as a percentage of its portfolio (from 43% in 1976 to 24% in 1980). Strong support should be given to the proposal that the BCA absorb the smallfarmer credit portfolio of IDAI.

Seasonal price fluctuations for grains suggest that credit for farm-level storage is warranted. Many improved technical packages will also involve greater use of purchased inputs thus raising farmer's credit needs. Increased urbanization may also lead to need for credit for direct marketing activities. In the current situation, "consumption" credit to free producers from export crop intermediaries may have particularly large returns. While credit needs remain large and are probably growing, provision of savings services may generate substantial amounts of real savings and should receive high priority. In general, the provision of a more complete range of rural banking services should be encouraged. USAID support of the BCA in the Strengthening Rural Credit Services Project should receive high priority. Because of the high overhead costs of duplicating loan programs and the steadily improving performance of the BCA, the credit component of any regional projects should be handled by the BCA.

2.6.4 Research

USAID's Integrated Agricultural Development Project (PDAI) is reinforcing agricultural research at Damien. Current work involves preliminary screening of selected local and improved varieties. Researchers are concentrating on food crops. Within the next year it is expected that on-farm adaptive research will begin and viable packages for corn, sorghum, and beans may be available by the end of 1983.

Regardless of what agricultural strategy is selected for Haiti, a strong argument needs to be made for reinforcing the fledgling research program and expanding it to coffee, cocoa and other tree crops that offer potential on steep slopes. While continuing to concentrate on preliminary screening of exotic varieties and regional adaptive research, the PDAI effort

needs the additional support envisioned in USAID's second phase Agricultural Development Support Project (ADSII). An entomologist, a plant pathologist, a microbiologist and a plant physiologist are needed if the research program is to address problems related to insects and diseases and to exploit the enormous potential for nitrogen fixation by legumenous plants that Haiti offers.

The preliminary screening and basic entomological and plant pathology research at Damien needs to be fed into regional, adaptive, farming systems research programs. We support the wide regional coverage intended under PDAI and think it unwise to concentrate adaptive research in the same way we are proposing a concentration of other development resources. The marginal gains from adaptive farm-level research are simply too great to ignore. Eventually, whatever stratgy is adopted for Haiti, there will be a need for improved technical packages that fit into peasant farming systems throughout the country. Unless work continues in all areas there would be a three to five year lag between the time when the environment for agricultural development improves and an effective program for diffusing the results to farmers could be mounted.

More attention should be given to research-extension-farmer links at the farm level. Researchers embody the highest level of technical expertise in Haiti. Through properly designed on-farm adaptive and farming systems research they can transfer some of this expertise to agricultural agents while receiving from them and farmers a better understanding of how specific crops fit into important farming systems. Obviously researchers benefit from this as well and are better able to develop technical packages which address the constraints faced by farmers. This approach is not that different from that used by American land grant universities in the U.S. However, more attention would be given to using on-farm research to improve the skills of extension agents and to guide research into more complex crop interactions than is common in the U.S. Researchers could also take advantage of their field visits to give short courses to district extension agents as part of an on-site training program. This would build support between researchers and the agents with whom they must work in addition to improving agents' skills.

Chapter III: PRIVATE ENTERPRISE ROLE

3.1 Introduction

The private enterprise sector, as defined in this chapter, includes all businesses in Haiti, from the cottage level to large-scale industry, that are or could be engaged in productive activity for private gain. Although small-scale farming could logically be included in this activity, it was excluded from the analysis which follows. Large-scale, integrated farming-operations, on the other hand, were considered to fall within the scope of this chapter. Furthermore, our analysis of private businesses goes beyond the food and agriculture sector, which is the primary focus of this report, to include as well non-agricultural investments.[1]

The inclusion of the latter was considered essential. Although agro-industries have a marked potential for Haiti, their impact is not expected to be as rapidly felt or of the same magnitude as from other industrial operations such as the re-export (assembly) industries. As pointed out in the Introduction, robust industrial development is as essential as dynamic agricultural growth to resolution of Haiti's economic problems.

This chapter undertakes a broad assessment of industrial possibilities in Haiti and makes specific action proposals to strengthen the private sector and accelerate industrial investment. The first part of the analysis is devoted to a discussion of large and medium-scaled industry and problems associated with its development. This is followed by a discussion of the problems affecting small-scale enteprises.

1. Non-profit, private voluntary or non-governmental organizations (PVOs/NGOs) comprise an important component of a broader definition of the private sector. They have played and will continue to play a particularly significant role in Haitian development as a complement to public sector and private enterprise activity. This role is discussed further in the Introduction and Chapters II, V and VI.

3.2 Investment Framework

3.2.1 Investor Categories

The private sector in Haiti includes a broad array of heterogeneous individuals, groups, companies, and institutions. Though sometimes overlapping, their problems, needs, and potentials are often different. Such differences can entail different approaches and policies intended to increase their contribution to development.

a. Domestic

Haitian investors or businessmen fall into four broad categories:

Small-scale Entrepreneurs: Haiti is a country of small-scale enterprises with 1 to 50 workers (see Sections C and I below). There are thousands of such businesses employing more people than any economic activity in Haiti outside of agriculture and small-scale trade. They include tailoring, car repair, shoe repair, carpentry, metalworking, bakeries, cement block-making, etc. Equipment per worker seldom exceeds $5,000 U.S., and is generally less than $2,000. Most do not use the formal financial system as a source of funds, relying on either family, friends, or moneylenders. There are both the full-time businessmen and those who engage in business only as a second occupation. This group as a whole may represent the most dynamic and flexible investment category in Haiti. Because of their small size and spatial dispersion, it may also be the most difficult to reach and assist.

New Industrialists/Merchants: There appears to be a growing number of well-educated Haitians who are entering business for the first time and do not spring from either the peasant class as do most of the first group, or from the established commercial families. They may be either "permanent" Haitians or those who have gone abroad and have now returned. Collectively, they might be described as a middle class with entrepreneurial tendencies (versus those who remain professionals or bureaucrats). Their investments may range from less than $50,000 (as an individual) to over $1 million (if part of a larger group). They generally cannot rely on family or close friends for

large investment assistance. Except for the Haitian community in the U.S., of which probably only a relatively minor proportion has knowledge useful to investment decision-making in Haiti, these new entrepreneurs do not have ready access to knowledgeable sources or appropriate marketing channels overseas. However, they are exceptionally responsive to new investment ideas.

Established Families: Haiti's organized industrial and commercial economy has long been dominated by relatively few families. Most are now concentrated in Port-au-Prince although their roots may be in one of the regional cities or towns like Jacmel or Cap Haitien. Although they also seek outside financing from banks and government bodies, they are generally able to tap internal resources from family and friends to undertake all but the largest projects. The most powerful or influential of these families can sometimes obtain concessionary terms or legal or regulatory interpretations not available to other businessmen. They can be quite responsive to new investment ideas although, given their range of interest, influence, and options, they may only pursue the most assured investments.

Government: The GOH is an infrequent but occasionally significant investor in the Haitian private sector. It generally will take an equity position (partial, not complete) in only the largest projects such as the cement plant and the new vegetable oil processing plant. It may take its equity directly or through a government institution like IDAI (Institution for Industrial and Agricultural Development). In projects of this size, it usually leaves the running of the operation to a non-governmental management group. The GOH will typically provide funds, directly or indirectly, to study and design the project.

b. Foreign

Existing or potential foreign investors in Haiti typically fall into three broad categories:

Individual Entrepreneurs: Historically, small private foreign investors have generally been comprised of two groups: the "promoters" and immigrants. The Haitian experience is replete with "promoters,"

individuals from North America and Europe who see an opportunity for a quick profit in the country. They typically bring the idea and the contacts and attempt to get others (both Haitians and foreigners) to provide the financial resources needed. Generally, they try to extract extraordinary concessions from those in positions of influence and often succeed. As might be expected, the projects so "promoted" are frequently short-lived (if they are initiated at all), with disillusionment among participants.

The second category of small investors are those who immigrate to Haiti permanently or on a part-time basis. Usually they are exposed to Haiti at some point (business, vacation, government or PVO work) and make the decision to stay on or return. They are generally committed to the country and often bring useful skills with them. However, their investment capital tends to be limited to what they have accumulated in personal savings from professional employment elsewhere or from the profits or sale of a small business.

The Medium-sized: This is a group seldom found in Haiti except perhaps in the assembly industries. Yet it is the group of foreign investors that may be the most appropriate for Haiti. They are generally companies with sales ranging from $10-200 million (perhaps larger, depending on the business) that are very focused in their activities (e.g., citrus, or vegetable production and marketing) and have had only limited or even no prior business experience abroad. Consequently, although they may be intrigued by an investment possibility in Haiti, they will also be very skittish about actually making the commitment to invest. An investor from this group will usually have the technical skills and marketing channels needed by a Haitian project if it is oriented to export production. These investors generally have access to the necessary capital, but they will want a significant capital commitment by a Haitian partner as a show of good faith.

Multi-National Companies: This group includes the large multinationals with all the experience, skills, and capital resources necessary to evaluate a Haitian opportunity and undertake it, if desirable, no matter what the size. These companies may not be interested in Haitian participation, if it can be avoided; they are very risk-conscious and,

Table III-1 Volume of Output of Manufactured Products, 1970-1978

	1970	1971	1972	1973	1974	1975	1976	1977	1978	Index 1977 or 1978/1970	Annual Growth Rate
Sugar a/(short tons)	59.3	64.4	72.0	62.3	57.5	a/55.9	a/54.0	a/41.a/	48.9	82.5	(2.0)
Wheat flour (16 pounds)	62.6	77.4	87.1	100.2	143.7	138.7	149.1	157.8	na	252.1	14.1
Edible fats (16 pounds)	1.6	2.0	2.1	1.5	2.1	3.5	4.8	5.0	na	312.5	17.7
Soft drinks (16 bottles)	25.6	27.7	30.1	40.6	36.2	40.9	40.2	43.9	na	171.5	8.0
Cigarettes (16 boxes of 200)	2.17	2.25	2.24	2.07	3.27	3.43	3.68	4.07	na	187.6	9.4
Cotton cloth (16 meters)	3.22	3.16	2.63	3.19	3.01	1.44	1.78	1.00	1.34	41.6	(6.8)
Clothing (103 dozens)	63.9	48.9	54.6	34.5	68.3	107.5	153.3	125.9	130.1	203.6	9.3
Underwear (103 dozens)	20.9	48.2	60.3	99.9	67.9	54.6	73.4	53.1	59.6	289.2	14.0
Shoes (103 pairs)	192.2	215.1	243.8	289.3	214.7	213.9	209.0	387.4	na	201.6	10.5
Cement (103 tons)	64.9	72.6	88.8	126.0	138.5	154.4	245.8	267.2	246.5	379.8	18.1
Essential oils (tons)	205.9	299.0	316.1	333.2	394.4	225.6	349.0	263.0	na	127.7	3.6

a/ Production by the Hasco sugar mill and Les Cayes sugar mill.

Source: Institut Haitien de Statistique.

Table III-2 Manufactured Exports, 1970-1977
(US $ thousands)

	1970	1971	1972	1973	1974	1975	1976	1977
Small industries, handicraft	6711.8	4599.2	6330.3	9067.4	9875.8	16095.0	13355.3	18853.2
Export assembly industries	6800.0	12000.0	19600.0	32080.2	48140.0	60280.0	81360.0	84276.0
Cement	-	-	13.0	-	-	60.6	2435.6	3151.2
Wheat flour	270.0	-	-	-	252.6	166.2	-	-
Wheat by products	-	-	272.6	28.0	666.4	790.2	760.0	na
Others	1271.6	2350.8	1400.8	2454.0	3332.4	4119.6	4034.4	15294.3
Total (gross)	15053.4	16950.0	27556.7	43629.4	62267.2	81511.6	101945.3	115574.7
Imported inputs of assembly industries	4000.0	10200.0	16700.0	22800.0	35500.0	44300.0	58900.0	61300.0
Total (net)	11053.4	6750.0	10856.7	20829.4	26767.2	37211.6	43045.3	54274.7
% assembly industries (net) in total (net)	25.3	26.7	26.7	44.6	47.2	42.9	52.1	42.3

Source: Administration Générale des Douanes.

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Table III-3 List of Imported Items in 1976/77 Which Could Be Substituted by Local Production

	Value in US Dollars
Fresh, Frozen and Canned Meat	765,281
Fresh and Canned Fish	1,688,483
Decorticated Rice	319,980
Corn	100,892
Corn Semolina and Corn Flour	52,815
Bakery Products, Biscuits	216,056
Canned Fruits, Jams, Fruit Juices	211,613
Canned Vegetables	259,703
Molasses and Sugar Syrup	270,977
Confectionery	8,431
Chocolate	115,186
Animal Feed	814,885
Edible Grains	850,998
Beer	242,240
Tobacco, Cigarettes	2,158,024
Fish Oil	11,210
Animal Fats and Oils	5,583,395
Soap, Detergents	2,977,537
Leather	853,663
Leather Products	156,302
Cotton Cloth	4,169,949
Bricks, Tiles	443,150
Wooden Furniture	342,851
Underwear, Hosiery	2,511,540
Total	26,353,160

Source: ILO Report on Small Enterprises in Haiti - 1979.
Note: These data relate only to agro-industrial production

therefore, look at Haiti in relation to all other countries to which they might go to obtain similar benefits with less risk. While there are exceptions, they typically are not interested in the generally smaller domestic investment opportunities to be found in a small, low-income country like Haiti or in dealing with numerous small suppliers (e.g., peasant farmers). Multi-nationals have been and are more likely to be interested in export and re-export opportunities in Haiti as opposed to production for domestic consumption. Recent positive experience with peasant production of tomatoes and tobacco for agro-industries oriented to the Haitian market might increase the interest of potential foreign investors in the Haitian market, however.

3.3 Current Industrial Activity

Tables III-1 throught III-3 provide general production, export, and other recent information on Haiti's industrial activity. A more detailed description of agro- and assembly industries follows below. Small-scale sector industries are discussed more fully in Section I.

3.3.1. Agro-industries[1]

Agroindustrial production accounted for 45 percent of Haiti's manufacturing output in the early 1960's, but for only 35-40 percent in the latter part of the seventies. Despite an unsatisfactory growth rate, agroindustrial production remains a very important segment of the Haitian economy.

Three groups of agroindustrial activities can be distinguished. First, traditional agroindustries, some with a particularly long historical trajectory; second, those developed in the period since the Second World War; and finally, the branches of processing which have emerged in the last few years.

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1. Extracted primarily from the 1979 IDB report, "Opportunities for Industrial Investment in Haiti," updated with more recent information where available.

a. Traditional Agroindustries

The traditional agroindustries are based on the prevailing climatological conditions and historical export background of Haiti; these include industrial processing of the following crops: sugar cane, sisal, cotton and vetiver and lime (the latter two for essential oils).

(1) Sugar cane

There are numerous small plants producing crude raw sugar, mainly for local consumption by the poor rural population. Recently, IDAI became active in promoting model mills of this type. In addition, sugar cane is processed and refined in three large mills: Cap Haitien, Port-au-Prince and in the Southwest near Les Cayes. A fourth mill is presently planned in the Gonaives area although questions have been raised concerning its financial viability.

Sugar cane also provides the raw materials for a large number of distilling plants which produce alcohol for local consumption. The principal product is clairin, a Haitian type of rum. The most important plants are located in Port-au-Prince, with a number of small facilities in Les Cayes and Cap Haitien. Exact production figures are not available, but there seems to be a growing demand for clairin which has led existing distilleries to expand their capacity.

Approximately 95,000 tons of refined sugar were produced in 1972-73, which dropped to approximately 51,000 tons in 1980-1981. In 1977 10,000 tons of sugar were imported by Haiti; normally a net-exporter.

(2) Sisal

Haitian sisal has traditionally been used for the production of binder twine, coffee sacks, artisan products and ropes. Three types of raw fiber serve as material inputs for these processing industries. The highest quality fiber is obtained by machine decortication . Manual decortication results in two lower quality fibers, "telle" and "battu".

In 1976, sisal production in Haiti declined to a new low of only 6,000 tons, of which 3,000 tons were machine decorticated fiber. Production remained essentially unchanged in 1977 and was forecast at about 6,000 tons for 1978. However, stronger prices in recent years has caused production to increase to 16,000 tons by 1980. 1981 production is expected to decline due to high carry-over stocks. Value of production is roughly $8.5 million.

During 1977, sisal exports totaled only about 2,000 metric tons (only 1,000 tons in 1976), compared to 9,400 tons in 1974 and close to 17,000 tons in 1970. By 1980, exports had again risen to 1974 levels and may they reach 11,000 tons in 1981. Efforts are now underway to develop European markets since Brazil is increasingly competing with Haiti in the U.S. market.

(3) Cotton

Once a major export product, cotton now needs to be imported on occasion to satisfy the demands of local textile producers. Even though production increased substantially in the early seventies, reaching a new post 1930's peak of 5,300 metric tons in 1973, it leveled off in 1976 and dropped sharply in 1977. Current production may only be 1,200 tons. Cotton fiber is now only a minor export item, and exports of cotton cloth (primarily denim) have come to an end. Only a relatively low level of exports of carpets, bedcovers and miscellaneous cotton products remains.

IDAI, through its branch SEN, operates a cotton processing complex in Gonaives which includes a cotton gin, a delinter, an extraction press for cotton seed oil and a cotton spinning plant. Most of Haitian cotton is ginned and processed in this complex, and seed cotton is transported up to a distance of 280 km to the plant. Apart from that, a small cotton gin operates in the South near Jacmel. All cotton produced in Haiti is bought by and sold through IDAI.

There are presently two spinning mills and one spinning/weaving plant in Haiti. Production capacity of the three is about 2,650 tons per year annually. However, production of yarn is only 700 tons and 1.4 million yards

of cloth which is roughly one third of Haiti's needs. The cotton industry is heavily subsidized through import protection or sale of domestically produced raw cotton (by IDAI) at 75% of the world price. Except for the smallest facility in Gonaive, the other two plants have outdated equipment and operate inefficiently. A new textile plant is under consideration with a capacity of 16.3 million meters of cotton fabric.

(4) Essential oils

Vetiver and lime production provide raw material for some 45 essential oil distillers, most of them located in the South. Essential oil production increased steadily in the early seventies, rising from 5.2 million gourdes in 1970 to 10.0 million gourdes in 1974. The value of exports tripled from $2.7 million in 1970 to $8.2 million in 1976. Since 1976 the value of exports has been as low as $6.5 million (1977) and as high as $9.7 million (1978).

The extraction of essential oils from citrus fruits is concentrated in the Cap Haitien and Jacmel-Les Cayes areas. The main products are lime and bitter orange oils, mostly exported to the U.S. A new plant for the extraction of lime oil started production in 1979 in Jacmel, with a capacity to process 45 tons per day, which could be doubled if demand develops accordingly. Equipment has been purchased for the initiation of another lime essential oil and lemon peel facility in Port-au-Prince. In addition, an integrated citrus processing complex is planned in Cap Haitien, though lack of adequate medium and long-term financing has delayed the project since mid-1977.

In the case of vetiver oil, Haiti has a virtually unlimited market in Europe and the U.S. A serious problem of vetiver root supply from small producers has developed in the last few years, however. The government flour mill enterprise, La Minoterie, started operating a new plant for vetiver oil extraction in Montrouis with a total capacity equal to one third of current national production. Even though the plant does not yet operate at full capacity, the extent of its purchases has led to a decline in the quality of the roots supplied in Haiti because many producers no longer leave the roots in the ground for the 18-24 months required for full maturation. In the

future La Minoterie intends to obtain its vetiver roots from the surrounding area by implementing an extension and production program for small producers on 1000 carreaus (1290 hectares). The discouraging effect on vetiver production of the tax structure is discussed in chapters I and II of the report.

An additional problem in vetiver extraction is that in most of the smaller plants the technique applied for the extraction is outdated and the equipment and installations are often in poor condition. Even though the new plant in Montrouis has an adequate design and layout, it still applies the traditional steam technique of extraction, though on an improved level. More efficient and refined techniques are apparently available today.

b. Postwar Agroindustrial Developments

During the postwar period, several new agroindustrial activities were started in Haiti, some of which have achieved great importance within Haiti's agro-industrial subsector.

(1) Flour-milling

Though based on imported inputs only, flour milling is by now one of the most important agroindustries in Haiti in terms of value added. The mill, Minoterie d'Haiti, originally established as a private firm by Caribbean Mills, is now solely owned by the Government, though it is operated in a joint venture with the Canadian milling firm, Maple Leaf. Production of flour has grown rapidly since 1971, and present daily capacity is 6000-6200 sacks at 100 lbs. each. As a by-product, 2000-2500 sacks of bran are produced daily. Present production satisfies local demand, except for periods of peak demand such as the Christmas and Easter holidays.

(2) Tobacco

Present tobacco production provides abut 30 percent of the 2.5-3.0 million pounds of raw material inputs of an important cigarette manufacturing industry. Comme Il Faut, the locally produced cigarette, dominates the

national market. Present forecasts for the 1980-81 harvest give an estimate of 750,000 lbs. flowing through Comme Il Faut compared to 850,000 lbs. in 1979-1980. In addition, an estimated 200,000 lbs is "directed" through the traditional marketing system. Comme Il Faut has been very successful in establishing a local production program combined with an extension service for small producers. Tobacco is mainly grown in the Cap Haitien and Cul-de-Sac area and in the Les Cayes region on the south coast.

(3) Alcoholic beverages

In the field of alcoholic beverages the establishment of a local beer factory greatly contributed to value added by the agro-industrial subsector. Principally based on imported raw materials, it now supplies nearly the total national market and also produces a variety of non-alcoholic beverages including a malt nutrient.

(4) Pasta

Based on the increasing supply of locally produced flour, several pasta plants began operating in the Port-au-Prince area in the 1970's. Their main products are various varieties of spaghetti and noodles.

(5) Cocoa

The processing of cocoa has been undertaken by the Haitian Manufacturing Speciality Co. (HAMASCOSA), a private company which until late 1978, enjoyed certain monopoly privileges including the right to be the sole exporter of cocoa. For reasons unknown to the team, the facility closed down in the past year or so.

(6) Beef, Dairy and Leather Products

HAMPCO (Haitian American Meat Company) operates a modern slaughterhouse in the Port-au-Prince area and exports beef to the United States. In 1977, the company received a loan of $750,000 from the Overseas Private Investment Corporation of the U.S. (OPIC) to initiate a project for

the production of pork, sausage, and rabbit both for the local market and for export to other countries in the Caribbean. A small IDAI-financed plant with a five head a day capacity now operates in Les Cayes. It is leased by a Canadian who sells to the tourist industry. (Beef is also produced by other small producers in a traditional manner.)

There are now several small, private modern dairy operations in the Port-au-Prince area. For the most part, dairy cattle are held in subsistence operations by small farmers. IDAI-SEN operates a modern dairy plant in Les Cayes which produces pasteurized milk, chocolate milk and butter. Their program of extension services to secure an adequate supply of milk to the plant has been only marginally successful. The plant in Les Cayes processes some 300 liters a day at present, which is about half of its capacity, and it operates at a loss. Another small dairy is run by the Ministry of Agriculture experiment station at Damien.

(7) Rice-milling

With the increase in rice production, a large number of small rice mills were set up in all of the rice producing regions of Haiti. These are private, mechanically operated mills, with less than a ton per day capacity in most cases, undertaking mostly custom milling for small producers (quantities sometimes as small as a kilo or two). An attempt to establish a large rice-mill in the Artibonite area in the late fifties failed. Problems of management and input supplies are cited as the main causes; with respect to the latter it should be noted that ten different varieties of rice are grown in this region, whereas a large mill needs two or three standard types for efficient operation.

c. Recent Agroindustrial Developments

In the last two to three years several agroindustrial activities were initiated in which Haiti definitely has a potential, but whose success still remains to be proven. These fields are tomato processing, canning (fruits, fruit juices, vegetables), vinegar production, and edible oil production from inputs other than cotton seed.

(1) Canning and tomato processing

An important canning enterprise started operating in June 1978. The Conservie Nationale, S.A. (CONASA), a Haitian owned shareholding company set up a plant in Cap Haitien to process mangos, guava, papaya, and pigeon peas. It intends to sell 40 percent of its products in the local market and 60 percent in export markets. CONASA's supply of raw material will come from the surrounding northern plain, and will be provided by small producers.

FACOLEF, an enterprise involving several prominent Haitian businessmen, began operating a multi-million dollar plant for the production of tomato paste at Cavaillon near Les Cayes. The plant also has facilities to can pigeon peas and breadfruit. In 1978 it was plagued by serious supply problems and, as a consequence, operated at a very low level of capacity, canning tomato paste based on imported product. Currently, however, local production of tomatoes supplies processing volume for three months. Expansion to five months is planned in 1982. FACOLEF hopes to export tomato products, breadfruit, and pigeon peas in the next several years. Two other companies also can tomato paste using tomatoes imported from the Dominican Republic, while at the same time attempting to procure local tomatoes.

(2) Vinegar

A private entrepreneur established a fully automatic vinegar plant in the northern part of the Port-au-Prince area, which produces vinegar on the basis of sugar cane. The vinegar produced is of very good quality and will clearly meet Haitian consumers' preferences, since apart from imported vinegar, Haitians have always used locally fermented vinegar from sugar cane juice. The plant is the first large scale production of vinegar in Haiti and started operating in 1977. Its capacity is such that at full utilization it could easily supply the entire national market and substitute for all imports of vinegar. At a later stage of the project, vinegar will be produced at a price that makes it avaiable to the poorer parts of the Haitian population, who do not consume vinegar regularly at present.

(3) Edible oils

Traditionally, edible oil has only been extracted from cottonseed in Haiti. In recent years, facilities were initiated to produce edible oil from sesame (Jacmel) and sunflower (Port Dauphin S.A. near Cap Haitien). In all three cases, the oil is extracted mechanically with outdated oil presses. As a result, these activities have not yet had a significant impact in supplying local demand. These appeared to be among the factors leading the Government to approve the construction of a $12.5 million plant to process soybean oil and any other oil seeds produced domestically or imported. In 1980-1981 this oilseed mill (SODEXOL) was established adjacent to the flour mill. Its crushing capacity is in excess of 55,000 tons annually. It can provide all domestic requirements for semi-refined edible oils.

3.3.2. Assembly Export Industries[1]

The assembly industries in Haiti have been the fastest growing component of the economy in the last decade. The subsector is comprised of approximately 200 factories which employ 40,000 to 60,000 workers. If one can assume that 3 to 4 people are supported by each worker, then, using the higher figures, the assembly industries help to support from 16 to 24 percent of the population of the Port-au-Prince metropolitan area (currently estimated at about 1 million), where all the assembly operations are located. Employment in the electronics and miscellaneous group of assembly industries has doubled from 1974 to 1978 and has increased by about 50 percent in baseballs, toys and other sporting goods (see Table III-4). In clothing, however, the largest branch of the assembly sector, employment has remained constant since 1974 due to the slowdown in the rate of output expansion required to comply with U.S. quota on textiles and garments. Thus, overall employment in assembly industries increased about 50 percent between 1974 and 1978.

1. Information obtained from the February 1981 World Bank report, Haiti: Economic Memorandum, and U.S. Embassy, Port-au-Prince.

Most assembly industries import inputs from abroad (mainly the U.S.) although a few use local raw materials such as cotton and sisal. To estimate the growth of assembly industries in the 1970s, one can thus calculate value added by subtracting from the value of exports the value of imported inputs. Net exports (as a proxy for value added) rose from $1.8 million in 1970 to $23.0 million in 1977, a considerable increase even after allowing for inflation. Exports by assembly industries represented 42.3 percent of total industrial exports in 1977 against 25.3 percent in 1970. Value added by assembly industries represents about 15 percent of total value added in manufacturing.

Although the re-export industry has been criticized for insufficient "input-output" linkages to the rest of the economy, its substantial workforce has created an important and growing source of effective demand for the products of Haitian agriculture and industry.

3.4 Major Development-Oriented Credit and Promotion Institutions Intended to Assist the Private Sector.

The following section provides brief descriptions of several development-oriented credit and promotion insitutions intended to assist the private sector.

There are now four development oriented credit institutions in Haiti: L'Institute pour le Developpement Agricole et Industriel (IDAI - Industrial and Agricultural Credit Institute); Le Bureau de Credit Agricole (BCA - Bureau of Agricultural Credit); The Haitian Development Foundation (HDF); Le Fond pour le Developpement Industriel (FDI - Industrial Development Fund).

IDAI is a government-financed (direct budgetary support) lending and investing institution chaired by an inter-ministerial board. Loans and investments are made for industrial and agricultural activities. In 1980, IDAI received US$ 3.9 million from the National Government Budget, of which it spent US$ 3.1 million for salaries and other administrative expenses. The outstanding loan portfolio as of December 1980 was US$ 6.5 million and the investment portfolio was US$ 7.2 million, less a "provision for possible devaluation" of US$ 2.2 million (disbursements less recovery).

BCA is also a government institution under the Ministry of Agriculture, specialized in crop lending to small farmers. The credit needs of small farmers and the role of BCA have already been covered in Chapter II. A new USAID project will provide support to the BCA.

The HDF, a non-governmental organization directly assisted by AID and the IDB and supported by the Haitian private sector, has been in operation only two years, lending to very small businesses in the Port au Prince area.[1] The HDF loan cap is $7,500 for an individual and $25,000 for groups. The HDF total loan portfolio as of November 30, 1981, was under US$ 250,000. Operating expenses of the HDF amount to approximately $200,000.

The FDI has been recently created with direct grant and loan support by the World Bank. The FDI is a rediscount and guaranty fund to operate through the established commercial banking network. The project operating cost of the FDI (including the Director's salary directly funded by the World Bank) has been estimated at US$ 130,000 per year. The present capital endowment is US$ 7,000,000. It is expected that US$ 2 million would be disbursed in three years.[2] The discounting cap is $250,000. Discounting occurs on 70-90% of total loan value, depending on the size of the loan.

In addition to these four credit institutions, there is the National Office of Investment Promotion (ONAPI) established in 1979 and operational in 1981. This stands in sharp contrast to most Latin American countries which have had public sector investment promotion mechanisms for two or more decades. ONAPI has a staff of eleven professionals and engages in project identification and investment promotion.

3.5 Opportunities and Advantages

As elsewhere in the world, private sector investment in Haiti has gone through cycles. The country presently possesses a business environment which

1. For a more complete analysis and recommendations to broaden the scope of the HDF see section I below.
2. The first tranche of the World Bank loan is $4 million, expandable to 7 million over the 4 year period.

may be very attractive to certain kinds of investment. Those positive elements, which jointly comprise the "demand" side of investment in Haiti, are briefly reviewed below.

3.5.1. General

With only one or two exceptions, Haiti does not appear to present unique investment opportunities over other countries of the Caribbean area. The exceptions are: (1) the heightened interest worldwide in the country's plight especially on the part of Florida, and (2) a labor force which is reported to be the least expensive in Latin America. However, both these advantages may be transitory. Labor cost advantages can eventually disappear, and Florida's concern with economic conditions in Haiti may not persist.

Cheap labor is seen as Haiti's major asset, but labor costs are already nearing the levels of neighboring countries and may actually exceed them in some lines on a unit-produced basis (e.g., garments). Thus, the country cannot look to a captive group of interested parties or investors who are forced to come to Haiti because no other acceptable alternative exists. Rather the country is faced with the need to package its assets (none truly unique in itself) into a combination attractive to both domestic and foreign investors.

In addition to labor and the heightened interest of the world community, Haiti's comparative advantages include the following:

Market Proximity: Except for Mexico and the Bahamas, Haiti (together with the Dominican Republic) is the nearest developing country to the U.S. with which the U.S. maintains relations. The U.S. represents the largest consumer market in the world. Penetration by Haiti into only a small percentage of a U.S. mass product market or creation of a speciality niche in the U.S. would provide sales perhaps far greater than any opportunity confined to the Haitian market alone. While Haiti must compete with other Caribbean countries for this market, it is generally protected by distance from undue competition from countries in Africa and Asia with similar resources as Haiti (climate, labor).

In addition to the U.S. market, Haiti has access to other Caribbean markets where labor is more expensive, food production more constrained, or markets too small to justify local manufacturers. For example, Puerto Rico imports wooden machetes made in Haiti for the tourist trade. Haiti has historically shipped agricultural products to the Turks-Caicos Islands. Other small islands in the Caribbean, often with lower quality standards than the U.S. market, may have potential for similar shipments.

Available Entrepreneurs: As discussed in Sections B and C above, Haiti does not lack for entrepreneurs at all levels. Should a promising investment idea emerge or a foreign investor seek a local partner or agent, the necessary entrepreneurs will be forthcoming. As discussed in the following section, the problem is not in the absence of entrepreneurs but in constraints which prevent this entrepreneurial energy from being mobilized and productivity applied.

Internal Demand: Although Haiti is a poor country with the lowest per capita income in the Hemisphere, it does have a surprisingly dynamic and growing market for consumer goods. Much of this can be attributed to the rapid growth of the assembly industries over the past decade and their generation of some 40,000-60,000 jobs with consequent growth in effective demand. In addition there has been a large inflow of funds from abroad through the international donor agencies and from expatriate Haitians remitting monies or returning temporarily to vacation or establish second homes.

Undeveloped Industrial Sector: While the nonexistence of other industries may retard investment as described in Section B above, a low level of industrial activity also presents opportunities, especially when domestic consumer markets have already been established through exposure to and subsequent growth of imports. Thus, in Haiti one finds a very advantageous set of circumstances. Import substitution and non-assembly export oriented industries are still at a low level of development. However, the presence and influence of the assembly industries has induced the development of the support structure and attitudes which will benefit many industries that might choose to locate in Haiti. Finally, while the assembly industries may have

paved the way for other industrial development, their high level of current activity in no way curbs further growth in this industrial category as it might have were the early growth in import substitution or speciality export production. Thus industrial growth should be able to continue on all fronts under the proper investment conditions.

U.S. Customs Codes Section 806/807: The section of U.S. trade laws and regulations which permits the export of parts and reimport of items assembled from these parts under very favorable trade terms has permitted Haitian and other countries' assembly industries to grow at a significant rate. Continuation of this trade policy should permit continued expansion of the assembly industry sector in Haiti as U.S. wage rates continue to rise, labor productivity stagnate or decline, and manufacturers identify additional opportunities where export-reimport is more profitable than U.S. assembly.

Farmer Responsiveness: Often it is believed that in peasant-based farming systems, farmers cannot be induced to convert rapidly to a new crop. Thus, agro-industries without dedicated land (i.e., owned or long-term leased) would not risk large fixed investments if peasants were their major source of raw materials. This has not been the recent experience in Haiti with tomatoes and tobacco. In both instances, peasant farmers expanded from zero to roughly one thousand acres in each crop over a three to four year period. This coming season, the tomato processing facility near Les Cayes (at Cavaillon) is hoping to induce farmers to increase acreage still further to over 2,000 acres. Peasant farmers are responsive. What was needed was a solid market (i.e., contract production), a price which increased income above competing crops, extension assistance, credit, and the availability of inputs, all of which were provided by the respective agro-industry. A similar program is now being initiated by the new oilseed crushing mill.

Public Fiscal Management: The recent positive performance of the GOH in controlling public expenditures and generating a fiscal surplus is a positive development from an investment standpoint for two reasons. First, a fiscally sound, professionally administered public sector and foreign exchange situation cannot but help improve the attitude of businessmen towards Haiti. Second, change in one area indicates that it may be possible in others if the benefit to Haiti and the government can be adequately demonstrated.

Concessionary Terms: Like most countries in the Caribbean, Haiti provides concessionary terms to foreign investors especially in "new industries" (established since 1949). These include: 100% foreign ownership permissible, (although joint ventures are preferred for investments oriented to the domestic market); corporate tax exemption for 10 to 20 years, no import tax nor export duties on most industrial items, and no restriction on the repatriation of profits, dividends, or capital. The currency is freely convertible with the U.S. dollar at a parity rate that has not changed since 1919. Similarly attractive conditions also exist for Haitians who invest in "new" industry.

3.5.2. Agro-Industrial Opportunity

The private sector specialists on the team believe there is an extremely large latent agro-industrial potential in some lines in Haiti. The sugar industry appears inefficient and less profitable than it should be given the productivity and revenue levels attained in other countries of the hemisphere with no worse physical constraints than Haiti. The success of the Dominican Republic in tapping the speciality tropical products market in the U.S. (e.g., plantains, frozen coconut, mango paste) need not be confined to that country. Haiti apparently already produces a higher quality mango than that produced in the Dominican Republic. As cited above, the tobacco and tomato processors have been successful in inducing significant expansions in peasant production of a desired crop. The meat, poultry, and dairy industries appear to be underdeveloped. Lower than international average prices for Haitian coffee may be correctable by upgrading within the country rather than overseas. Larger landowners seem increasingly interested in increasing the agricultural output from their holdings either through personal investment or through a second party manager. Adequate roads exist to most major agricultural regions (although feeder roads are somewhat limited). Rice production is projected to meet domestic market demand in the next few years.

Thus, most of the ingredients for more rapid agro-industrial growth appear to be present. However, while some expansion has occurred in recent years, the rate has been somewhat disappointing. Possible causes are presented in Section F. below. It is important first to describe in the following section several institutions that impact on the private sector.

3.6 Investment Constraints

3.6.1. Perceptions of Larger Scale Haitian Investors

The private sector specialists on the strategy team interviewed numerous businessmen in the Cayes, Port-au-Prince, Gonaives, and Port-de-Paix areas. Also pertinent additional information was provided by other team members who spent time in the far Southwest and Northwest, the Artibonite, Cap Haitien, and Jacmel. Finally, GOH, private sector and other individuals provided useful inputs regarding areas of the country not visited by the strategy team. In all areas, there appeared to be a commonality in the concerns expressed and the perceived obstacles to more rapid investment by the private sector.

It should be recognized that the concerns expressed to the team were colored by what a businessmen might like versus what he actually needs to make additional investments. Many of the "problems" expressed are no different than those cited by businessmen everywhere, even in countries where investment occurs at a high level. Thus, it is imperative to attempt to distinguish between a universal private sector bias and conditions specific to Haiti.

Basically, concerns or obstacles cited by the Haitian businessmen fall into four major categories: information, finance, government, other. Each is briefly described below.

a. Information

Perhaps the dominant theme heard during our field work was the issues related to information access. Three types of information shortfalls were identified: investment ideas, market knowledge, and idea evaluation. Basically businessmen in the regional cities felt that they might well be sitting on high potential investment opportunities but were simply not aware of their presence either because they were not aware of the potentialities of local combinations (climatic, soil, minerals, existing raw materials, etc.) or because they were ignorant of the markets which might buy their existing products. In addition to the lack of awareness of international markets, even

when markets were perceived to exist, potential investors were not knowledgeable in how to efficiently assess the potential and find appropriate foreign partners for pursuing the opportunity. Finally, when an idea was felt to be plausible by a potential investor, there were no knowledgeable people in Haiti with whom the idea could be tentatively explored without considerable expenditure of time and money. Since most ideas which initially appear promising are eventually discarded for sound reasons, spending such time and money on every new idea formulated is an unacceptable approach for all but perhaps the largest Haitian investors.

There are several additional reasons for a lack of contacts. First, since the economy and resource knowledge base is quite underdeveloped, Haitian businessmen are unlikely to find, except by chance, the needed information among friends, acquaintances, or even the population in general. Second, except for the very largest Haitian businessmen, their contacts outside the country are generally limited to a few cities (probably Miami, New York, Boston, and/or Montreal), to one or two product lines (e.g., coffee, seafood, crafts), and to importers, not farmers or industrialists. Most of the knowledge required to assess a broad range of ideas at their inception does not reside in these cities, product lines, or businesses (i.e., importers). Although Haitians are generally aware of the very largest conglomerates in an area (e.g., Hormel, Oscar Myer, Swift in meat packing), the Haitian is often reluctant to approach these, as well he might, since the uninitiated can easily get lost in the corporate maze, or the prospective project is of insufficient size to be of interest to the U.S. business. The most appropriate information and investor sources tend, rather, to be small and outside the major eastern cities, a level and type of business and geographic area which is virtually unknown to most potential Haitian investors.

b. Finance

Interviews with Haitian businessmen revealed these principal concerns regarding investment credit: availability, responsiveness of the credit system, and interest rates.

Credit availability: Many of those interviewed did not feel constrained by the unavailability of credit. However, this group is generally comprised of individuals from the long established merchant families who can draw on internal resources (personal, family, close friends) to finance all but the largest projects. A second group of smaller businessmen did see credit availability as an obstacle to increased investment. They cited problems with obtaining both investment and operating capital.

Commercial banks prefer loans of three months or less; they are accustomed only to commericial loans. For their best customers they will occasionally seek longer term loans; however, two years tends to be the limit before payback. Additionally, the banks are reluctant to turn the loans over at that time. Investment credit is available in small amounts through the HDF (under $25,000 as part of a group) and for large amounts through the IFC (Internatonal Financial Corporation - World Bank) (over $2 million). In the near future, the FDI should ease the situation somewhat through its rediscounting and partial guarantee facilities (to a maximum of $250,000 per loan). Thus, except for IDAI which is not seen as a significant or effective source of financing by most of the businessmen interviewed (see following), there is a gap for medium-to-long term money between $250,000 and $2,000,000.

Operating capital is also a problem. Most medium-to-small investors (but still larger than the cottage industries) have typically used their short-term credit line to the maximum since they are attempting to expand rapidly from a limited personal capital/equity base. Thus, when sudden opportunities or problems arise which require short-term capital, they are unable to adequately respond.

Responsiveness of System: Within the limits of its constraints and policies on lending, the commercial banking system in Haiti is seen as quite responsive. Appointments can be made quickly, and loan decisions are rapidly forthcoming. This has not been the experience of interviewers with public sector financing institutions. Many complaints were made regarding inability to arrange appointments or obtain decisions without long delays or only through personal contacts. Complicated procedures were particularly difficult to negotiate for the small or medium-size entrepreneur. Once loans are

approved, continuing involvement by the lending institution was seen as unnecessarily restrictive and burdensome. (Time did not permit an evaluation of the full legitimacy of these complaints. Some businessmen had had a satisfactory involvement with IDAI.)

Interest Rates: Several private sector investors cited high interest rates (18-20%) as too onerous to permit borrowing. This a complex issue on which there can be opposing points of view (see, for example, section "I" on small industry which argues for higher interest rates so as to encourage efficient use of capital in an economic environment where capital is very scarce and opportunity costs as reflected by informal market, moneylender rates are much higher). At any rate, the agro-industrialists interviewed felt that existing rates of return in agro-industry did not justify the high existing commercial institutional interest rates.

c. Government

Government plays a critical role in setting the framework for private enterprise growth. It can provide important direct and indirect complementary support for such growth. It may also legitimately restrict private enterprise growth when such growth would impose uncompensated social costs, such as to the environment, or to human health or to public or other private property. However, Government can also penalize private enterprise growth without cause. When this happens, the entire economy loses, including agriculure, labor, productivity and efficiency, the balance of payments and the consumer. The positive ripple or multiplier effect becomes a negative one. Historically, the Government of Haiti has played both a positive and an unduly negative role with respect to private enterprise.

Direct Management: Government participation in private enterprise often imposes severe inefficiency and misallocation of resources. Thus, private investors will avoid a government partnership if it is perceived that the GOH will be directly or even indirectly involved in the management.

Regulations: Regulation is assumed here to include direct or indirect taxes, duties, price controls, import restrictions,and licensing

among others. In general non-duty taxes are not seen as a hinderance to further investment. Export duties on coffee are felt to prevent further peasant investment in production which subsequently limits any signficant interest in developing corollary facilities. This is corroborated by recent coffee production trends in Haiti. (Coffee is discussed more fully in Chapter II above.)

Although the industry was not reviewed in detail, price setting by the GOH at all levels of the sugar industry is felt to be a major reason for the poor performance of this industry. In practically every sugar producing country of the world, sugar companies conduct research, provide extension and credit, reinvest in facilities, and seek to promote higher sucrose yields among growers. In Haiti this has ocurred only marginally if at all. While price controls can protect producers in low world price periods and consumers in high price periods, the overall benefits to both producer and consumer over time may have been negative versus what might have occurred had simple ad valorem retail taxes and producer income taxes prevailed rather than price controls. While significant potential for increasing sugar production is felt to exist, it will probably not occur under current conditions. In addition, as the agricultural sector in Haiti continues to develop, more and more land will probably move out of cane production into other, higher income crops. Thus, unless yields are increased (both tonnage and sucrose), Haiti will increasingly become a deficit country. The resulting unnecessary loss of income, employment, and foreign exchange should be of major concern to the government.

Essential oils provide a third example of governmental involvement which has created problems for producers and perhaps contributed to the industry's decline. Basically the main criticism by the private sector is not the level of duties, commissions, etc., (although it would, of course, like these reduced). Rather it is the inability to adjust to changes in the world marketplace caused by government policies. Producer-exporters cannot adjust their selling prices to take advantage of either temporary market aberrations or to generate quick cash for either business or personal reasons.

Application of the Law: A number of Haitians interviewed saw laws and regulations being interpreted to the advantage of one group at the expense of another. Thus an otherwise attractive investment was sometimes blocked or discouraged due to these government interpretations. These interpretations were sometimes affected by a competitor with greater political influence. Due to this "shadow" of the power structure, investment is often discouraged without the actual unequal application of the law. Simply the likelihood of such unequal treatment is a sufficient deterent.

Thus, the administration of tax incentives or duty exemptions can exclude competitors. This exclusionary practice imposes an indirect penalty -- an implicit but no less real tax -- on potential competitors and consumers. This issue arises particularly with respect to "infant industry protection." Such protection should be time-limited and modest in level.

As an industry becomes healthy and profitable, it is logical that the government will expect to generate more public revenues from it. In most countries this is typically done through corporate income taxes, sales taxes or export duties at a fixed rate. Thus, as a business grows, government revenues grow. Generally, no business area should be singled out for special tax treatment (with the exception of luxury items or items for which a broad consensus to discourage exists, such as liquor and tobacco products). In Haiti, however, as a business sector becomes more profitable, it also becomes more visible and has tended to become a target of special government attention with a view to extraordinary revenue generation. These additional revenue generating activities and related administrative controls do not generally consider the operating environment and cost structures in which a business sector must function. As a consequence, not only is the private sector taxed extraordinarily (directly or indirectly), but the government actions can sap the vitality of the industry and prevent growth or even force reduction in output or relocation to another country. Historical examples inclued coffee, sugar, pineapple canning and soap manufacturing. A more recent one is essential oils. Processors, agricultural producers and consumers are hurt in the process.

This predatory tendency is not always the fault of the government as such. It is sometimes precipitated by a private sector participant in the sector who tries to develop a privileged position by inviting government involvement or protection. While the private sector advocate may benefit in the short run, to the detriment of his competitors, officials and governments change in the long run . The initial privileged position is lost, and the entire industry may have irrevocably suffered.

Inefficiency: Perhaps the most common complaint of the private sector the world over is that government is inefficient. Fortunately, in many countries, the business sector does not have to seek financing or other services from the government, since parallel private institutions or services are available. When the private sector is forced to deal with the government on a daily basis, such as with customs, efficient processes generally evolve. In Haiti, as in most other developing countries, alternatives do not exist or efficiency has not evolved. Common complaints include delayed access, slow approval process, no confidentiality, bureaucratic mentality, little or no relevant knowledge, absence of field staff, theft, delays in getting out of the port, and delays in getting foreign manager entry and work papers. While none of these in itself prevents investment, they can either delay it or cause the private sector to avoid contact with the government. This latter can lead to parallel institutions being developed that wastes national resources in duplicative efforts, or it can lead to circumvention of the law beyond what would have occurred under a more efficient system.

d. Others

In addition to the major categories discussed above, several other problems were expressed pertinent to investment decisions.

Amenities: In regional cities, the lack of amenities was cited as one of the reasons industry had not located outside Port-au-Prince to any significant degree. Thus, until such amenities are developed (which could conceivably happen with the development of tourism in an area), investors will be averse to moving outside the capital area until such time as the cost of doing business in Port-au-Prince becomes prohibitive.

Labor Productivity: Haiti has in general a reputation for low-cost, but productive labor. Nonetheless, some interviewers cited situations where newly hired workers could not initially work a full eight hour day without sharp declines in efficiency toward the day's end. Eventually as the newly acquired income permits improved nutritional status, stamina improves. However, even then, some interviewees felt that Haitian workers were not as adaptable to frequent changes in product lines (as in the volatile toy industry) as workers in other countries. There was also some complaint that workers felt employers "owed" them a continuing job and salary, regardless of performance (a common feature of the "patron" tradition found in many countries). As Haitian industry expands and the industrial labor force gains experience, these situations may ameliorate.

Packaging Materials: Apparently monopolies exist in various packaging materials employed by certain agro-industries. The two materials cited were cans and cardboard. (The team had insufficient time to verify the actual regulatory situation.) With respect to the former, the quality of the Haitian can was so poor that it could not hope to meet U.S. FDA standards. In one case an export shipment apparently went bad because of container quality. Subsequently, cans were imported from the Dominican Republic. Thus, if the GOH permits a monopoly situation with poor quality container production, investments dependent on high quality containers to meet a market need will not be undertaken.

Infrastructure: Although the absence of physical infrastructure (e.g., electric power, roads, ports) is often mentioned as a major obstacle to development in Haiti, this was not expressed by Haitian businessmen as a significant problem nor was it seen to be one by the team in the short term. For both Les Cayes and Gonaives, excess power apparently exists. Neither city has to have a port (sea or air) to attract certain types of industry. Obviously, in time or if industrial development occurs more rapidly than in the past, infrastructure constraints will come to bear. Perhaps in the short term, transmission problems within the power system serving Port-au-Prince is of most concern.

Wage rates: It had also been hypothesized that a national minimum wage was an obstacle to industrial development in the regional centers since the "real" (opportunity cost) wage rate there was probably less than in Port-au-Prince. However, no Haitian businessman in the outlying cities expressed a concern about wage rates. In fact, most felt they should pay more than the national minimum in order to insure that the workers were healthier and more motivated. Basically the philosophy was that "if you paid more your could ask more" of your workers.

A more important consideration is the need to exercise great care in future upward adjustments of the minimum wage rate. If it is adjusted more rapidly than national productivity, Haiti could rapidly lose its international competitive standing in such areas as re-export assembly.

3.6.2. Additional Team Perceptions

While most of the problems cited by the Haitian private sector in the interview process were felt generally to be legitimate, they were by no means comprehensive as to the problems facing increased private investment activity in Haiti. That is to be expected in limited interviewing, both in numbers and time. Consequently, the team drew on its previous knowledge of Haiti, reports of other missions and donor groups, its experience elsewhere in the developing world, and its knowledge of the U.S. to identify additional areas of concern which might hinder further American private investment, in particular.

Competition with Florida: Southern Florida has a climate not that dissimilar to Haiti. Consequently many products which can be grown in Florida can also be grown in Haiti at the same time, sometimes more cheaply due to lower labor costs. Many products, however, have greater agronomic potential in Haiti than in Florida. A strategy of U.S. assistance should seek to promote crops complementary to those grown in Florida in terms of season or variety (e.g., speciality tropical items, winter cucumbers and cantaloupes, foliage cuttings).

Haitian Purchasing Power: While it was indicated earlier that the Haitian market for goods was growing, the fact remains that most Haitians,

even those employed in the assembly industries, can only manage relatively low value purchases at any point in time since saving is difficult. Thus, import substitution investment is often constrained to fairly low value products.

U.S. Market Requirements: Unlike much of the Haitian market, the U.S. market has high quality requirements. This manifests itself at three levels: government (FDA), consumer (appearance, demading taste) and industry (consistency of product characteristics and supply). These quality standards are often difficult to attain with peasant producers of raw materials and new industries possessing all the common infant industry problems of management. Thus, projects may fail although viable markets in the U.S. have been identified.

Language: All else being equal, most small U.S. investors when seeking an offshore location would probably prefer first, an English speaking country, second a Spanish speaking country, and only then a French speaking country. Americans are notoriously mono-lingual. When they do speak a second language, it is most apt to be Spanish. In addition, native Spanish speakers with technical or managerial backgrounds are far more common in the U.S. than French speakers. Thus, although most Haitian businessmen speak English and even with the resource of the Haitian community in the U.S., many U.S. investors will still see the existence of French as an obstacle to doing business in Haiti versus the English and Spanish-speaking Caribbean.

Foreign Investor Knowledge: Just as many Haitian businessmen do not know how to effectively assess the U.S. market or find U.S. partners, the mid-sized and small U.S. investors most appropriate to Haiti's needs also do not know how to evaluate business conditions in Haiti or find a reliable partner. Consequently, unless directly contacted by someone they trust, they will likely never consider Haiti as an investment option. (This is also true of most other countries which might be desirous of attracting mid-level and smaller U.S. investors.)

Haiti's Image: Haiti's investment image abroad is poor. Most foreigners still think of Haiti in terms of its image in the fifties and sixties. More recent perceptions can also be negative: emigrees leaving out

of desperation and a country verging on international bankruptcy. Until convinced differently through effective (and factual) promotion, most foreign investors may well look elsewhere for industrial or agricultural opportunities.

Amenities: Although Port-au-Prince may have far more amenities than Haiti's regional cities, it has far less than certain other countries in the region such as the Dominican Republic, Costa Rica, Mexico, and Jamaica. Thus, since many foreign investment location decisions are made for amenities reasons when all else is roughly equal, Haiti may not be able to attract its share of such investments.

Investment Promotion: Compared to a number of other countries, both developed and developing, Haiti's investment promotion activities are poor.

Concessions: Certain of Haiti's investment concessions appear redundant or more generous than required to attract investment. Three have been cited. First, the fifteen year tax holiday for investment outside the capital area is felt to have little incentive effect beyond the seven year exemption which exists for industrial investments anywhere. Thus, by having these additional exemptions, governmental revenues are being lost unnecessarily (years 8 to 15) from regional investments which would likely have been made without this supposed incentive. What is missing in Haiti is proper policy follow-up to see if adjustments are in order (to the benefit of either the investor or the government).

The second concessionary issue raised, and perhaps more important than the first, involved the production of tomato paste. Domestic manufactures have been protected from foreign imports. The only stipulation is that they use increasing portions of domestically produced tomatoes. However, there was apparently no price control measures placed on the domestic manufacturers during the period of protection. Thus, some critics contend that locally canned past is selling at prices not justified by production costs and reasonable profit levels.

Third, SODEXOL a mixed enterprise with GOH, domestic and foreign private capital, was granted a monopoly to produce semi-refined vegetable oil for

domestic consumption. Output prices are at levels over 50% higher than current international prices ($1223/MT vs. $753/MT CIF Port-au-Prince).[1] Semi-refined oil, formerly imported has been produced from imported raw material, mainly soybeans, by SODEXAL since it inauguration in September, 1981. This facility is currently operating at a rate approaching its capacity of 100-120,000 MT of oil a year. The main purchasers of this semi-refined output are five domestic processors of refined oil which is in turn sold to retail outlets. Since the retail price of edible oil is controlled by the Ministry of Commerce and Industry, the effect of the higher price has been to reduce the margins of the refined oil processors. Over time this squeeze could reduce competition in the processing of refined oil (it might also spur increased efficiency), or to the extent the increased price is passed on, increase the indirect tax already imposed on final consumers by the margin above world prices. The high capital and import-intensity of SODEXAL has been the subject of criticism by the World Bank (loc. cit.) and others. To the extent that current efforts to develop local sources of raw material supply, including peanuts, are successful, this criticism is mitigated. (See Chapter VI for further discussion.)

Agricultural Research: Given the lack of field presence or application of agricultural research in many parts of Haiti, potential agroindustrial or large scale farming investors face risks far greater than they might elsewhere where the information base is more complete. During the early years of a project, low yields, poor quality, and erratic supply may result when an operation tries to produce acceptable raw materials with little local knowledge and large cash outlays. Previous research reduces the likelihood of failure.

Mangerial Sophistication: Most Haitian businessmen are entrepreneurs, not professional managers. This is acceptable when financial resources are generated internally from family and friends and when personal supervision of operations is possible by the owner.

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1. The world price of semi-refined oil is subject to sharp fluctuations. It apparently has been as high as $900-$1000 per MT but not as high as $1200.

However, when outside financing becomes necessary and businesses grow (geographically, in size, or number) beyond one's capacity to manage them personally, then a more professional approach is required. Owners must understand the limits of their ability and the demands of the larger business world; competent managers must be capable of working independently; and control systems must be established which do not require hands-on supervision by the owner or manager. Haitian business is in a transition from one state to the other. Consequently, a "looseness" in management style and approach is often found, a looseness which would be disconcerting to many potential investors from the U.S., Canada, and Europe.

Quotas: Currently quotas prohibit any significant increases in Haiti's textile and garment industry producing for the U.S. market. While a survey of U.S. quotas and other trade restrictions was not undertaken as part of this study, they are and can be an obstacle to certain types of investment development in Haiti. The danger also exists that such quotas will be reduced or that imports will be eliminated entirely.

3.7 Conclusions and Recommendations

Introduction

The recommendations of this chapter, although under the umbrella of the Food and Agriculture Development Strategy Team, are also addressed to a broader spectrum of private sector development possibilities. These recommendations represent an understanding of critical factors in industrial development strategies in general. While coinciding with the perceived constraints analysis resulting directly from our interviews, they are also the result of our equally extensive experience in many developing countries, particularly in the Caribbean area. The team believes these recommendations, make a significant contribution to broader "private sector development efforts," supported by USAID, the State of Florida and other U.S. Government agencies.

The team recommends that as a part of any private sector/job creation program, AID assign special emphasis to the promotion of the so-called

"re-export industries." During the past decade these enterprises have been the fastest growing "sub-sector" of the Haitian economy, in sharp contrast with the much slower growth of the agro-industrial sub-sector. In terms of employment creation, both the re-export industries and the small (including the "informal structure" category) industries represent over 90% of all industrial employment. However, this should not imply neglect of assistance to agro-industrial investment that may have greater foreign exchange and farm income impact than re-export industry.

This section is organized around the following policy issues: finance, information, risk-cost amelioration, government policy, and export promotion possibilities. The background of each issue is discussed, followed by a set of action recommendations.

3.7.1. Issue: Financing

a. Background:

The major development-oriented financing institutions have already been described, in section D above. In addition, seven international commercial banks, two Haitian banks, (one private, one public), approximately 35 caisses populares, and 10 insurance companies (one domestic), operate in the country. The foreign banks operate almost exclusively in Port-au-Prince while the Haitian banks and the caisses populares have a few more branches outside the capital. Of all the international banks, the Royal Bank of Canada is by far the largest with assets almost equal to those of all the other banks added together. The net domestic assets of the banking system in 1980 amounted to US $284 million an increase of approximately 27% over 1979; however, credit to the private sector was US $63 million representing a net increase (new loans less recoveries) of only US $9.4 million over 1979.

Commercial banks concentrate on the "distributive sector" and provide essentially short term loans, although the "revolving credit" practice in Haiti in effect, makes many loans effectively longer than short term (although not longer than 1-2 years). Because these loans are also made to capital equipment (tractors, farm machinery, etc.) and distribution and importing companies, it may be asserted that commerical banking credit has had a favorable development impact in Haiti.

Another development financing institution operating in Haiti is the Latin American Agricultural Development Corporation (LAAD). This private company has a loan/investment portfolio in Haiti of several million dollars concentrated in agro-industrial enterprises. This portfolio has been built over the last seven years but at present is not significantly increasing because of internal policies of the corporation and unfavorable recovery experience (foreign exchange shortages).

There are two additional "development/production" oriented potential sources of financing principally of equity but also including direct lending or intermediation. These are the new Interamerican Development Bank (IDB) "equity investment division" (Venezuelan Trust Fund) and the World Bank Group's International Finance Corporation [1] (IFC). As far as we have been able to learn, the IFC has not made any loans or equity investments in Haiti. The IDB is presently contemplating several equity investments, over the next 2-3 years. Each of these investments will have an order of magnitude of under US $500,000.

Possibly the largest potential source of project financing (limited to energy related projects) would be the Mexican-Venezuelan "oil facility" plan. We have not however been able to identify any project or institution which might be funded through this facility. More importantly our interviewees in the private sector were completely unaware of this arrangement.

A rough estimate of the aggregate amount of credit made available to the private sector[2] during 1980 for all purposes by the "development financing" agencies and the commerical banking system would be:

		US $(000)
IDAI (loans and investments)		2.5 net portfolio increase
HDF		0.2 net portfolio increase
"Banking System"		9.4 net portfolio increase
	Total	12.1

1. In later pages of this section we discuss the role that the IFC's "project identification fund for the Caribbean" could play in Haiti.
2. Not including small farmers financed by the BCA.

This is a very small amount in a billion dollar economy. The "quantitative" problem of only modest increases in private sector capital availability is compounded by the qualitative problems of a "ponderous" development finance institutional system, the result can be a stagnating private sector.

In support of the allegations made by the private sector interviewees (large and small) that IDAI and HDF were unresponsive or very slow, possibly the best indirect evidence is extraordinarily high operating cost of these institutions (one dollar or more operating cost to one loan dollar).

On the other hand while the commercial banking system may show much greater agility and reponsiveness to private sector financing requirements (short-term), the low expansion rate may be indicative of a situation where the banks are essentially "locked" into the same clientele year after year. Furthermore, it is likely that few new additions to their individual loan portfolios have been placed outside of Port-au-Prince. In fact, was stated by some of our informants that individual lines of credit have remained virtually unchanged over the last few years. For instance, if a businessman is authorized a line of credit for US $250,000 because that is the limit of what may be secured to the bank's satisfaction, that line of credit has not changed over the last five years regardless of inflation and increased capital requirements.

Compounding the problem of bank financing are the costs and restrictions on foreclosure of real property offered as guaranty on loan collateral. The banks' understandable reluctance to secure a significant portion of their loan portfolios with real property (not easily realizable in Haiti) adds further to the limited reach of present bank lending in Haiti. This situation affects particularly foreign banks.

To contrast this Haitian situation with other countries of the Caribbean, Jamaica's largest foreign bank has 50 branches all over the island and deposits in excess of US $400 million, almost double the whole commercial banking system in Haiti for both branches and deposits.

b. Options for Development:

(1) The first priority in our proposed action plan to correct financing restrictions would be to revive the private development finance company (DFC) project. The need for substantially more financial resources for expansion, diversification and establishment of new industries (as well as services such as equipment leasing, etc.) is widespread and wellknown. Thus, the promotion of the concept should not require additional studies to ascertain or measure demand and, therefore, the financial viability of a DFC. If equity participation could be promoted among a sufficiently large number of private enterprises and even financial institutions, reflective of the widespread need among businesses for additional financial resources, the initial success of the DFC, at least in regards to a market for its funds, would be assured.

Widespread ownership of equity will also allay fears by "small business" of control by the larger ones. A strong presence by AID and other lending agencies will also be reassuring to private investors and clients of equitable treatment and minimal governmental interference. Surprisingly, some interviewees have also indicated that strong non-Haitian co-management during the initial years will be an important reassuring factor to investors and clients as well.

A strong trusted management will also be necessary to guarantee agility and cost effectiveness avoiding unnecessarily cumbersome procedures and reporting practices. In discussions with high HDF officials, the external donor agencies reporting requirements were cited as an important cause of slow procedures and high administrative costs.

(2) In addition to the creation of the DFC, we feel that an enlargement of the re-discount and guarantee program of the FDI should be contemplated. The present program could be broadened through a special window to include small industries (and productive services) which could be financed by the HDF. At the same time more ambitious goals should be estalished with special care not to over extend the organization itself.

If the FDI for whatever reason is reluctant to expand its scope or volume, AID through the possible use of the Title III funds could create a rediscount fund especially earmarked for foreign banks. This would permit them to expand their loan portfolios without need to compete for scarce deposits. Haitian banks might then have the incentive to expand (both vertically and geographically) to better capture domestic deposits.

The AID component of the programs proposed above may be estimated as follows:

Program	US $Grant/Funding	US $Loan
DFC	500,000 2 years	10,000,000 4 years
FDI	200,000 2 years	4,000,000 2 years
Financing System Analysis	150,000 1 year	0

3.7.2. Issue: The Information Gap

a. Background:

The economic information available to the domestic private sector is characteristically thin in early stages of development.

This problem is probably more acute in Haiti because of the country's relative isolation from world affairs. Private sector organizations such as chambers of commerce and associations of industries which are usually the prime movers of market information exchanges and business contacts in other countries have until very recently been virtually nonexistent in Haiti, especially outside of the capital.

The National Investment Promotion Office's (ONAPI) scope of activities is directed precisely at overcoming the identified constraint. However, because ONAPI is limited by resources, experience and the extent of its current dialogue with the private sector, it would not be advisable to recommend that it over extend itself with national coverage.

There are other organizations that could have a favorable impact on removing this constraint, which could and should collaborate with ONAPI. These are, for example, the various private sector organizations such as HAMCHAM (Haitian-American Chamber of Commerce), ADIH (Industrial Association) and the AIHE (Businessmen Association). These organizatons should be

encouraged to extend their activities to other relatively important economic centers such as Gonaives, Les Cayes, Cap Haitien, etc. At the same time assistance could be provided to facilitate their linkage with similar organizations outside of Haiti, particularly in Florida, where there is a favorable momentum towards Haiti at present.

Another possible source of technical assistance, market research capability (limited to the Haitian market), and contacts with potential interested foreign investors are the reputable local consulting firms as well as some law offices. In this case, too, ONAPI should be encouraged to develop good working relationships with these private professional groups.

b. Options for Development

The most important consideration in the design of an action plan to counter the identified constraints is that it be consistent with the plan previously recommended to expand development financing facilities. There should be a shared rationale, and every opportunity for synergisms should be taken advantage of.

-- In this spirit we recommend that additional assistance to ONAPI be conditioned on increased participation of the private sector, preferably of an institutional character (ADIH, AIHE, etc.), in the policy formulating body (e.g., Board of Directors) of ONAPI.

-- In addition AID could facilitate resources that would allow ONAPI to create strong linkages with Florida and other areas where investments and markets may be promoted.

-- ONAPI should be encouraged to develop formal ties with the DFC and vice versa.

-- ONAPI should be discouraged from investing excessive resources in preparing pre-feasibility studies on its own initiative (although it may be more acceptable if requested by a potential investor). In this regard AID should explore and pursue the inclusion of Haiti in both PIDAP (AID Latin American Regional Project Identification Development Assistance Program) and

the IFC's Caribbean Investment Promotion Program. These two AID/IFC programs are richly endowed. Although they have been primarily designed for the Eastern Caribbean, both include Belize and the IFC also includes the Dominican Republic.

-- AID, possibly with IDB cooperation (World Bank and other donors not excluded), could promote the creation of a revolving "pre-investment study" fund exclusively for the private sector. ONAPI as well as other private local consulting firms could be hired by investors to make studies of projects which these investors would pursue if the conclusions were favorable. The cost of the study could be partially or fully funded on a positive contingent basis by the pre-investment fund through a loan program that eventually could be tied to the DFC. If the study required foreign expertise, this could also be contracted by the fund.

-- Although the mandate of ONAPI is to promote industrial development, there are constraints on its ability to do so effectively. Consequently, since the professional packaging and effective promotion of Haiti's investment potential is so critical to the creation of new jobs, a private sector promotion board could be created and supported with AID funds. This board would be small (three to four qualified Haitians and American professionals), have representation in both Haiti and the U.S., and could eventually be folded into the DFC for supervisory control.

-- The State of Florida is presently considering the possibility of placing a full-time representative in USAID/Haiti to facilitate programs (private and public) between the State and Haiti. This initiative should be strongly supported by AID.

-- AID might finance the preparation and printing of various promotional materials in Haiti (e.g., "Doing Business in Haiti," "Investment Opportunities in Haiti"). Their preparation could be supervised by ONAPI and the proposed private promotion board and used by both these and other groups.

-- In order to facilitate for both Haitians and Americans access to needed information and the flow of ideas to potential investors, a Haitian-American Agribusiness Council could be formed. Members would include Haitians,

Americans currently involved in Haitian agribusiness, and U.S. residents drawn from businesses which produce, handle, or process agricultural products which can be grown in Haiti. Members would be unpaid (the Florida representative in Haiti might act as the Executive Director). AID could fund the travel and meeting expenses of the council.

— When technical and U.S. market viability assessments (i.e., 3-4 day evaluations of a project idea) are undertaken by one group (e.g., U.S.) or another, it is recommended that they consider drawing on the foreign private business expertise in the related product area for these asessments. This would be in lieu of using of consulting firms, universities, or donor specialists. The involvement of foreign business expertise may be less expensive (perhaps expenses only) but more importantly may have significant promotional value.

The AID component of the programs proposed above may be estimated as follows:

Program	US $Grant/Funding	US $Loan
ONAPI	500,000 5 years	-
Pre-investment fund	1,000,000 5 years	2,000,000 5 years
Private Promotion Board	250,000 5 years	-
Promotion Materials	100,000 1 year	-
Agribusiness Council	500,000 5 years	-

3.7.3. Issue: Risk/Cost Amelioration

a. Background

Investment in Haiti is either perceived to be or often actually is of higher risk or cost than many other areas open to investors. Thus, while the effective promotion of Haiti's assets and the provison of credit may contribute significantly to the reduction of misperceptions about the business climate here, it can do little to alleviate the actual risk problems which exist and which impede more rapid development of the private sector and, therefore, the country. While a certain degree of risk is inherent in all private sector enc avors, there are those risks which may be considered "extraordinary." This is often the case with agro-industries in developing countries. Unless these risks can be reduced, agro-industrial development

will at best grow in Haiti at the modest rate of the past. (It should be noted that while agro-industries have a lower financial rate of return than other industries (e.g., housing, tourism), they may have a far greater economic rate of return to the economy as a whole.) The objective of public programs should be to increase the financial rate of return so that investment, particularly in agro-industries, is sufficiently attractive to other alternatives open to investors. This is partially done through concessions such as those currently found in Haiti and most of the Caribbean basin. However, other "reasonable" options are also open to reduce risk or investment costs and improve profits.

b. Options for Development

(1) For new agro-industries based on local raw material supply, one of the major front-end risks is crop failure due to a lack of available prior knowledge of growing conditions in the region. Until farmers "learn" the new crop in a new area, crop failures or minimal yields are common. Thus, an imaginative crop insurance program could be developed with two separate insurable risks: disaster insurance (for hurricanes and drought) and "learning" insurance during the first three years of a project. Due to the potentially high premium cost of the latter, if subsidies were not to be available, the premium cost for the three year (or more) coverage might be spread over 10 to 15 years. Such a program, once designed, might be administered through insurance companies operating in Haiti with U.S. government assistance during early heavy loss periods. Such assistance might be provided within the framework of the U.S. crop insurance system or the AID Latin America and Caribbean Bureau crop insurance program. Coverage should include all crops.

(2) Most agro-industrial projects (and even non-agroindustries) in countries like Haiti are forced to carry an infrastructure load (both physical and institutional) greater than their counterparts in the developed world. This is one of the reasons for low financial returns. Such infrastructive requirements include initial crop research in an area, extension, farm credit, electrical power, water, storage, and farm input supply. It is recommended that a program be developed whereby public grant funds could be made available to the private sector for these activities during the early, developmental

years of a project. In other words, pay the private sector to do many of these things where the impact is apt to be more project immediate than it would be through the payment of universities, consultants, or the government to do the same thing. In fact, the public sector may even wish to fund capacity in these areas beyond that actually required by the project. For example, a fresh and frozen fruit/vegetable packing and exporting operation in the Les Cayes area might increase its refrigerated and power capacity beyond what is needed for rent or sale to the local public. Project extension personnel could be funded to work outside their specific crop and farmer group. The purchase/warehousing/distribution system for project farm inputs could be expanded to become an actual farm input supply company for all farmers in the area. Government farm credit could be extended through this company. In no case, however, should government undertake extensive infrastructure investment on behalf of a private firm as a special "inducement". Both firm and government could end up with a "white elephant". See Section H below for further discussion.

Depending on the nature of the project and the type of infrastructure or service assistance desired, grants or loans will be appropriate. The program would be administered by AID perhaps in conjunction with the DFC, once established. (DFC involvement would be especially appropriate for the loan component of this recommendation.)

(3) A special category of country might be established where special concessions are made for U.S. investors. OPIC risk insurance premiums might be waived. This would not only reduce the cost of doing business but also may be an effective, positive "attention-getter." Since OPIC apparently has a good record in not "losing" its clients' assets (both in Haiti and elsewhere), the actual cost is likely to be no more than administrative costs. There might also be U.S. tax exemptions for profits earned in Haiti or on Haitian operations. This might be restricted to investments in certain sectors or regions.

(4) Poor management is often one of the principal causes of project failure. In Haiti (as noted above) this ncludes:

— Difficulty of Haitian entrepreneurs in moving from smaller, internally (i.e., personally) financed and controlled businesses to larger, more depersonalized operations requiring greater structure and interaction with the larger business community.

— Lack of middle managers to assume responsibility when the above implied transition takes place.

— Diversification of investors into totally new business areas in which they have no experience or knowledge.

The first and third of these problems may be alleviated by two-to-five day seminars in Haiti for Haitian businessmen (not students) on a variety of appropriate topics. These might include: project financing, financial control systems appropriate to multi or single product or small-to-mid sized business, personnel development, management consderations for agro-industrial projects (or any other industry category appropriate to Haiti), and market analysis techniques. AID might fund 3-4 of these seminars annually.

The second problem -- developing middle management -- is a much broader issue which cannot be addressed in depth here. It is likely to involve curriculum changes in Haiti, specialized study abroad, development of human resource programs in large companies, etc.

The AID funded costs of these recommendations are:

	US$ Grant/Funding	US$ Loan/Guarantees
Insurance Program	100,000 (1 year)	2,000,000 (5 years)
Complementary Infrastructure Assistance	5,000,000 (5 years)	2,000,000 (5 years)
Management Seminars	250,000 (5 years)	-

3.7.4. Issue: Government Policy

a. Background

Throughout this report and others similar to it, GOH policies and consistency in application of policies have been raised as constraints to

expanded private investment and national development. The range of these policy-related problems has been fairly well documented. What is absent are sound, implementable solutions acceptable to both the GOH and financial and development principles. The recommendations suggested below address only the larger policy issues, rather than attempting to provide specific implementable ones.

b. Options for Development

A well-thought through national policy toward the private sector should be researched, designed, and implemented if the maximum development (and government revenue) benefit is to be obtained from this vital resource by the GOH. Government objectives and constraints must be established within which such a policy can be designed. Then all government policy affecting the private sector should be reviewed in this context. Specific policy areas for review and action are:

-- Business incentives (e.g., tax holidays, power rates, industrial park changes and services).

-- Import and export tariffs, both of agricultural commodities, manufactured products, capital goods, and consumer goods (e.g., coffee, luxury items).

-- Protection for domestic businesses, including quality requirements

-- Price setting policies (e.g., sugar)

Some tightening and some loosening in all three areas is no doubt in order, but only within the framework of a consistent overall GOH private sector strategy.

AID should raise these concerns in policy dialogue with the GOH and consider provision of technical assistance support to assist the GOH conduct policy analysis and review in this area (up to $250,000 over the next five years).

3.7.5. Issue: Export Promotion Possibilities

a. Background

The discussion of this subject draws on experience in other small developing countries and our "observation" of Haiti's potential in this field. We hope that the ideas will raise enough curiosity on the part of AID and others to induce further exploration.

b. Options for Development

The small industry sector in Haiti has a very large productive potential for utilitarian and non-utilitarian artisan goods. This productive potential seems to be basically constrained by a limited market. We feel that an important export market beyond the tourist trade could be opened. Such a market could possibly be developed around the better known and highly valued primitive paintings of established artists but including other Haitian products. These other products could range from other handicrafts -- wood carvings, woven basketry, etc. -- to industrial products as a demonstration of Haitian labor skills to attract investment to the re-export industries field.

A possible model for this operation could be the Ecuadorean Artisan Marketing Organization (OCEPA), which was set up with AID and Government of Ecuador funding but which became self-supporting and profitable within a relatively short period.

As an alternative or complementary recommendation, AID could support with equity funding the creation of an private export "trading" company. Centered around one or two well established marketable Haitian commodities, it would attempt to develop export markets for other non-traditional Haitian products. As a start, such exports as, for example, mango preserves or other Haitian "dishes" presently processed by small or medium industries, could be directed at the large expatriate communities in Boston, New York and Miami where there are also large blocks of Hispanics with similar tastes. After the trading company becomes profitable in two or three years, AID could sell its equity to private investors.

The AID component of the programs proposed above are estimated as follows:

Program	US$ Grant	US$ Loan (Working Cap.)
Artisan marketing	1 million 5 yrs	1 million 5 yrs.
Trading company	1 million 5 yrs	1 million 5 yrs.

3.8. Regional Implications

Haiti is a small country, with a strong centripetal dynamic: Port-au-Prince is growing at 7 or more percent a year. Within a decade, it will have close to two million inhabitants. This dynamic is not likely to be changed in the short run. Despite "overcrowding" and miserable living conditions for the poor people of Port-au-Prince, the city offers the best overall conditions for industrial investments.[1] Here are the banks and financial institutions; here is the center of national and international communications; here is the country's principal port and airport; here are the key governmental offices with which every businessman will have to deal. As concerns management personnel, the amenities of Port-au-Prince (schools, university, hospitals, restaurants, cinemas) are far superior to those anywhere else in the country. Port-au-Prince has skilled manpower. It has business services. And above all, the national market is concentrated in Port-au-Prince. Soon, one-third of the country's population will be living here. Few national businesses (unless closely tied to agriculture) will be able to survive in the rural periphery and the secondary cities of the country.[2]

And so it is wishful thinking to shift a significant part of Haiti's industrial "park" into the periphery. It is doubtful, though perhaps not impossible, to imagine some re-export firms locating in Gonaives or even Cap Haitien. Such cases must be negotiated, firm by firm. But overall, it is only reasonable that the great bulk of Haiti's manufacturing industries should be located in the region of Port-au-Prince.

1. By the designation of Port-au-Prince, we have in mind a region centered on the nation's capital and defined by a radius of some 20 or 30 km along the coast.
2. This does not include small-scale enterprises that serve only a local market. SSEs are discussed in the next section.

This conclusion does not consider "what is best for Haiti" from an abstract point of view. "What is best for Haiti" might very well suggest a so-called growth pole approach according to which infrastructure investments would be chanelled into one or more of the country's secondary cities in the hope that (1) such investments will stimulate accelerated industrial growth in these cities and (2) that such growth would somehow "spread" to the surrounding countryside and smaller towns in the circumference of the "pole".

Experience with the growth pole approach has been very mixed. It is indeed possible, as for instance in Venezuela's Ciudad Guyana, to mount an industrial complex together with related urban infrastructure investments. That is a genuine "pole" and a growth pole policy makes sense where similar conditions are fulfilled. What made Guyana work is the unique constellation of resources that came together at one point: hydropower, natural gas, iron ore, petroleum, and agricultural resources. With this combination it was possible to create an industrial city of some 300,000 over a period of 25 years. Nothing comparable exists in Haiti. There are no unique resources in Haiti, nor regional resource "complexes." The principal resources are the country's people and the land.

Secondary cities in Haiti will grow as a consequence of rural (i.e., agricultural) development. As peasant income grows, the demand for goods and services that only cities can provide will also expand. This expanded market will encourage industrial investments in the periphery to serve both local and regional markets. Regional development in Haiti must be centered in agriculture, and not in urban "growth poles."

This does not argue against providing, for example, credit to small-scale and medium enterprise in Haiti's regional cities. But it does warn against over-investment in peripheral cities by the government in the hope of attracting private investors, either domestic or foreign. It would be pointless and, indeed, wasteful to invest, for example, in an industrial park in Cap Haitien or Les Cayes only to have that site remain vacant for years, turning into a modern ruin, in the hope that the investment in infrastructure will magically attract private investors. This mistake has been made time and again in other parts of the world. Haiti cannot afford to repeat it.

The case of specific agro-industries is another one. Because of a close symbiosis with agriculture, some of them may very well move out into the regions. But this is a matter to be decided on a case by case basis. In no event is it advisable for the government to undertake extensive infrastructure investments as a special service to a private firm, as an "inducement". If a firm is prepared to make an investment, it will invest and carry the burden of, for example, constructing a building or an access road. Government concessions can be given in other ways, as discussed in section G preceeding.

3.9 Small-scale Private Sector Development

3.9.1 Purpose of Support

The principal development purpose of most private enterprise support schemes is to promote structural change in an economy by (1) promoting activities that offer significant prospects of real increases in incomes, and (2) by drawing people of out of activiites which do not, cannot and will not provide such increases. The structural change takes the form of having people shift from low to higher productivity situations within sectors, and from lower productivity sectors to those of higher productivity. If the process operates at all levels and in all parts of an economy, it represents the fundamental mechanisms for promoting individuals and families out of poverty in both urban and rural areas. The rationale for any publicly organized direct or indirect support schemes focussed on small enterprise is usually based on observations that the process of structural change is limited, and/or inadequately distributed across the full range of productive private enterprises.

In Haiti, as in many other developing countries, the process has been limited, and has primarily been the result of activities only among the largest and most powerful of private enterprise groups. This bias, by itself, does not constitute an issue of concern. Over time the process spreads across an entire economy as knowledge of new market opportunities and techniques of production become widespread. What does constitute a major problem in Haiti is that the process is slow. Expansion of productive non-agricultural employment is not keeping pace with the declining rate of expansion of agriculturally-derived income and employment. As indicated in the discussion

of the spatial socio-economic system (Section IV), rural-urban migration is likely to expand rapidly over the next decade, at least in terms of absolute numbers of people. If non-agricultural productive employment does not keep pace with the increase in the supply of labor, there is a major risk of witnessing a decline in the real incomes of people in both urban and rural areas, and a corresponding increase in the pressures to emigrate to neighboring countries.

In this context one of the strategy team's principal tasks has been an examination of possibilities for accelerating the growth of income and employment in productive non-agricultural enterprise in Haiti. The following sub-section concerns itself witht the opportunities and constraints regarding smaller-scale productive non-agricultural enterprise.

3.9.2 Characteristics of Small-scale Enterprise

Haiti has a lengthy and strong tradition of productive non-agricultural enterprise in both urban and rural areas. In 1970, for example, it was estimated that some 117,000 people, or abut 7% of the labor force at that time, were engaged in various sorts of manufacturing activities, and in all areas of the country.[1] Other studies have indicated that manufacturing represents a very substantial secondary activity for large numbers of people whose principal occupation is that of farming. These secondary activities address a variety of rural demands for goods, and include such things as leatherworks and tanneries, lime kilns, charcoal burners, metal toolworks, comb makers, grass and bamboo weaving works (e.g., for bags, fish traps, and baskets), woodworks (that make bowls, mortars, pestles, tool handles, spoons, etc.), sheet metal works (that transform tin cans into dippers, ports and candelabras), clothing manufacturers, dugout makers, shipbuilders, sail and

1. Enquete Socio-Economique (Avril, 1970), Premiers Resultats, IHS, Mai 1975.) This, however, referred only to those individuals who were exclusively engaged in such occupations.

semi makers, pottery and ceramic makers, shoemakers and distilleries.[1] To give a sense of scale to this phenomenon, it may be noted that in a 1951 study of a small rural area near Jacmel it was noted that of about 500 adults primarily engaged in agricultural production, 180 or 36% also had secondary occupations -- most of which were of a productive type.[2] These official statistics have had a tendency to grossly underestimate the entrepreneurial potential that exists in rural areas. The same type of underestimate also affects statistics in urban areas. While official data for Port-au-Prince have had a tendency to reflect high rates of unemployment and low rates of self-or small-scale manufacturing employment, at least one study in recent years has suggested that in low-income areas of the capital, small-scale manufacturing can occupy as much as 35% of a neighborhood's labor force.[3]

While the full scope and variety of small-scale manufacturing activity has yet to be documented, considerable progress has been made in the last few years in bringing about an understanding of the actual and potential importance of such activities.

A sample survey undertaken in 1979, for example, covered about 8500 small-scale enterprises, employing some 34,000 people, more than half of which were in tailoring and carpentry.[4] The actual number of small enterprises and employees are believed to be far greater.

This study also noted that the proportion of SSE employment in total employment increased with declining size of town and village population. Unfortunately, the analysis did not include an examination of the scope of small-scale secondary activities.

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1. Mintz, S.W. Caribbean Transformation, Chicago: Aldine Publishing Company, 1974.
2. Metraux, A. L'Homme et la Terre dans la Vallee de Marbial, UNESCO, 31 juillet, 1951.
3. Fass, S. The Economics of Survival, Office of Urban Development, USAID, October 1980.
4. Haggblade, S. et., al. Small Manufacturing and Repair Enterprises in Haiti, MSU, 1979.

Another recent set of surveys undertaken by the UN for Port-au-Prince suggested considerable dynamism in smaller-scale manufacturing in the city (see Tables III-4 and III-5 below).[1] In the period 1979 to 1981 for example, the study indicated that smaller-scale manufacturing enterprises and employment increased much faster than larger-scale counterpart firms. As shown in Table 1, the number of firms with 5-50 employees increased by 25.3%, and employment in those firms by about 23%. The corresponding growth rate for medium sized firms (51-300 employees) was 16.5% and 18.4% respectively, whereas that for very large firms (more than 300 workers) was only 3.0% and 4.8%. The study had to abandon its inventory of firms with 4 workers or less because of difficulties in counting them and drawing basic information from them. One might note, however, that the 35% of manufacturing employment discovered in the low-income area study noted earlier was entirely composed of work in firms less than 4 employees. These very small enterprises may in fact contain many more workers than those with 5 workers or more.

In any case, as indicated in Table III-5, below, the UN study also noted that among small enterprises (5-50 workers), the most important expansions occurred in the sector of food processing, textiles/garments and wood products. Textile/garments also were the main source of growth of medium-sized industries. Thus the growth of small and medium manufacturing in the capital has been derived largely from export demand (i.e., textiles/garments) and local consumer demand (i.e., food processing).

If one were to judge from the data provided by the UN and MSU surveys, one might deduce that very little was happening with regard to expansion of the productive secondary activities mentioned at the outset of this section. There is, in fact, little or no statistical information of a comprehensive nature about these activites. Be we know that they exist, and from this knowledge we can posit that there does exist considerable entrepreneurial potential "out there," in both rural and urban areas.

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1. Resultats de L'Enquete Sur L'Emploi Industriel Realisee a Port-au-Prince, PNUD/BIT, Port-au-Prince, Mai 1981.

3.9.3 Constraints Upon SSE Development

There are two principal kinds of constraints which impinge upon the possibilities for promoting expansion of SSEs. The first is the set of constraints faced by the SSEs themselves. As indicated in the MSU study of 1979, with varying severity these include such issues as demand, availabiliy of working capital, availability of fixed capital, credit, raw material and equipment availabillity, management skills and the supply of qualified labor. In addition to these, and something which is very important in places which are relatively isolated from the outside world, is availability of technical knowledge about processes and markets for different sorts of goods. These issues however, impinge upon all enterprises, small and large, where ever they may be. The private sector, in all its complexity, usually deals with them autonomously, and over an extended period of time.

The second kind of constraint, much more important for present purposes, is the availability of socio-economic institutions which could by direct or indirect action reduce the severity of the constraints noted above.

Leaving aside the question of general government fiscal, economic and trade policy, which is dealt with more extensively elsewhere in the mission's report, the fundamental constraint in Haiti at the moment is the absence of effective institutions which are oriented to small-scale enterprises, particularly outside Port-au-Prince. Commercial banks have not had much interest in SSE finance, for example. Rural extension services have never looked into the matter of assisting a farmer's secondary activities. Educational services, except for the occasional vocational school (which trains only a tiny fraction of the labor force and then for purposes of employment in factories or for export), have never been oriented to the formation of self-employable skills. As is the case for the majority of people in Haiti, small enterprises have been left to their own devices for some 200 years. Unless something can be done about support, there is not much scope for trying to accelerate the process of SSE development.

3.9.4 Opportunities for SSE Promotion

While the existence of helping institutions is at least "thin," there are nevertheless a few which offer promise. Moreoever, there have been significant additions to the insitutional framework in very recent years, and these have now opened doors to actions which heretofore would have been impossible. For the present it is useful to discuss three of these institutional frameworks: the Haitian Development Foundation (HDF), other private voluntary organizations (PVOs) and the Industrial Development Fund (IDF).

(a) The Haitian Development Foundation (HDF)

Established in 1979 with a $495,000 AID grant to the Pan-American Development Foundation, the HDF is a vehicle for mobilizing local resources by private citizens and channeling the resources (in the form of management assistance and credit) to very small businesses. Although the first or only such undertaking in the country, it does represent a rather creative attempt, based on experiences in Africa by "Partnership for Productivity" (an AID contractor), to promote the entrpreneurial initiatives of lower-income and smaller-scale businesses. HDF has made a promising start, and demonstrates considerable potential for expansion and effectiveness.

Unfortunately, the premises upon which HDF were originally based do not lend themselves to maximum effectivness. The general orientation has been to "help the little guy". While the charitable intent is laudable, it compromises HDF's ability to help a lot of "little guys", and to continually expand the number of individuals benefitting from its services. Current problems are several. One is that selection of enterprise types which are to be supported is not altogether rational. The current inclusion of many low-productivity types of enterprises, such as trade and services, defeats the basic purpose of moving as many people out of such enterprises as possible, and into more productive activities, particularly those which offer a financial return which covers loan reimbursement and at the same time generates increased net income to the borrower.

A second, and related, issue is the interest rate charged for loans. At present it is based on institutional commercial rates, and as such does not at all reflect the market cost of money, administrative costs for small loans, technical assistance costs and coverage for risks of bad debts. Profits from the loan fund at present do not cover even a fraction of HDF's overhead costs. This must be changed, and should be changed to reflect the prices of credit which beneificiaries would be faced with in the "informal" capital market -- assuming that in such a market they could obtain any sort of loan. A recent study indicated that market interest rates ranged betweeen 25% per month on secured loans and 60% on unsecured loans.[1] HDF need not charge equivalent rates, but should recognize that any rates below those indicated would be regarded as helpful by many potential entrepreneurs. If projects are productive, they should indeed be able to generate a return which more than amply offsets a higher interest structure.

A third issue, and this relates directly to the cost of administration, is the time-cost of processing a loan. At present this takes an average of 50 days. Much of the delay is caused by the requirement of having animators train borrowers on the principles of business management before the loan is granted. Unfortunately this, like the question of interest rate, contradicts the realities of the situations in which entrpreneurs find themselves. In most cases, if small businesses have been in existence and have grown successfully prior to receiving a loan, they are likely to do well afterwards. The operator has already demonstrated a capacity for entrepreneurship and, unless a major shift of activity is contemplated, already has a good sense of management. It is most unlikely that animators have a better sense of how to do business than a business person (literate or not). More efficient and appropriate techniques for assessing credit-worthiness are called for, and may include such things as past business history, reputation in community of residence or business, clear presentation of what the requested loan is supposed to generate, etc. Loan processing should rarely take more than a week, and two as a maximum. There are, of course, risks involved but these should be absorbed in the overall interest rate, and not in extended evaluation and training.

1. Fass, S. The Economics of Survival, Office of Urban Development, USAID, October, 1980.

A fourth issue, again having impact on the administrative cost of HDF's operations, is the small average size of loan -- $2,000. At present the maximum acceptable loan size for individuals is $7500 and so HDF's portfolio is stuck with an inflexibility which results in high administration costs for each loan. There is no scope for cross-subsidization between the lower unit costs of large loans, and the higher unit costs of the small ones. A maximum loan should be $50,000 at least.

HDF's loan fund will rise from $300,000 today to about $800,000 next year as the result of a $500,000 addition by USAID. Under present organizational circumstances it would be unwise to add any further amounts to the fund after next year unless some major changes are made. It would be most opportune if such changes could be made because, as stated at the outset, HDF is a new institutional actor and, if it grows, may become one of the most important vehicles for promoting small-scale productive enterprise in urban and rural areas of the country.

b. Private Voluntary Organizations (PVOs)

PVOs have historically not been particularly active in promoting productive small enterprise outside of food production. For example, of the 66 organizations listed in the TAICH Country Report of April 1981, only 11 were apparently engaged in "industrial development". The more important of these were CARE/HACHO, Catholic Relief Services, Heifer Project International, Inc., Oblates of Mary Immaculate and the Salesians of St. John Bosco. In almost all cases the effort has been focussed on the production of craft items. In some cases the results have been impressive. A sisal rug export operation begun by the Salesians with help from the Netherlands Government in 1976 has continued to provide direct employment to some 450 workers in urban and rural areas, with an initial invesment of $12,000.[1]

1. Fass, S. The Economics of Survival, (Appendix C), Office of Urban Development, USAID, October 1980.) The more recent "CANO" operation is another example of what is possible.

Table III-4: Evolution of Employment and Number of Enterprises According to Size and Units of Production: 1979/80 - 1980/81

Type	Employing between	1979/1980 Number of Enterprises	1979/1980 Employees	1980/1981 Number of Enterprises	1980/1981 Employees	Change in Growth Enterprises	Change in Growth Employees
Small	5-50 people	186	3,765	249	4,616	25	22
Medium	51-300 people	127	17,729	152	20,998	16	18
Large	301 and more	32	17,893	35	18,749	3	4
M.U.P.[1]	0-4 people	17	52	-	-	-	-
I.U.[2]	-	8	-	15	-	46	-
TOTAL		370	39,439	449	44,363	21	12

1. M.U.P. = Micro units of production
2. I.U. = Information partially or totally unavailable from these firms.

Source: PNUD/BIT

Table III-5 Enterprises According to Size, Large Branches and Categories of Economic Activity: 1979/80 - 1980/81

Branches of Economic Activity	ENTERPRISES Micro 1979/80	Small 79/80	Small 80/81	Medium 79/80	Medium 80/81	Large 79/80	Large 80/81	Information Incomplete 79/80	Information Incomplete 80/81	Total 79/80	Total 80/81
1. Agriculture, Wildlife, Forestry, Fisheries	1	2	3	-	-	-	-	-	-	3	3
2. Natural Resource Industries	-	-	-	-	-	1	1	-	-	1	1
3. Manufacturing Industries											
31. Food Industry	2	49	76	14	16	2	2	3	5	70	99
32. Textile Indus.	4	27	43	59	66	11	11	3	6	104	126
33. Wood Industry and Woodworking	4	23	33	5	7	-	-	-	-	32	40
34. Paper Production and Paper Products	2	12	14	3	5	1	1	1	-	19	20
35. Chemical Industry and Chemical Products	1	14	18	2	5	-	-	-	-	17	23
36. Production of Mineral Products (nonmetalic)	-	23	25	7	10	-	-	-	2	30	37
37. Raw metal Industry	-	2	2	1	1	-	-	-	-	3	3
38. Metalworks	2	27	26	38	21	7	8	-	-	54	55
39. Other manufacturing industries	1	7	9	16	19	8	8	-	1	32	37
4. Electricy, Gas and Water											
41. Electricy	-	-	-	1	1	1	1	1	1	3	3
42. Installation and distribution of water	-	-	-	1	1	1	1	-	-	2	2
Total	17	186	249	127	152	32	33	8	15	3790	449

Source: PNUD/BIT

Unfortunately, the focus on crafts does not do justice to all the other forms of small-enterprise which are possible to promote -- of the kinds described at the outset and of the simple kinds that have yet to be seen in Haiti. One example of a more productive focus is the existence, for 12 years, of a metalwork/foundry training center at Camp Perrin (in the Southwest) which upgrades smiths to the point where they can make tools, casts, etc. on their own.

Although PVOs have an organized charitable intent which makes them somewhat incompatible with the purposes of promoting private small enterprise activities (e.g., the problem of so-called "usurious" interest rates or "excessive" individual profits), their presence in urban and rural areas and the interest of at least some of them in "industrial development" does suggest that it might be possible to include them in some aspects of an SSE promotion scheme of wider scope. One key support scheme that comes to mind, and which applies to HDF as well, is to provide the PVOs with "technological" assistance. The purpose of such assistance, if it could be arranged, would be to introduce the interested PVOs, and through them the interested inhabitants of areas served, to ideas, equipment and products of which they have never known of before, but which can be adopted to local conditions for production from locally available materials, for local consumption or for export. It is to be noted that this is not a question of "appropriate technology", but rather an information transfer type of service which, hopefully, serves to break down the entrepreneurial isolation of Haiti so that innovative ideas begin to arrive in the country (particularly from other developing countries such as India, Philippines, Sri-Lanka and Pakistan) where a massive array of practical possibilities have been developed over the years.

One component of such an assistance scheme might require an individual to serve as intermediary between the world outside and the PVOs. Someone from the International Trade Center (UNCTAD) or the Small Industries Services Institute (India), might, if qualified, be ideal. Another component would be a large budget for document acquisition, international subscriptions to appropriate trade and marketing journals, etc. In the longer run this is an activity which eventually ought to be absorbed by the PVO's themselves, by the National Office of Industrial Promotion, and by bookstores -- but this last is a very long way off.

Given the limited number of interested PVOs at the present time, providing such a service only to them would not represent the most cost-effective use of resources. This sort of diffusion scheme ought to be made available to a much wider clientele. One way to do that may be to attach it also to the newly created Industrial Development Fund.

c. The Industrial Development Fund (FDI)

The overall characteristics and purposes of the FDI are described elsewhere in this mission report. For present purposes it may be noted simply that it is a guarantee fund which is to provide medium term credit at commercial rates to small and medium-scale firms engaged in craft, manufacturing, fishery, tourism, transport and industrial construction. The maximum loan size is $250,000, but margins offered to commercial intermediary banks provide incentives to make loans of less than $50,000. It is a new World Bank-supported operation with a fund of $7 million. If the effort should prove unsuccessful over the next 4 years, consideration may be given to further expansion of the fund.

Because Haitians have not had to deal with such a financial facility before, they are not accustomed to preparing appropriate project finance requests. The FDI has therefore set aside a portion of its projected profits to provide complementary technical assistance to prospective borrowers. Although most of the assistance is expected to take the form of managment support, the portion of profits reserved for the assistance can, if necessary, be used for obtaining consultant services for technical matters.

In discussions with the Director of FDI, it was agreed that technological ignorance was a problem even among medium and larger-scale entrepreneurs. The potential utility of having a technological information service of the kind suggested in the earlier discussion of PVOs was also discussed, and agreed upon in principle. Most importantly, it was mutually agreed that it would prove very difficult to find the proper individual to fill the post. If the right person could not be found, it would be better to simply not provide the service. Bad information can be more destructive than no information.

3.9.5 Implications for USAID Support Activities

From the foregoing there would appear to be a number of direct things which AID could consider for the purposes of further promoting small-scale productive enterprise over the next 5 years. These, together with rough estimates of the costs involved, include:

(a) Technical assistance to HDF to revamp its operating assumptions and procedures as soon as possible, with a view to minimizing overhead costs, maximizing the movement of loans and maixmizing profits to expand the loan fund.
3 man-months of TA (in 1st year) -- $25,000

b. Five-year monitoring of HDF performance according to basic financial criteria; taking place very 6 months for a period of 2 weeks each time (though if things go smoothly this can be dealt with through the annual audit).
20 man-weeks (over 5 years) -- $38,500

c. Conditional upon the success of establishing (a), above, and commitments from HDF regarding promotion of a portion of total loans outside Port-au-Prince (including loans to other PVOs), providing additions to the loan fund on the following general schedule (excluding $500,000 scheduled for next year):

year 2 --	$ 700,000
year 3 --	$1,000,000
year 4 --	$1,000,000
year 5 --	$1,500,000
Total	$4,200,000

d. Establishment of a technological information service to support HDF, other PVOs and FDI operations if, and only if, a suitable candidate can be found to work in Haiti. The effectiveness of this service should be evaluated after no more than 2 years, upon which a decision should be made regarding its extension:

year 1: -	12 man-months of TA --	$100,000[1]
	Documentation Fund --	25,000
	Overhead Expenses (office rental, etc) --	17,500
	Sub-total	$137,500
year 2: -	12 man-months of TA --	$100,000
	Documentation Fund --	50,000
	Overhead Expenses --	12,500
	Subtotal --	$162,500
TOTAL		$300,000

e. Possible extension of (3) above through years 4 and 5: -- $325,000

The total AID support figure for small private enterprise promotion thus amounts to $4.9 million over 5 years if the general approach outlined above is acceded to. This excludes any other actual or proposed operations of the AID Mission's Private Sector Office.

1. Here and in previous estimates a total cost figure of $100,000 per man-year is used as a rough figure. This should be modified if incorrect.

Chapter IV: The Spatial Characteristics of Haiti's Socio-Economic Structure[1]

4.1 Demographic Characteristics

The growth of population in Haiti is very uneven across the country. This is in part due to regional differences in natural growth. It is most due to substantial internal migration. As inidcated in Table 1, between 1950 and 1971 the urban population grew at 4.1% per year, while that of the rural population increased at only 1.1%. In the same period the average population growth rate was 1.6% a year, and is estimated to be about 1.8% a year at present. This low rate results from a low natural growth rate of about 2.2%, and substantial emigration of about 0.4% per year.

Growth has been particularly unbalanced in urban areas. In 1975, Port-au-Prince (653,000 inhabitants) was almost 12 times the size of Cap Haitien (54,000 inhabitants), the second largest town in the country (table 2). The capital practically monopolizes urban activities and retards the development of other centrs. Some 90% of manufacturing activity, for example, is concentrated in the Port-au-Prince area.

Similarly, population growth in rural areas was uneven. While the rural population as a whole experienced net out migration, growing at little more than 1% a year, in some areas this population rose faster than the natural rate of increase. In other areas total resident popultion declined.

This spatial pattern of population growth there reflects intensive international and internal migration. In 1973, for example, emigration was estimated at 0.4% per year, apparently originating mostly from the

1. Early portions of the paper are based on the World Bank's Urban Sector Strategy report of April 1979. Interested readers should refer to it for additional detail and discussion of Haiti's spatial social economy.

Port-au-Prince area (Table 3) [1] International migration follows the strong polarization of Haiti's socio-economic structure, and net in-migration to Port-au-Prince orginates primarily in the four peripheral departments. Migration is particularly strong from the Southern Peninsula (Table 4), with main origins being the Nippes and Aquin areas.. Other major generators of migrants include Grande Rivière du Nord, Limbé, Fort Liberté and Vallières in the North; Port-de-Paix and Gonaives in the Northwest; and Mirebalais and Lascahobas in the Center (Table 1).

This migration is essentially a reaction to the spatial differential in perceived socio-economic opportunities. Any substantive spatially-oriented development strategy must address the factors underlying the motivation to migrate (nationally or internationally), which considerable research in Haiti has shown to be employment and income possibilities, and access to education and other service facilities.

4.2 Differentials in Socio-Economic Conditions

According to recent survey estimates, average income differences between different parts of the country are of the order of 1:7 (Table 5), so that average per person income in rural areas reaches only a bit more than half the national average, while income in the capital is abut 3.5 times the national average of total income.

With an average per person income of a little more than $200 (1976), it is evident that a very large number of people live in conditions of absolute poverty. It is estimated that in 1976 the cost of minimum consumption for food and non-food items amounted to about gdes 1,110 (U.S $220) in Port-au-Prince and gdes 980 (U.S. $195) in rural areas. The confrontation of these consumption estimates with actual purchasing power shows that the

1. Until August 1976 the territory was divided into 5 departmental subdivisions. Afterwards there were nine such divisions. Numbers of departments indicated in the tables coincide with either the old or new administrative subdivisions; depending on the date when data were originally published.

overwhelming majority of Haiti's population, almost 90% (75%)[1] live under conditions of absolute poverty. The incidence of poverty varies however for different parts of the country, and ranges from about 60% (40%) in Port-au-Prince, to over 83% (74%) in provincial towns, and to 94% (78%) in rural areas (Table 6). One of the most important reasons for the existence of such spatial differences in income opportunities and poverty has been government action (and inaction) over the last 10-20 years.

4.3 Spatial Impact of Government Activity

Although public consumption and investment together account for no more that 11%-12% of GDP, the role of government in Haiti's economy nevertheless remains important both in terms of its action, and its inaction in specific fields.

In regard to the fiscal system, for example, there is a decided bias against areas other than Port-au-Prince. As indicated in Table 7, the capital contributes 47% to total tax revenues. However, at least in FY 1975/76, almost 83% of fiscal expenditures were concentrated in the city. Only 17% was disbursed in the rest of the country. These figures, largely composed of public salaries, reflect the extreme centralisation of Haiti's political and administrative apparatus. Even making allowances for recurrent expenditures of municipalities, and other benefits to the rest of the country of salaries paid and expenses incurred in the capital, Port-au-Prince still benefits directly from 50-55% of total public expenditure.

With regard to development expenditures, at least in the period 76-81, the split has still been basically 50% to the capital and 50% to the rest of the country. Thus the fiscal system does not provide for any spatially distributive effects. The tax system is not designed according to personal or regional ability to pay.

1. Percentages in parentheses are based on lower estimates of expenditures for non-food items (see Table 6).

Agriculture contributes 45% to GDP and provides a livelihood to 75% of the population. Nonetheless, up until very recently, the Government has spent only about 10% annually in the sector. This neglect has resulted in a quasi-nonexistent extension service, a stagnant level of agricultural production and rural incomes, and to a considerable extent is responsible for the rural-urban migration rate of 0.7% a year.

The manufacturing sector contributes about 13% of GDP and employs some 6% of the Haitian labor force. It is almost extremely concentrated in Port-au-Prince. In part this is due to the centralisation of the political and administrative structure. It is necessary to be close to the capital in order to work things out with a complex and cumbersome bureaucracy. The concentration also results from the fact that the government has made necessary infrastructure investments (e.g., power, roads, industrial park, telephone service, port, airport, etc.) only in the capital until now. Tax incentives for decentralisation were established in 1977, but they do not yet compensate for the decided locational advantages of the capital.

Foreign trade and exchange has also influenced the spatial pattern of the country. Maintenance of the free convertability of the gourde to the dollar for 50 years has favored commercial transactions rather than the development of domestic production. At the same time the absence of a coherent import substitution policy and of regulations to increase the local content of manufactured products have had negative effects on agriculture. In the case of cotton, for example, access to imports has not provided the local textile industry with an incentive to improve local production.

With regard to credit, it may be noted that commercial banks are mostly concentrated in Port-au-Prince. IDAI, which lends very little compared to the banks, has only a very rudimentary system of branch offices outside the capital. Most of IDAI's portfolio in any case, consists of long-term loans in Port-au-Prince. Terms and interest rates are the same everywhere, and so rural areas obtain only the smallest fraction of total organised lending.

Education has been long neglected. What has been done in the sector has mainly catered to a small urban elite and the vast majority of children and adults, particularly in rural areas, has been excluded (Table 8). Only 2% of

children in rural areas complete primary education. In urban areas the proportion is 27%. Were this bias not bad enough, the curricula of rural schools (which are taught in French instead of Creole) are mostly irrelevant to the circumstances of the country. By and large rural education has been a complete loss and has served to fuel the rural-urban migration process.

Finally, as has been noted above, the administrative structure is very highly centralized. There is no significant administrative or financial autonomy at the departmental or municipal level. The centralized structure has not only drained talent and resources from areas outside the capital, but also has shaped the pattern of public action and inaction described above. In this context it is evident that any serious attempt at decentralization of economic activities, and more equitable promotion of income growth, will necessarily have to rely on local initiatives. By definition this requires some basic devolution of political and administrative power.

4.4 Future Overall Spatial Development Strategies

The spatial imbalances which have been described in the foregoing have developed over a long time. They play a powerful role in the spatial dynamics of the country influencing the behavior of the whole population and the different economic sectors. Concern with spatial balance (or reduction of current imbalance) rests on the assumption that living standards will rise more rapidly and on a more sustained basis if resources are allocated in a more balanced way between urban and rural areas.

On this premise the World Bank outlined four general spatial development strategies, and attempted to estimate the population and employment creation impacts of each. The four strategies were:

I. allow present spatial dynamics to continue (development under status quo conditions);

II attempt to conserve th present spatial structure by eliminating internal migration by 996 (forced rural development);

III attempt to reduce rural-urban migration without influencing its direction (realistic rural development); and

IV attempt to reduce rural-urban migration and to reorient it towards more balanced urban growth (realistic rural development with balanced urban development).

Under any of the alternatives it was evident that rural-urban migration would (and should) continue well into the future. It would because the capacity of agriculture to absorb more labor in Haiti is extremely limited. It should because sustained movement of people from lower to high productivity sectors (usually located in cities and towns) is one of the price mechanisms for moving large segments of a population out of poverty.

Tables 9 and 10 indicate the demographic projections resulting from each of the alternative hypotheses. Comparing alternatives I (status quo) and III (realistic rural development) in Table 9, it can be seen that by 1986 there would be little change in the current pattern of population distribution. Current migratory tendencies would continue. Twenty years down the line, however, in 2001 (which is not that far away), there would be marked changes. If things are left as they are, the population of Port-au-Prince might climb to 2.2 million. Most of this growth will result from migration from rural areas of the southern peninsula. It is expected that the population in those areas will drop from a current 853,000 to 491,000 in 20 years. By contrast, with alternative III, promoting rural development, the population of the capital would be of the order of 1.3 million, and the population of the rural south would drop to a more reasonable 747,000 from its current level. Thus, an effort at rural development, particularly in the south, which narrows the opportunity gap between the capital and rural areas, will come to benefit the populations of both areas.

It is nevertheless clear that in the intervening two decades a major effort must be made to increase the rate of productive employment creation outside agriculture in order to absorbe labor at places where they live or should migrate to. As is indicated in Table 11, the total labor force will increase by some 22,000 a year until 1986, and by about 37,000 a year

A much more effective role, however direct or indirect AID involvement is to be, would appear to be one of promoting essential services which would increase the level of private non-agricultural enterprise activities to take advantage of the completed and about to be completed infrastructural elements in the major towns. There will be a major, perhaps massive shift in population out of agriculture over the next decade, irrespective of what is done in that sector, and unless other income-generating activities are initiated to increase their absorptive capacity, pressures for immigration will mount considerably as will the risks of sustained declines in real income for an increasing proportion of the national population. Proposals in regard to this issue are presented in Chapter III, "Role of Private Enterprise," contained elsewhere in report.

Possible orientation of AID involvement in agriculture-related activities are discussed elswhere in the team's report, as are institutional alternatives with regard to effective implementation of various strategies (see Chapters II and V).

Nevertheless, the examination of the spatial characteristics of the socioeconomic system does yield some rather important implications of a general nature concerning the capacity to implement anything of substance and scale outside Port-au-Prince. The basic issue is that outside the capital there is very little in the way of a public or private institutional framework which would make possible the undertaking of any larger-scale agricultural development program in the near future. Rural areas and provincial towns, at present, have a very limited absorptive capacity.

It follows that any attempt at promoting agriculture or rural non-agricultural activities must necessarily incorporate a basic component oriented to strengthening, rebuilding and expanding the institutional structure outside the capital. In this respect one may note that except for small islands of intensive donor-supported activity (e.g., ODN, ODPG, ODVA, etc.), the entire country is essentially devoid of substantive institutional infrastructure. It does not matter, in this context, where one begins to implement such a component. What matters is that insitutional construction and reconstruction begin somewhere, anywhere, and immediately, in order that

thereafter. Differences in regional labor force increases, due to changes in the spatial orientation of public development efforts, can only be expected in the longer run; taking effect in the period 1986-2001. In the aggregate however, it is likely that most new entrants to the labor force will have to make a living in relatively low-productivity occupations of the small-scale business sector (i.e., the so-called "informal" sector) such as trade, services, etc. in urban and rural areas. A maximum effort at the development of the basic sectors of agriculture, industry and construction is therefore needed to fuel the demand for goods and services produced by small-scale activities, as well as to provide direct employment.

4.5 Implications USAID Support Activities in Haiti

The foregoing discussions of various dimensions of the spatial dimension in Haiti's socioeconomic system were elaborated by the World Bank in 1978-79; and appear very accurate insofar as past and current trends are concerned. The ideas about alternative future spatial development strategies, and the demographic and employment implications these might involve are considerably more abstract. The case is nevertheless made that fundamental spatial reorientation of public investment and recurrent expenditures are essential if any serious effort is to be made in raising the incomes and productivity of the nation's poor in a sustained fashion. The case is also made that a major shift in attention needs to be put on agricultural production and productivity, and on productive non-agricultural activities such as manufacturing and construction at all scales of activity.

With regard to non-agricultural activities of more substantial scale, it is to be noted that a recent listing of projects in execution, projects in preparation and project ideas compiled by the World Bank suggests that most of the infrastructural requirements (e.g., power, transport, water supply, industrial parks, etc.) in major towns are being or are likely to be provided in the near future by other donor agencies.[1] Unless donor intentions change, there is little scope for additional AID involvement in this area at least over the next 5 years.

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1. Memorandum of the Haitian Economy, IBRD, May 18, 1981.

the agriculture development component -- the basic objective -- expand and generate substantive effects.

At the same time, it must be emphasized that the foregoing examination has made it abundantly clear that one cannot afford to make a separation between the center (Port-au-Prince) and rural areas; particularly with regard to public or quasi-public institutions. The spatial socio-economic system results, to a very large extent, from a complex system of centralized pubic-private power. Among other things, this means the retention of central control of financial and personnel management in Port-au-Prince. Since money and people are the essence of institutional capacity and effectiveness, it is mandatory that any insitution-building effort in rural areas be paralleled by direct intervention, pressure and strengthening of centrally-located institutions. Unless this latter effort is undertaken from the beginning, there are high risks of central power effectively compromising any institutional efforts in rural areas, and hence any agricultural production programs which require the existence of effective local institutions.

This said, and notwithstanding the earlier comment that from an institutional point of view it does not matter where one begins, cost-effectiveness for any given level of efforts does require some degree of concentration of human and material resources in specific circumscribed areas. In the context of Haiti's present state there seem to be at least two prime areas of oppportunity which present themselves to AID for a number of different reasons. These are:

4.5.1 The Southern Peninsula. This area has benefitted from a number of relatively small and isolated projects supported by AID (Les Cayes), CIDA (Miragoane-DRIPP), but has not received sustained and substantive assistance in the matter of agricultural development. It suffers from very high population pressure and out-migration to Port-au-Prince, recurrent destruction of infrastructure (e.g., roads, irrigation), a lack of a well-articulated feeder road system, and an absence of information on the resource base of much of its area. It contains abut 1.1 million people today in an area of 6200 $km.^2$; or an average density of 177 people per $km.^2$. As indicated in Annex A, the region (including Grande Anse) offers a variety of possibilities for

promoting food and non-food crops, for engaging in soil conservation measures, for developing irrigation systems, for promoting larger-scale farms and agro-processing activities, especially in coastal areas such as the Cayes plain where there are many large landholdings, and for developing urban-type non-agricultural productive activities (e.g., at Cayes, Jeremie). The region contains 4 agricultural districts in which, reportedly, the DARNDR employs some 60 technical personnel of one kind or another. A certain number of PVOs are also active here and there in the region, the more important of which include Catholic Relief Services, Oblates of Mary Immaculate, Save the Children Foundation, and the Salesian's of St. John Bosca; all of these have some component activities relating to food production or soil management and/or non-agricultural employment promotion. The public and private institutional structure is thin, but at least provides something to build upon.

4.5.2 The Northwestern Peninsula. The "Haitian Sahel", as it is sometimes called, has benefitted from certain isolated projects supported by AID (e.g., Jean Rabel), HACHO/CARE (all over the area) and the FAO (Trois Rivières). It suffers from low and erratic rainfall and was serverely hit by the droughts of 1975 and 1976-77. Except for the eastern part covering a triangular area between Jean Rabel, Anse à Foleur and Gros Morne, donor agencies other than AID have shown little or no interest in the region. There is nonetheless some potential in the zone worth pursuing. These include possibilities for small-area irrigation, dry-land farming, use of genetic material and techniques such as those developed by the International Crop Research Institute for the Semi-Arid Tropics (ICRISAT), and the implementation of agro-forestry programs aimed at water conservation, soil erosion control and expansion of the fuelwood/charcoal industry. This is not the most promising area of Haiti, but on the other hand most of it is thinly populated. With some effort it can be made to support a larger popullation than it actually does at present (245,000 in 1981), which is not an unimportant consideration when considering the longer-term demographic future of Haiti. There is some potential for growth of non-agricultural income in Port-de-Paix, but the significant location for such activity is more likely to be Gonaives. The latter is only about 2 hours by road from Port-au-Prince, and is already beginning to witness a bit of decentralizaed industrial activity (e.g., wire coating mill, garment factory). At present there are

reportedly about 40-45 technical personnel of DARNDR stationed in the region.[1] Typical of most areas in Haiti, at the time of writing the Ministry personnel have at their disposal only one functioning 4-wheel drive vehicle and 1 tractor. A much more important institutional infrastructure, at least until recently, was HACHO which, with support from CARE and AID, employed 165 people (including 16 agricultural technicans) in all major centers of the region.[2] In fact, relative to many other areas, the Northwest has an ample base from which to undertake agricultural programs while at the same time building up the capacity of that existing human infrastructure. While there are a number of other areas worthy of consideration, the Central Plateau and Northeast being ready candidates, the two peninsular regions represent major challenges to any development effort of serious nature. Certainly over the next 5 years it would appear unwarranted to continue the pattern of diluting AID resources thinly across the territory of the country. There is, at least nationally, an advantage in terms of effectiveness and potential for concentrating in a few areas at a time and then moving to other areas later; after having learned something useful about the process of concentrated agricultural promotion. Certainly, from a program managment point of view, the less travel required to monitor actions the less troublesome administration is likely to be -- all other things being the same.

Finally, it is to be noted that several other donor agencies have expressed varying degrees of interest in rural development projects in both regions (e.g., IFAD in the Northwest, and IDB, EEC and FAC in the South). In some measure, if the projects are actually pursued over the next 5 years, these donor activities can be viewed as "targets of opportunity" in the sense of providing AID-supported schemes with additional institutional and physical infrastructure to build upon and complement. Such an approach, in theory at least, would tend to reduce the degree of "Balkanization" of the country which has characterized international assistance to Haiti over the last decade. Using a reverse logic, it would also be reasonable to suggest that AID-supported schemes provide the necessary infrastructure for other donor activities which may follow at a later date.

1. De Young, M. Profile of the Northwest, USAID, November 1981.

2. Smucker, G. and Smucker, J.N., HACHO and the Community Council Movement, USAID, 1980.

Table 1: Population by Department[1/] and Arrondissement, 1950 and 1971

Administrative Unit	Total Population			Urban Population			Rural Population		
	Thousands		Av. Annual growth (%)	Thousands		Av. Annual growth (%)	Thousands		Av. Annual growth (%)
	1950	1971		1950	1971		1950	1971	
Département de l'Ouest	674.8	1151.8	3.0	162.7	523.2	5.7	462.0	628.6	1.5
Port-au-Prince	413.8	877.3	3.6	151.9	506.5	5.9	261.9	370.8	1.7
Léogane	211.0	274.5	1.3	10.8	16.7	2.1	200.1	257.8	1.2
Département du Nord	431.4	583.1	1.4	60.8	101.4	2.5	370.6	481.8	1.3
Cap Haïtien	118.2	199.8	2.5	29.4	54.7	3.0	88.8	145.1	2.4
Grande Rivière du Nord	106.5	100.4	-0.3	9.3	16.1	2.6	97.1	84.3	-0.7
Trou du Nord	52.3	69.3	1.4	11.9	14.4	0.9	40.4	54.9	1.5
Borgne	57.6	80.3	1.6	3.3	5.7	2.6	54.3	74.5	1.5
Plaisance	57.2	96.8	2.5	3.0	4.0	1.4	54.3	92.8	2.6
Limbé	39.6	36.5	-0.4	3.9	6.5	2.5	35.7	30.0	-0.8
Département du Nord-Est	107.7	116.8	0.4	14.1	16.4	0.7	93.4	100.3	0.3
Fort Liberté	64.4	68.9	0.3	12.2	12.9	0.3	52.2	56.0	0.3
Vallières	43.3	47.9	0.5	1.9	3.5	3.0	41.4	44.3	0.3
Département du Nord-Ouest	168.3	216.5	1.2	13.5	26.1	3.2	154.8	190.4	1.0
Port-de-Paix	115.8	136.4	0.6	10.8	21.7	3.4	105.0	114.7	0.4
Môle St. Nicolas	52.5	80.1	2.1	2.7	4.4	2.3	49.8	75.7	2.0
Département de l'Artibonite	466.9	622.2	1.4	41.3	76.3	3.0	425.8	546.1	1.2
Gonaïves	165.7	186.7	0.6	17.9	36.7	3.5	147.9	150.1	0.1
Dessalines	129.1	174.6	1.5	8.9	13.3	1.9	120.2	161.3	1.4
St. Marc	96.6	147.6	2.1	11.4	20.5	2.8	85.3	127.1	1.9
Hinche	75.5	113.3	2.0	3.1	5.8	3.0	72.4	107.6	1.9
Département du Centre	256.0	300.1	0.8	15.2	26.6	2.7	240.9	273.5	0.6
Mirebalais	100.3	133.5	1.4	7.6	14.2	3.0	92.7	119.3	1.2
Lascahobas	114.1	126.5	0.5	4.2	7.1	2.5	110.0	119.4	0.4
Département du Sud-Est	302.6	351.3	0.7	14.7	19.4	1.3	287.9	331.8	0.7
Belle Anse	56.9	52.2	-0.4	2.2	3.0	1.6	54.7	49.2	-0.5
Jacmel	245.7	299.1	1.0	12.5	16.4	1.3	233.2	282.6	0.9
Département du Sud	375.3	519.7	1.6	29.2	42.2	1.8	346.1	477.5	1.5
Cayes	195.2	272.7	1.6	15.8	27.2	2.6	179.4	245.4	1.5
Côteaux	56.2	86.4	2.1	7.7	9.7	1.1	48.5	76.7	2.2
Aquin	123.9	160.6	1.3	5.7	5.3	-0.4	118.2	155.4	1.3
Département du Grande Anse	364.3	453.1	1.0	27.2	47.8	2.7	336.9	405.2	0.9
Jeremie	175.4	240.9	1.6	15.7	25.1	2.3	159.6	215.7	1.5
Tiburon	47.1	61.9	1.3	5.5	13.0	4.2	41.5	48.9	0.8
Anse à Veau (Nippes)	141.8	150.3	0.3	6.0	9.7	2.3	135.8	140.6	0.2
TOTAL	3097.2	4314.6	1.6	378.8	879.7	4.1	2718.4	3334.9	1.1

1/ 9 departements.

Source: IHS - Guide Economique de la République d'Haiti, 1977

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a

Table 2: Resident Population of Departmental Capitals, Haiti 1975

Departement	Capital	Population
Ouest	Port-au-Prince (Metropolitan area)	652,900
Nord	Cap Haitien	53,797
Nord-Est	Fort-Liberte	3,509
Artibonite	Gonaives	35,096
Centre	Hinche	9,487
Sud-Est	Jacmel	12,165
Sud	Cayes	25,711
Grand Anse	Jeremie	19,697
Nord-Ouest	Port-de-Paix	16,735

Source: Institut Haitien de Statistiques, 1978

Table 3: Net Migration (Internal & External)
By Department - Haiti 1973

Département	Net Migration Internal	International	Total	% of population	Population mid 1973 (1000)
Ouest	+23873	-15414	+8459	+4.9	1730.0
Nord	-2946	-1236	-4182	-5.8	718.6
Artibonite	-3820	-882	-4702	-6.1	773.7
Sud	-14649	-852	-15501	-15.6	990.7
Nord-Ouest	-2458	-173	-2631	-11.7	224.7
Total	0	-18557	-18557	-4.2	4437.7

Source: Institut Haitien de Statistiques,

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Table 4: Cumulated Net Migration[1/] by Deparment and Area of Residence
Haiti 1971

	Number of Persons	% of Resident Population
Migrants Département Ouest	+13841	+1.2
Urban areas	-906	-1.5
Rural areas	+14747	+1.3
Migrants Aire Métropolitaine	+102771	+20.8
Migrants Département Nord	-27426	-3.9
Urban areas	-5905	-5.0
Rural areas	-21521	-3.7
Migrants Département Artibonite	+4627	+0.6
Urban areas	+9446	+10.5
Rural areas	-4819	-0.7
Migrants Département Sud	-88392	-9.1
Urban areas	-14795	-16.4
Rural areas	-73597	-8.3
Migrants Département Nord-Ouest	-5421	-2.5
Urban areas	+1716	+6.4
Rural areas	-7137	-3.7

1/ Cumulated net migration = resident population - population born in the area.

Source: Institut Haitien de Statistiques.

May 1, 1978

Table 5 Average National Income Per Caput, by Region
Haiti, 1976

	Country Total	Urban Areas: Total	Urban Areas: Port-au-Prince Metropolitan Area	Urban Areas: Other Towns	Rural Areas
Labor Income					
Gourdes	581.9	891.0	1107.1	636.3	504.4
% (rural areas = 100)	115	177	220	126	100
Total National Income					
Gourdes	951.8	2735.3	3400.0	1958.8	504.4
% (rural areas = 100)	189	542	672	367	100

Table 6: People Living Under Conditions of Absolute Poverty, Haiti 1976

Region	Minimum Consumer Expenditure per year in G		Percentage of Total Population with Per-Caput Income Lower than Minimum Expenditures	
	Per-Caput I	Per-Caput II	I	II
Country Total	1000.5	702.6	89.7	73.8
Urban Areas	1082.1	794.0	70.7	55.2
Metropolitan Area	1113.0	819.7	60.4	39.2
Other Towns	1045.7	754.7	82.9	74.1
Rural Areas	980.0	675.1	94.4	78.4

Table 7: Regional Incidence of Fiscal System, Haiti 1975/76

(a) Tax revenue (millions of G)

Regional Units	Internal revenues (1)	Adjustments (2)	Internal revenues adjusted (3)=(1)+(2)	Coffee export tax (4)	Other customs receipts (5)	Customs receipts (6)=(4)+(5)	Total current tax revenues (7)=(3)+(6)	Percentage distribution
Port-au-Prince	116.4	-20.6	95.8		56.0	56.0	151.8	47.2
Rest of the country	9.5	+20.6	30.1		86.6	140.0	170.1	52.8
Provincial towns	.		9.7		28.1	28.1	37.8	11.7
Rural areas	.		20.4	53.4	58.5	111.9	132.3	41.1
TOTAL	125.9	0	125.9	53.4	142.6	196.0	321.9	100.0

b) Fiscal expenditures (millions of G)
(on cash basis)

	Salaries (1)	Adjustments for Central Region(2)	Salaries adjusted (3)=(1)+(2)	Operating expenditures (4)	Adjustments for Central Region(5)	Operating expenditures adjusted (6)=(4)+(5)	Subsidies (7)	Expenditures (8)=(3)+(6)+(7)	Percentage distribution
Port-au-Prince	104.2	-2.1	102.1	38.6	-0.2	38.4	17.6	158.1	82.7
Rest of the country	24.5	+2.1	26.6	1.9	+0.2	2.1	4.4	33.1	17.3
TOTAL	128.7	0	128.7	40.5	0	40.5	22.0	191.1	100.0

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Table 8: Teachers and School-age Population[1/] per Teacher by Department, Haiti 1975-1976

Départements	PRIMARY EDUCATION						SECONDARY EDUCATION (URBAN AREAS)	
	Total		Urban Areas		Rural Areas			
	Number of teachers	Population aged 5-14 per teacher	Number of teachers	Population aged 5-14 per teacher	Number of teachers	Population aged 5-14 per teacher	Number of teachers [2/]	Population aged 10-19 per teacher
Nord	1991	104.4	1607	23.9	384	441.4	604	61.4
Nord-Ouest	636	100.8	527	17.5	109	504.3	103	88.5
Artibonite	1450	153.6	1118	27.7	332	578.0	278	102.6
Ouest	6376	78.6	5801	32.7	575	540.9	2023	101.1
Sud	2050	134.7	1690	17.6	360	684.8	272	85.0
Total	12503	101.7	10743	27.8	1760	553.4	3280	93.9

1/ Population aged 5-14 years (primary education) and 10-19 years (secondary education).
2/ Number of teachers refers to FY1976-77.

Source: World Bank

Table 9: Demographic Projections by Regions and Spatial Strategy, Haiti 1976-2001
(Thousands of inhabitants)

Region/Subregion	1976 1/	1981	1986				1991				1996				2001			
			I 2/	II 3/	III 4/	IV 5/	I	II	III	IV	I	II	III	IV	I	II	III	IV
Département de l'Ouest	1240.2	1305.1	1364.3	1378.0	1372.6	1372.9	1414.9	1471.0	1448.3	1449.6	1452.3	1572.3	1526.8	1529.6	1476.4	1670.7	1604.1	1609.3
Urban	65.8	71.8	78.6	78.6	78.6	78.9	85.3	85.3	85.3	86.6	91.4	91.4	91.4	94.2	96.5	96.5	96.5	101.7
Rural	1174.4	1233.3	1285.7	1299.4	1294.0	1294.0	1329.6	1385.7	1363.0	1363.0	1360.9	1480.9	1435.4	1435.4	1379.9	1574.2	1507.6	1507.6
Metropolitain Area	647.5	851.7	1121.4	1062.5	1084.9	1081.9	1439.6	1201.8	1295.0	1282.9	1790.5	1292.8	1474.4	1447.1	2161.3	1372.5	1628.3	1579.4
Département du Nord	758.3	818.3	879.4	886.6	883.7	884.3	938.9	969.9	957.5	960.0	995.2	1062.4	1037.1	1042.6	1049.0	1158.8	1121.3	1131.3
Urban	131.8	148.2	166.4	166.4	166.4	167.0	184.4	184.4	184.4	186.9	201.1	201.1	201.1	206.6	217.0	217.0	217.0	227.0
Rural	626.5	670.1	712.8	720.2	717.3	717.3	754.5	785.5	773.1	773.1	794.1	861.3	836.0	836.0	832.0	941.8	904.3	904.3
Département du Nord-Ouest	229.3	240.1	247.2	252.1	249.8	250.0	250.3	270.1	261.7	262.6	248.7	291.5	275.3	277.4	243.8	314.0	290.3	294.1
Urban	31.5	37.5	44.4	43.9	44.2	44.4	51.8	49.6	50.8	51.7	58.9	54.4	56.9	59.0	66.0	58.9	62.6	66.4
Rural	197.8	202.6	202.8	208.2	205.6	205.6	198.5	220.5	210.9	210.9	189.8	237.1	218.4	218.4	177.8	255.1	227.7	227.7
Département de l'Artibonite	823.6	880.4	933.0	941.8	938.8	939.6	981.1	1017.4	1004.3	1007.6	1022.7	1101.4	1074.4	1082.3	1039.2	1188.1	1148.3	1161.8
Urban	106.5	126.1	148.0	146.1	147.2	148.0	170.9	162.9	167.6	170.9	193.5	176.8	185.9	193.8	216.0	189.3	203.0	216.5
Rural	717.1	754.3	765.0	795.7	791.6	791.6	810.2	854.5	836.7	836.7	829.2	924.6	888.5	888.5	843.2	998.8	945.3	945.3
Département du Sud	977.0	960.6	916.1	943.4	932.8	933.9	846.5	958.9	913.6	917.9	753.1	993.6	902.6	912.1	639.5	1029.8	896.1	913.6
Urban	97.8	107.6	118.7	118.7	118.7	119.8	129.8	129.8	129.8	134.1	139.9	139.9	139.9	149.4	148.7	148.7	148.7	166.2
Rural	879.2	853.0	797.4	824.7	814.1	814.1	716.7	829.1	783.8	783.8	613.2	853.7	762.7	762.7	490.8	881.1	747.4	747.4
Total	4675.9	5056.2	5461.2	5464.4	5462.6	5462.6	5871.3	5889.1	5880.4	5880.4	6262.5	6314.0	6290.6	6291.1	6629.2	6733.9	6688.4	6689.5
Urban	1080.9	1342.9	1677.5	1616.2	1640.0	1640.0	2061.8	1813.8	1912.9	1912.9	2475.3	1956.4	2149.6	2150.1	2905.5	2082.9	2356.1	2357.2
Rural	3595.0	3713.3	3783.7	3848.2	3822.6	3821.6	3809.5	4075.3	3967.5	3967.5	3787.2	4357.6	4141.0	4141.0	3723.7	4651.0	4332.3	4332.3

1/ Projected from 1971 census data
2/ Strategy I = development under status quo conditions
3/ Strategy II = forced rural development
4/ Strategy III = realistic rural development
5/ Strategy IV = realistic rural development cum balanced urban development

Source: IBRD

Table 10: Population Growth and Structure by Urban and Rural Areas by Spatial ~~Survey~~ Strategy, Haiti 1950-2001

(a) Structure (percentage)

Regions	1950	1971	1976	1986				2001			
				I	II	III	IV	I	II	III	IV
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Urban Areas	12.2	20.4	23.1	30.7	29.6	30.0	30.0	43.8	30.9	35.2	35.2
Port-au-Prince	4.9	11.7	13.8	20.5	19.4	19.9	19.8	32.6	20.4	24.3	23.6
Other towns	7.3	8.7	9.3	10.2	10.2	10.1	10.2	11.2	10.5	10.9	11.6
Rural Areas	87.8	79.6	76.9	69.3	70.4	70.0	70.0	56.2	69.1	64.8	64.8

b) Average annual growth rates (percentages)

	1950-1971	1971-1976	1976-1986				1986-2001			
			I	II	III	IV	I	II	III	IV
Total	1.6	1.5	1.6	1.6	1.6	1.6	1.3	1.4	1.4	1.4
Urban areas	4.1	4.2	4.5	4.1	4.3	4.3	3.7	1.7	2.4	2.4
Port-au-Prince	5.9	5.6	5.6	5.1	5.3	5.3	4.5	1.7	2.7	2.5
Other towns	2.4	2.3	2.5	2.5	2.5	2.5	2.0	1.7	1.8	2.2
Rural Areas	1.1	0.8	0.5	0.7	0.6	0.6	-0.1	1.3	0.8	0.8

Source IBRD

Table 11: Increases in Population and Labour Force by Region, Haiti 1976-1986-2001
(Thousands of persons)

	1976 - 1986								1986 - 2001							
	TOTAL INCREASE				AVERAGE ANNUAL INCREASE 1/				TOTAL INCREASE				AVERAGE ANNUAL INCREASE 1/			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Population																
Total	785.3	788.5	786.7	786.7	78.5	78.9	78.7	78.7	1164.8	1269.5	1225.8	1226.9	77.7	84.8	81.7	81.8
Urban areas	596.6	535.3	559.1	559.1	59.7	53.5	55.9	55.9	1228.0	466.7	716.1	717.2	81.9	31.1	47.7	47.8
Port-au-Prince	473.9	415.0	437.4	434.4	47.4	41.5	43.7	43.4	1040.0	310.0	543.4	497.5	69.3	20.7	36.2	33.2
Other towns	122.7	120.3	121.7	124.7	12.3	12.0	12.2	12.5	188.0	156.7	172.7	219.7	12.5	10.4	11.5	14.6
Rural areas	188.7	253.2	227.6	227.6	18.9	25.3	22.8	22.3	-60.0	802.8	509.7	509.7	-4.0	53.5	34.0	34.0
Labour force																
Total	149.8	224.4	221.1	220.9	15.0	22.2	22.1	22.1	479.4	566.8	548.8	548.6	32.0	37.8	36.6	36.6
Urban areas	254.5	232.7	246.2	246.0	25.5	23.3	24.6	24.6	512.5	236.6	358.6	358.4	34.2	15.8	23.9	23.9
Port-au-Prince	206.2	185.7	198.5	196.8	20.6	18.6	19.9	19.7	432.7	164.4	278.5	255.3	28.8	11.0	18.6	17.0
Other towns	48.3	47.0	47.7	49.2	4.8	4.7	4.8	4.9	79.8	72.2	80.1	103.1	5.3	4.8	5.3	6.9
Rural areas	-104.7	-10.3	-25.1	-25.1	-10.5	-1.0	-2.5	-2.5	-33.1	330.2	190.2	190.2	-2.2	22.0	12.7	12.7

1/ Figures may not add to total due to rounding

Source: IBRD

Chapter V: INSTITUTIONAL OPTIONS

This report is primarily concerned with getting things moving in Haiti, with how to achieve lasting results in the conditions of life of the Haitian peasant. The present chapter on institutional options considers the various ways this can be done.

5.1. What Has Worked

There are not many rural projects in Haiti that can be said to have worked. The following, therefore, represents a synthesis of what we have seen, of what we have been told, and what we have read. We have decided to present our conclusions in the form of an ideal type, a set of principles that may guide the design of successful projects in the future. We are concerned with what has worked. And what has worked in Haiti's rural context, is projects on the ground.[1]

5.1.1 The Haitian peasant is the key actor in agricultural development. There is a widespread but mistaken belief that projects rise or fall with the performance of the public sector. Yet it is obvious to anyone who even briefly reflects on the matter that in agricultural development for the small farmer, it is the small farmer himself whose resources and livelihood are at stake. It is the peasant who must be motivated to see the project as his own. The project cannot move faster than the peasant is prepared to move himself. Those who organize and manage projects have an

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1. The projects from which we draw our conclusions include:
   a. Regional Development Projects: ODN (Organization for the Development of the North); ODPG (Organization for the Development of the Gonaives Plain); HACHO (Haitian-American Community Help Organization); ODVA (Organization for the Development of the Artibonite Valley); DRIFP (Integrated Rural Development Project for Petit Goave).
   b. Community Development Projects: CRS (Gros Morne Project); AID Groupement Projects, Afè Nèg Coumbite.
   c. PVO Projects: Food for Work projects in the Northwest and Southwest; Operation Double Harvest; Camp Perrin (Foundry Crafts Project).
   d. Private Sector Projects: FACOLEFF (Cavallion); Thébaud Plantation (Anse Rouge).
   e. Field Projects: Ilotes de Développement (IICA-GOH); GOH agricultural research activities; PDAI; agricultural research (Madian-Salignac, FAC); FAC-project, Jacmel, and FAO-financed soil conservation project at Limbé.

obligation not only to inform the peasant, but to listen to him and to modify, if necessary the overall design so that it comes to be consistent with his wishes and priorities. To stress the centrality of the peasant in rural transformation is not to say that all the instruments for transformation already exist within the community, waiting only to be aroused. Peasants need new knowledge of how to work the land so that it might become more productive; they need modern inputs, they need infrastructre.

Working with peasants who are suspicious of the Government's intentions is a weary process and projects that rely on genuine peasant participation proceed slowly. But what proceeds slowly because the peasant takes convincing lead in the long run to success.

5.1.2 Field projects serve as a unit for agricultural programming. The projects which are central to rural transformation are those which have to do with changing farming systems, with changing the relation between peasants and their environment, so as to preserve the environment to benefit the peasants whose livelihood depends on it. They are intended to improve land productivity and peasant incomes. They are intended to reclaim Haiti's devastated lands.

Admittedly, field projects are "islands" of development. Each project will require a sustained, intensive effort that may last for years (see paragraph 5.1.7 below). In the long run, it may be desirable to link these islands to each other and to create a national program of agricultural and rural development. But this option is not immediately available, though it may happen in the longer view. For the moment, we are limited to "islands" of development and to programs at the national level which support this effort (see paragraph j below). The reasons are multiple: the lack of total resources for a more comprehensive approach, the lack, specifically, of Haitian personnel to manage a more comprehensive, integrated effort, and the general conditions of the Haitian administrative environment.

5.1.3 GOH commitment to field projects is essential. Donors are sometimes anxious to proceed. Projects which start without a clear commitment on the Haitian Government's part are bound sooner or later to crumble. Field projects work when the GOH sees them as their projects. This sense of project

"ownership" on the part of the Haitian Government (even if they do not pay for but a minor fraction of the total cost) is not something that can come "after the fact," once the project is installed. It must be there from the very beginning. This means that field projects must arise out of a continuing dialogue with Haitian officials. In the institutional part of this chapter, we will suggest one method of doing so, by drawing on the special knowlege which District Offices of the Ministry of Agriculture have.

5.1.4 Expatriate technical assistance is required for project management. All successful projects we have seen have involved the invisible, physical presence of competent expatriate technicians. Part of their job is to develop and extend new practices and technology. But it is more than this. Their presence lends the project a certain prestige, and can help to keep up pressure on the GOH to live up to its earlier commitments and to insulate the project from arbitrary interference. Expatriates have more freedom of action than Haitian counterparts, and they may have contacts that may be helpful to the overall progress of the project. But, of course, the presence of expatriate experts is not enough to ensure success. What else is needed follows below.

5.1.5 Effective direction of field projects must be Haitian. The impatience of foreigners to get on with the job often leads them to take a more prominent role in project direction than is warranted. Clearly, it must be a Haitian who will direct the project. The project must not be permitted to become in the course of its implementation, an expatriate project. Expatriates are there to provide technical assistance. If project management flounders, management assistance may be called for. Experience indicates that a substantial effort must be made to improve the systems and skills of the Ministry of Agriculture. In the short-term every effort should be made to avoid project design that will overburden the existing structures. If the advisory role of expatriate staff slips over to a management role, it is evident that a project was not adapted to the indigenous institutional capacity and will probably not be sustainable in the long run.

5.1.6 Field projects should be human-scaled. This means that they are physically bounded, have clear objectives, and are transparent in their organization. The boundedness of field projects refers to the fact that they

must be located somewhere, and that the geographical limits of their operational area must be clearly defined. Many field projects in agriculture are confined to small watersheds where a complete agricultural systems approach to farming can be applied, covering both lowland and upland areas. Project objectives should be formulated so that they can be used operationally, for example, when measuring successful completion of project elements. They should be so stated that even relatively untutored people can understand and internalize them. Finally, they must be consistent with what the peasants themselves understand and want. If you wish to grow more corn, the objectives should say so and not talk of ambiguous productivity measures. If you wish to replace row crops with tree crops to reduce soil erosion and downstream floods, that should be stated. Finally, human-scaled projects have a transparent organizational structure. This means that hierarchy is minimized, that the lines of authority are short and direct, that the project administration is at the site and has daily contact with ongoing activities and with the people who work there.

Field projects probably should not exceed 5,000 ha. supporting a population of 15 to 20 thousand. Projects that are larger than this require an organization that is no longer transparent, objectives that are too abstract, and an excessive commitment of foreign assistance resources. In Haiti, it is best to keep things on a modest scale.

5.1.7 Field projects require sustained, intensive effort. The intensity of the effort involved in getting peasants to adopt new practices and to move from project idea to successful implementation is not always sufficiently appreciated. Once a suitable technology package has been developed which is adapted to the environment and is economically viable one can realize considerable economies of scale in transfering the technology to comparable ecological zones. The extension effort of encouraging changes in farming practices, of coordinating the protection of the watershed, and of providing the necessary infrastructure investments is considerable. Perhaps the following will help to make clear what is intended.

In August 1978, AID consultant Gerald F. Murray wrote a proposal for the organization of erosion control projects in Haiti. His recommendations included a step-by-step listing of measures that would be necessary to

accomplish the project. In order to improve the project effectiveness, he recommended that sub-projects switch from working with large 50-men peasant groups to what he called "smaller hillside units of 15 or 20 men". The following is a direct quotation from his text on how to proceed next:

*Charge groups with decisions concerning types of trees, order of terracing plots (taking current crops into account), seasonal scheduling of activities to mesh with their cropping cycle, daily scheduling of activity, and allocation of workdays to different members of the group.

*Provide groups with a monthly advance of cash that will serve as the source of purchased food for meals during the month. They are responsible for making the fund last a month and will thus get training in common management of cash.

*Involve women not only in the acquisition, preparation, and distribution of food, but also in lighter terracing and planting tasks.

*Involve poorer members of the community by making sure that every single individual is in one hillside unit, excluding no one because of lack of land in the region.

*Tighten up technical control over the progress of the work. Avoid building of unnecessary walls, excessively steep roads, and the like.

*Clarify relations, especially as to decision-making powers, between foreign and Haitian technicians.

*On completion of a subcatchment, clarify to hillside units their new status as vigilance and maintenance units.

*Have each hillside unit verify the maintenance of all terraces and trees in its orbit every three months. Repair damaged items, and report when the hillside is in order.

*Send up a delegated project agent on notification from a hillside unit to verify that the hillside is in fact in order.

*Pay the stipulated sum to those units whose fields are in order. Withhold pay from a unit any of whose fields has been neglected.

*Throughout the entire project, have meetings and educational sessions in which the consequences of erosion and the need for trees and terraces are clearly communicated.

And all this for only one small hillside. The point is not whether we must agree with Mr. Murray on every step. His report serves rather to illustrate what it will take to accomplish a permanent change in the rural landscape of Haiti. The process is intense, it involves working on a small scale with people, it must be tightly managed, and it must be extended over a long period of time. There are not short-cuts to field project successes.

5.1.8 Field projects should have operational autonomy. Haiti's highly centralized system of public administration works against this criterion. But where projects lack this autonomy, it means that the top staff must spend too much time travelling back and forth to Port-au-Prince for consultations, authorizations, and disbursements. Meanwhile, the project stalls. Policy guidance, of course, should come from the top, but the project should be able to make dispositions within its own budgetary constraints. Operational autonomy implies, at the same time, tight fiscal controls and auditing procedures. Allowance must be made for these in project design. But project efficiency declines when "the Minister" has be to consulted on every small detail of operations. In the long run a systematic reform of Ministry of Agriculture management systems in required.

5.1.9 Field projects are self-sufficient. In a "rich" institutional environment in which services are readily at hand, where specialization is the customary way of doing business, and where integration is achieved through either the market or administrative craft, self-sufficiency would not be a requirement. These conditions do not prevail in Haiti. In time they may develop. Meanwhile, if certain services are essential to the successful completion of a field project, they should be internalized in the design of the project, they should come under the direct control of the Project Director. To repeat: given economies of scale, this would not be the efficient way of proceeding. But in Haiti, economies of scale cannot be relied upon.

5.1.10 Field projects must be adequately supported nationally. Although field projects have been portrayed as bounded, autonomous, and self-sufficient, their ultimate success depends on the support they receive from the Center. The support implied here is not merely institutional, though that it should also be this goes without saying. Three examples come readily to mind. The first is tax policy which, for export crops, typically displaces the burden on the peasantry with the result of dampening motivation to produce for export. The second example concerns research. Extensive research is required to develop varieties of food crops that flourish best under Haitian conditions. Supplementary research can and indeed must be done on the project site, since micro-ecological conditions often prove decisive in the adaptation of varieties or in specific fertilizer/irrigation schemes. But the basic

research must be done at the national level to economize on personnel. The third example is advanced training for project staff. Some training can obviously be done in the field. Indeed, field practice is an essential component of learning. But not all learning can be done by the project. Project personnel are drawn from the schools and colleges of Haiti. Adequate levels of support for both research and training are essential to field project performance. The fourth example has to do with the management of the Ministries themselves, specifically the Ministry of Agriculture, whose internal operations must be vastly improved in view of the increasing number of tasks in the field that it is obliged to support.

The foregoing suggests the complementarity between projects on the ground and so-called institution-building. Both must proceed apace if there is progress to be made. The multiplication of field projects lends special urgency to changes at the national level which need to be brought about. It also suggests, however, that the appropriate role for the center is service and support on the one hand, and policy guidance on the other. Detailed, day-by-day management control is inappropriate.

5.1.11 Field projects should be designed with a view to social learning. It has long been known that "development" is not primarily a process of imitation, transfer of knowledge and appropriate practices, or merely "applied" knowledge, but involves invention, innovation, learning, and adaptation. Development in that sense is like a journey of discovery, a push into unknown worlds, where little can be foretold with any confidence. Unfortunately, we have not had useful models until recently that might help us structure development as a learning process. Without wishing to review the pertinent literature, we can now say with some confidence that social learning must be based on the following precepts:

-- effective learning yields for the most part "personal" or "embodied" knowledge, which stems from people's experience. Personal knowledge has neither been analyzed, nor is it formalized or codified knowledge. It is largely what we get when we hire a so-called expert. But the expert has only a general knowledge, based on experiences elsewhere. S/he has not yet had local, project-specific experiences. At the same time, local people have plenty of "experiences" and therefore personal and valid knowledge

(after all, they have learned to survive), but they are innocent of any knowledge that may lead to innovation. Consequently, learning is maximized by establishing a dialogue between experts and local people concerning what is to be established;

-- all learning involves making mistakes, and the acceptance of error therefore must be viewed as an integral part of developmental change. But, of course, the mistakes must be recognized as such and become the basis for a creative, thoughtful response, by changing the direction of the action, by reconsidering the strategy that has been followed, by looking at one's reality map and, in the final analysis, by reconceiving one's operative values in the situation. Above all, social learning implies a willingness to change;

-- social learning follows a pattern. It proceeds from low to high levels of performance, and from an initial concern with mere effectiveness (making a desired impact) to subsequent phases during which efficiency is increased and the original model is expanded to include greater areas of coverage, etc. But as a given project, or better yet, a given assembly of projects -- a program -- passes through these phases, structural changes become necessary. Involved, therefore is not merely a process of incremental improvement but changes which lead to a restructuring of basic organizational relationships.

5.2 Farmer Organization

On the surface the problem of underdevelopment in Haiti is one of inadequate resources for the investment necessary to raise living standards. Different types of investment may make a greater or lesser contribution to raising living standards but the basic problem is often seen as one of choice of investment. Donors have concentrated their resources on training those who must make those choices and on providing them with the materials necessary to realize them. At both the macro and micro levels this approach has not been particularly fruitful.

Haiti is replete with examples of good public sector investments and farm level community projects undertaken in times past which fell into disrepair and dysfunction long before their expected useful lives. In effect

it is easier to make investments than to sustain them. Sometimes the reasons have been political. But too often short-term successes turn into long term failures because insufficient and inappropriate attention has been given to the question of peasant organization.

Many observers of the Haitian scene are convinced that sustainable long term rural development in Haiti is not possible without creating viable, cohesive peasant organizations that can address themselves to the set of contradictions in which peasants find themselves entrapped. Unfortunately this is one area where international donors are generally quite powerless. This gives rise to a fundamental contradiction: peasants cannot extricate themselves from their poverty without greater access to investment resources; yet making these resources available too soon, too quickly, or in too great a quantity will often destroy the very cohesiveness that is essential for effective peasant organizations. In effect, the basic problem is not one of resources but one of organization.

Haiti has acquired broad experience in organizing peasants. PVOs, religious groups, community development agents and others have tried various approaches to creating viable peasant organizations that can serve as a basis for development programs. Valuable lessons have been learned-ignored by some but used by others to strengthen the movement. To be sure, there is not always a consensus on what is the lesson to be learned or how problems which arise should be addressed. But there do seem to be emerging certain control themes that donors may want to keep in mind. Some of these are discussed in Lowenthal (1978).

The first theme is that peasant organization cannot be rushed. It must be nurtured. It must proceed from the identification of common problems which unite a particular group of peasants and their own attempts to address these problems. Unless group trust and solidarity come before resources, there is a high risk those resources will be squandered. This process can take several years.

The second theme is that peasants must lead with their own resources, however meager. To the extent that trust and solidarity increase, they will

be willing to put their own time and money into group activities. Without such trust and solidarity the organization will crumble with the first major shock or failure.

This implies that peasant equity should represent the major share of investment capital, at least until the organizations have gained real strength. Initially, little money should move through the organization that does not come from the peasants themselves. Eventually the share of outside capital can begin to increase but too rapid an increase risks swamping peasant structures with management problems they have not yet developed the capacity to handle. A compound growth rate in peasant equity of 15-20% per year may be all that can be handled without generating careless management practices.

The third theme is a need for broad flexibility in approaches to peasant organization at the local level. A single approach can not address the diverse geographic, institutional and social complexity of rural Haiti. The human personalities involved will be different. The stages of evolution on which such organizations can be built will also vary. Organizing agents need the flexibility to confront these dimensions in whatever ways emerge from the interaction of the individual peasants in a particular group.

A fourth theme is the importance of the form of assistance offered to peasant groups by those wishing to help them consolidate and grow. Food-for-Work offered by outside agencies can cause "ownership" of a particular activity to be transferred to the donor or the government. Excessive levels of assistance can remove any element of investment risk-taking on the part of peasants and turn group activities into wage employment. This also leads to corruption and favoritism and erodes group solidarity. All these lessons are eminently evident in Food-for-Work programs operated through community councils (Smucker, 1979). Giving peasants tools, seeds, fertilizers, and other items related to the particular activity at hand appears to be much superior to food aid or cash wages.

A fifth theme is the importance of the motivation of the agent trying to <u>help</u> peasants organize. His human qualities as well as his ability to avoid trying to control or push fledgling organizations are very important

components of success. Yet the Gros Morne experience suggests that these qualities can be learned. Indeed the very process of letting peasants grope with their own problems and solutions seems to generate a respect for their situation on the part of the animator or organizing agent that often is lacking initially.

Finally, peasant organizations should be self-selected and small, perhaps six to twelve people of similar socio-economic standing. Once such organizations become strong then larger scale groups may be formed through federations of the basic work groups. At each stage of evolution new structures and relationships will need to be articulated, tested and revised by the peasants themselves. This is necessary to keep "ownership" of these insitutions from being transferred, in the minds of the peasants to others.

Obviously these themes are much more easily represented by PVOs than government agents. Yet there are many Department of Agriculture agronomes and field agents who are sensitive to these issues and have had some success in organizing Haitian peasants. If agricultural field agents could be brought together in order to discuss with Haitian and non Haitian community development specialists who have successfully implemented these small community development efforts, there is little doubt than an important institutional learning process would be initiated within DARNDR. The result would be a much more effective program of organizing Haitian peasants.

At the same time donors will have to accept their relative impotence in this area and concentrate on not subverting such organizational effort by pushing too many resources at them too quickly. This does not mean that the need for resources is not great. It simply means that the ability of peasant organizations to absorb resources effectively will place a limit on how much can be done in the short-term.

For high technology, intensive production programs the question of peasant oganizations is less crucial. Peasants can be dealt with as individual producers if necessary, though groups would certainly facilitate the process. Interaction with peasants and extension management systems which encourage a two-way flow of information in a farming systems context should go a long way

toward solving current problems at the peasant level. Finally direct agro-industry peasant links for supply of inputs, credit and guaranteed markets for certain commodities presents a third mode of operation which runs relatively smoothly for selected products. This provides a basis of experience for evolving similar programs for other commodities such as peasant live broiler production or oilseed production.

5.3 Alternative Institutional Arrangements

In this section, we will present three institutional perspectives for implementing A.I.D. rural development in Haiti: (a) a field project (sectoral) approach; (b) a regional sectoral approach; and (c) a regional comprehensive rural development approach. Common to them all is the field project. In shifting to an institutional perspective, the criteria discussed in the preceding section are maintained: a good field project is a good field project regardless of its institutional setting.

The three options stand in an ascending order of complexity and risk. None of them are easy, but clearly the first, or field project (sectoral) approach is the easiest of the three. All of them, moreover, have advantages and disadvantages. These are identified following the description of each alternative. In conclusion, we present an overall evaluation of the alternatives and our recommendation for the best course of action.

Option (a) Field Project Approach

5.3.1 Elements of a Field Project (Sectoral) Approach . Within the limitations of budget and manpower resources, the bulk of agriculture/natural resources activities financed by AID are moved from Port-au-Prince into the field. Field projects may be identified anywhere within the country and are designed in accordance with the principles laid down in the preceeding section.

The institutional basis of field projects will continue to be the Ministry of Agriculture, operating through its District Offices. As a basis of project selection, District Officers should be consulted. More specifically, District Officers may be asked to submit project proposals

and/or ideas to a joint Ministerial/AID task force for project identification and design. Accordingly, projects in different parts of the country may receive varying emphasis in terms of their major objective and even scale of operation. Some may be quite small, some large. They will all serve as a basis for learning. Frequent evaluations should lead to new knowledge.

However, not all activities now centered at Damien (where the Ministry of Agriculture is located, on the edge of Port-au-Prince) should be decentralized. Instead, they should be refocussed to serve the specific needs of field projects. They should be thought of as supporting the field projects. This will require continuing dialogue between personnel at Damien and project staff.

Assessment: This approach remains in known terrain. Field projects are a familiar notion, even though not all of the criteria have always been applied. The institutional environment for the project--the Ministry of Agriculture--also remains the same. There is some understanding of how it works, what are its strong points and its weak. There is also some understanding of what would need to be done to strengthen its overall performance.

The major advantage of the project approach, however, is that it does not make unusual demands on the Haitian system. Though it certainly can stretch that environment to its limits. By dividing AID efforts among a variety of projects throughout the country--though particular regions may be favored--the risk of failure is minimized. It is extremely unlikely that none of the attempts to change farming system practices in Haiti would come to fruition. Some projects will do well, others less well. After some time, monies and other resources may be reallocated among projects, strengthening those that are successful.

By locating projects in districts, a certain absorptive capacity exists which is given by the ability of District Offices to effectively utilize and manage resources. Exactly where this point lies is not presently known. Some projects may be able to absorb half a million dollars of AID-equivalent a year; others may be able to use greater amounts (e.g. the IDB project at l'Asile or the FAC project at Jacmel). In any event, there is room for experimentation.

At present there are 20 Ministry of Agriculture District Offices throughout the country employing about 600 technicians. Unfortunately they have but few resources for project development. As a result they presently operate at very low levels of efficiency. The way to upgrade their performance, however, is not simply by giving them more money, but by asking them to undertake specific tasks.

The principal disadvantage of the field project approach stems from the very concept of a field project as a self-contained, autonomous undertaking. It is an "island" of development which does not by itself lead to general rural development but to the achievement of objectives that are restricted in concept. They are limited to the project because of its self-contained nature, there are few multiplier effects other than those which would come from an increase in farm incomes.

This disadvantage is, in part, compensated for by the structural framework into which the project approach is inserted: the District Offices of the Ministry of Agriculture. In one form or another, these offices will remain in place. Their work is agricultural and resource development. Even if foreign aid were withdrawn at some point, their work continues, even if less intensively than before. The staffs of these offices are now in place and eager to work. Their capacity can be vastly improved by setting them on projects and giving them the tools and knowledge with which to work.

As has been stressed before, when discussing field project characteristics, there is need to back them up by ensuring that the Ministry of Agriculture which is promoting them itself has the necessary capabilities to sustain a growing number of projects on the ground. By common consent, Agriculture is one of the weakest ministries in Haiti (see the detailed MASI report, Analysis of Institutional Capability of Haitian Ministry of Agriculture, 1976 (?). USAID has been working for years with the Ministry guided by the idea of institution-building. But institution-building without projects is not a very promising approach. A more effective solution is to work backwards from field projects, in a concerned effort at the level of the Ministry, to allow project work to move ahead. Field projects are stymied by poor administration at the center. Personnel matters, payroll, supplies, research -- it is all part of the process to make projects cost-effective.

And a global approach may eventually be needed to deal with the weaknesses that have been detected. But the first responsibility is a more practical one: to make sure that the project functions out in the field. That is the task; nothing else really matters in a field project approach. One cannot wait with projects until the Ministry is ready and prepared. Rather, the ministerial structure must be rebuilt even as projects in the field are underway.

Working backwards from field projects to institutional reforms promises to provide both incentives and pressures for improved performance at the national level. Nevertheless, it must be recognized that the continued concentration of staff in Port-au-Prince and the institutional weaknesses of the Ministry of Agriculture will combine to severely limit absorbtion capacity well into the existing twenty year planning period. It is necessary, therefore, to make a commitment now to a long-term effort of improving central ministry capacity to backstop field projects if this, or any other strategy, is to be effective. At this time the most important constraints do not appear to be technical in nature. This team, and others, have been impressed by the number and quality of staff at Damien. Similarly, the current agricultural research efforts appear to be proceeding satisfactorily and promise important results in the near future. Rather, the important constraints in the agriculture sector remain as the MASI team identified them -- (a) the planning system, (b) the budgeting and financial management system, (c) the personnel system, and (d) the excessive concentration of resources and decision making at the center. Without a determined attack on these basic procedural and structural problems of the Ministry of Agriculture the long-term prognosis for the "field project" approach is bad. The field project approach can encourage a field orientation and decentralization, it can provide incentives for shifts in budget priorities and the utilization of staff, but without basic reforms the capacity in the existing system is little and management constraints substantial.

Option (b) - The Regional Organization

5.3.2 Elements of a regional sectoral approach. There is a very real problem in shifting the bulk of agricultural development assistance from the Center to the rural periphery of Haiti. It is true that the Ministry of

Agriculture now maintains staffs at 20 district offices throughout the country. But the bulk of the Ministry's technical personnel resides in Port-au-Prince. According to the MASI Report (1976?), about two-thirds of all technical staff work in the Center.

A vivid picture of the problem is given by the Smuckers in their evaluation of community development for the Northwest report on HACHO (January 1980). They write:

> Many of the personnel assignments are of course under conditions of hardship given the urban orientation and training of the program personnel. As is common with other large agencies operating programs in rural Haiti, there are complaints in local communities about the common pattern of short work weeks in the field. It appears that the salary structure does not provide sufficient incentive for stabilizing this situation, a problem not unrelated to the general question of funding. There appears to be a problem of staff turnover as well, including loss of personnel through emigration. Some personnel assigned to HACHO by the Ministry of Public Health have reportedly failed to arrive on assignment due to such fears as torrential flooding, for example, in Jean Rabel. An underlying issue in hiring is the preponderance of individuals from Port-au-Prince, or with families and other close ties there, tending to orient their lives less to the field site than to the capital city. (pg. 18).

One attempted solution to this problem has been the creation of donor-supported regional organizations with program responsiblities in specific geographic areas. Their legal status is that of a semi-autonomous agency subscribed to the Ministry of Agriculture and reporting directly to the Minister. The oldest of these agencies, ODVA, operates an irrigation project in the Artibonite Valley. It is primarily supported with funds from the IDB. In the nearby Plaine des Gonaives, the German aid program has been helping to fund a small irrigation project of 2,400 ha, working through another semi-autonomous agency, the ODPG. The present Minister of Agriculture was for a while Director of the OPDG, and after five years, the project seems to be doing well. Finally, in the North, the World Bank has been funding a multi-sectoral rural development agency, the ODN, which, like the others, reports to the Minister of Agriculture. Finally, there are HACHO and DRIPP.

HACHO, which began in 1966 as an AID-financed public health program designed to carry out disaster relief in the Northwest has evolved into a community development agency and now serves primarily as an umbrella for a

number of small-scale TA programs financed by different donor groups. Despite several reorganizations, its legal status remains undefined, and since the withdrawal of AID funds in 1980, the agency has been in decline. An attempt to come under the tutelle of the Minister of Agriculture was turned down.

DRIPP was financed by the CIDA for five years. Not quite a parastatal organization, it is better described as a program. However, after disclosure of gross mismanagement, late in 1981 the Canadians withdrew from the program which was responsible for a number of discrete projects in two agricultural districts southwest of Port-au-Prince. The Haitian Government has decided to continue with DRIPP and has appointed the former district agronome from Jacmel as its General Director. But funds have been drastically curtailed and DRIPP's future is uncertain.

We did not carry out a detailed review of the three regional development organizations (ODVA, ODPG, ODN). What follows are impressions based on some interviews, brief visits to each of the agencies, and scattered written reports. These organizations exist primarily as vehicles for donor-sponsored programs. A very large proportion of the budget of each agency comes from foreign assistance. All three agencies employ their own implementing staffs, who are on detail from the Ministry of Agriculture. Initially, ODN was intended to be primarily an organization that would fund specific projects and coordinate development efforts in its area but it appears that the cooperation received from the Ministry of Agriculture has been less than satisfactory, and so it began to do much of the irrigation work itself.

A review of the available annual reports, evaluations, and project documents from the ODN, ODVA, ODPG, HACHO, and DRIPP raises some question as to whether these organizations have, in fact, been able to date to overcome the inherent weaknesses of the Haitian administrative system.

First, the absorptive capacity provided by the new structures has been disappointing. For example, the World Bank project with the ODN was able to disburse only $4.4 million of a planned $13.4 million between 1977 and 1981. Other donors have experienced similar problems, whether executing projects directly through regular ministerial channels or through regional

organizations. The causes are diverse -- lack of counterpart funds, inadequate counterpart staff, personnel procedures, financial management procedures, etc. Overall, it might be argued that the regional organizations have been marginally more effective in moving resources -- both human and fiscal -- to the field than have inidividual projects but performance is still disappointing.

Second, although each of the agencies is managed by a Haitian director it has been common for expatriate staff to have explicit executive/management responsibilities above and beyond their technical assistance role (this has been much less so for ODVA, especially in recent years). This does, of course, reflect a concern for accountability and organizational performance associated with the preponderant foreign financing of these activities. It may even be the case that effective cooperation between Haitian and expatriate staff can bring about performance substantially higher than average for the Haitian bureaucracy. Nevertheless, the system continues to reflect a shortage of mid-level Haitian management which the regional organization approach has done little to correct.

Third, It has also been the case that the regional organizations have had difficulty in maintaining an adequate balance among their several activities and this in itself has inhibited the overall development of specific regions. HACHO made considerable strides in community health services and road construction but less so in irrigation and agricultural extension. ODVA has been effective in physical construction of irrigation works, but on-farm water management and maintenance of canals have both suffered from weaknesses in the extension organization. It will also be noted that consistently the weak link in performance has been improved agricultural production. Thus, unless the regional agency maintains a very narrowly focused set of activities, it eventually comes up against constraints external to the organization as it depends on the Ministry of Agriculture or other Ministries for supporting services. When these constraints are encountered, the organization either pursues targets of opportunity and distorts regional development priorities or it begins to absorb direct control over an increasing range of public functions.

The regional organization experience in Haiti has proven that interdepartmental coordination committees have been ineffective in providing the needed integration of public activities in the several regions. HACHO, ODN, and ODVA reports have all indicated that the lack of an overall regional planning mechanism which can provide both the guidelines and discipline for intersectoral collaboration and investment has been a serious weakness. For example, both ODVA and ODPG suffer considerable difficulties due to erosion in the watershed of the irrigation perimiters, but lack authority to deal with the problem. The coordination problem is also reflected in the paucity of adequate data on which to plan projects within the regions. All of the evaluation reports have stressed the delays and mistakes occasioned by insufficient understanding of local conditions as each donor commences field activities. The existing Haitian system provides neither a repository of experience gained nor a flow of available information within the system.

Fourth, a particular problem arises from the policy of paying foreign salary supplements to Haitian staff. The supplements appear necessary in view of the very low salary schedules paid out of the Ministry of Agriculture. In Port-au-Prince, technical staff can accumulate multiple jobs, but this is not an option in the field. Moreover, work in the field is supposed to be at least 8 hours, whereas the customary practice in the capital is to work no more than six. In order to attract good people then, it seems reasonable that they should receive a supplement. The problem arises from the dual loyalties this situation creates. The foreign technicians may begin to treat Haitian technicians as "their" employees and so undercut the Director whose authority is put into question. There are additional problems with personnel policy as such, which, under the tutelle arrangement, remains the prerogative of the Minister of Agriculture. The policy of salary supplements has been described by one senior IDB official as the single greatest problem that has arisen with field projects. But what to do about it, is not clear.

Semi-autonomous agencies exist in many parts of the world and have carried out successful programs of regional development. They differ greatly one from the other in their internal structure, the extent of their autonomy, their functions, and in many other respects. Some of them are world renowned, such as the TVA (U.S.), SUDENE (Brazil), the Cassa per il Mezzogiorno (Italy), and the CVG (Venezuela). In fact, this form of organization appears to be by far

one of the most effective ways to undertake regional development programs. Although they collaborate with regular government agencies within their own regions, agencies typically have their own operating staffs as well, and in the case of major construction programs, tend to rely on the private sector.

There is no reason then, either by looking at Haiti's limited experience with regional development agencies or at experience world-wide, to suppose this framework, given time, cannot be made to work in this country. On the other hand, given the extremely low level of public service organization in Haiti, and the particular difficulties of a rural development program that wishes to change farming practices, the level of efficiency that can be expected from a regional "authority" cannot in the long run be very much above that which is found throughout the Haitian administration. And the larger the agency, the more this will be true.

In the short and intermediate term, however, it is evident that regional development agencies can provide working procedures and incentives that encourage performance substantially above the national administrative norm so long as external funding continues. In addition, to the extent that these organizations have regionally focused and clear-cut mandates, such as the ODPG and ODVA irrigation schemes, they may have a substantial impact. They also permit the concentration of expatriate technical staff close to the field problems and have sufficient economies of scale to internalize many key support functions. Regional development agencies thus appear to offer considerable promise for moving productive invesment quickly into rural areas. Nevertheless, and for the same reasons, their "institution building" efforts are highly susceptible to interruption.

With this background in mind, let us explore the option of implementing A.I.D.'s expanding effort in agriculture through some form of regional organization. A regional sectoral approach of this kind involves a more sustained, focussed, and concentrated set of activities focussed on a single region and under the administration of a sectoral regional agency for agricultural and natural resources development. Its major points of difference with Option (a) (the project approach) is the regional concentration of programs and the specific instrument for administration, which would be a regional agency.

The feasibility and desirability of a regional approach has been discussed in an earlier chapter. Here it will be assumed that the regional option has been selected, and that the region in question is one of the major areas into which the country has been divided for planning purposes, or Region 4 which is centered on Les Cayes in the Southwest. This region contains approximately one million people, equivalent to one-third of Haiti's rural population. It is also one of the neediest regions in the country.

To develop the agricultural potential of this region, we envision the creation of a new regional development organization. It might be called the Organisme pour le Developpement Agricolaire Meridionelle (ODAM) or, in English, Agency for the Agricultural Development of the South. Organizations of this type in Haiti are semi-autonomous legal entities subscribed to a Ministry. The new organization, ODAM, would be subscribed to the Ministry of Agriculture which already has control over several such organizations: one in the North (ODN) and two in the so-called Region Transversal (ODPG at Gonaives and ODVA in the Artibonite Valley).

Two forms of organizing ODAM may be envisioned: in the first, it would be an implementing agency, disposing over its own staff which, presumably would be (on loan) from the Ministry. The second way would be to limit the agency to programming and funding, implementation being left to local District Offices as under Option (a). Given resource constraints, the latter is the more - desirable alternative. In both instances, ODAM would be authorized to contract for complementary activities with specific Ministries, such as road construction, the construction of health clinics, a mosquito eradication program, a specially designed rural education program, etc. But essentially, it would remain an agriculture and resources agency directly accountable to the Minister of Agriculture at Damien. Its principal task would be to undertake field projects of the kind mentioned in Option (a).

Assessment: Experience with regional development organizations in the agricultural field is quite diverse in Haiti (see Appendix). The overall conclusion is that they can be made to work, even as they go through growing pains. Their dependency on foreign aid is plainly evident. HACHO, a community development agency for the Northwest and not, strictly speaking, a

government-mandated regional agency in the legal sense, once enjoyed considerable esteem but crumbled when AID withdrew from it in 1980. It still exists, but its resources are pitifully small, barely enough to keep the operation afloat. Now it can do little more than struggle on in the penumbra of Haiti's public administration. Without substantial foreign donor support, government agencies don't thrive in the rural periphery. All power remains with the Center.

A similar fate is likely to befall DRIPP, a multi-purpose rural development program which works in two large districts two hours out of Port-au-Prince. It, too, is not, in the strict sense, a regional agency, though it comes close to being one. Recently, the Canadian Government withdrew from DRIPP (for reasons of alleged mismanagement), but the GOH decided to continue with the operation, albeit on a vastly reduced scale. During the five years of Canada's involvement with the program, some 83 percent of the project funds were supplied through CIDA. What is left now is the 17 percent contribution from the Haitian budget. Whether this is enough to sustain the program, and whether and how it can recover from the shock of foreign withdrawal, remains to be seen.

ODAM would not be immune from these troubles, though as a full-fledged regional agency it would enjoy a legal status that neither HACHO nor DRIPP have ever had. I would also be able to build on the experiences of ODVA and ODPG -- paying more attention to a "learning process" approach to compensate for inadequate field data on the one hand and increased attention to improved management procedures on the other. Its principal advantage would be to make visible a serious commitment to regional decentralization in a major sector and to facilitate the coordination of projects on the ground by moving the headquarters of the agency into the region itself. Recent proposals by the Ministry of Planning to establish a regional planning unit at Les Cayes could, over time, help to provide needed intersectoral linkages -- an important weakness of earlier regional efforts.

Planning Region 4 of the Ministry of Plan's Regional Development classification (roughly the western half of the Southwest Peninsula) contains four District Offices of the Agriculture Ministry at Les Cayes, Coteaux, Dame-Marie, and Jeremie. All four of these Districts would be

activated by ODAM to develop suitable projects within their own areas. There would be less competition among districts for projects under Option (b) than (a) which is nationwide, and the absorptive capacity of Region 4 for project funds would tend,as a consequence, to be more limited. On the other hand, supplementary investments promoted with other Ministries would link project areas with each other and create a more integrated region. A major contribution could be made, for instance, through a massive road construction program in support of rural projects. At present, Region 4 is one of the least accessible areas of Haiti (especially during the rainy season). A concentred effort of agriculturally oriented projects together with an extensive road building program could accomplish quite a bit for this region which is one of the most neglected in the country.

ODAM would not necessarily represent a dramatic breakthrough. Creating a new organization is always risky. The Ministry of Agriculture already has three regional organizations operating in different parts of the country. Why add a fourth, it might be asked. Could not the field projects be managed out of Damien? Could not road construction in the Southwest be encouraged in other ways? Why add to administrative complexity?

The arguments for an ODAM are not easy to sustain, unless it is seen as a step towards something larger, that is, a general rural development effort in one region. This is discussed as our third option below.

Option (c) Comprehensive Rural Development

5.3.3 Elements of a Regional Comprehensive Rural Development Approach. We will describe this option in greater detail than the other two, in part because of its complexity. It is not discretely different from Option (b), the principal difference being that in its purpose and intention it is explicitly multi-sectoral: it envisions comprehensive rural development, and not merely in the agricultural sector. For this reason (b) and (c) flow into each other, and elements of (c) may well be incorporated into Option (b).

For this new multi-sectoral approach, two alternative forms may again be contemplated: either the agency becomes self-contained and disposes over its own project implementation staff, or it limits itself to planning, programming, and finance of those field project activities within the region that contribute to overall rural development.

As under Option (b) the first of these alternatives is not desirable. It would in practice mean creating a kind of shadow government in Region 4. Given the size of the region being contemplated, which includes about one-fourth of Haiti's rural population, an approach which bypasses all ministries and has its own implementation staff, would soon show signs of stress. The development administration of one million people is an expensive proposition. The scale of such an operation would make it extremely unlikely that it could operate at an efficiency level very much above that which prevails in the rest of the country. Leaving the agency to be created as a planning and financing organization would be a far more reasonable and flexible solution. The following description of its major elements therefore assumes this second alternative.

*legal status: the agency, which we may call Organisme de Developpement Rural Meridional (ODRM), would be established as an organisme d'utilité publique.

*tutelage: ODRM would be subscribed to a new Interministerial Council for Rural Development (ICRD)[1]. The Council would include, as a minimum, the following ministers: Agriculture, Public Works, Health, Education, Planning, and Finance. The Council would function at the political level.

*funding: initial funding would come from GOH, AID development assistance and counterpart funds. Other national and international contributions in the form of both grants and loans might eventually become available.

*direction: Haitian and American co-directors acceptable to the ICRD.

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1. Alternatively, and in line with a proposal by Ministry of Planning (SEP) the ICRD could be named Mission Internationale d'Amenagement du Territoire et Planification Regionale Integrale.

*location and area of responsibility: Les Cayes (headquarters) and Planning Region 4.

* purpose: to promote the broad economic, social, and physical development of the people and lands of the southern region, with particular attention to the rural population and its condition of life and livelihood. Specific objectives will emerge from an operational regional development plan which addresses the many problems of regional rural underdevelopment. Initially, however, ODRM would focus primarily on agriculture and natural resources, inclusive of the following:

--land and land use
--flood control and reclamation
--water management and irrigation
--agricultural and livestock production
--marketing
--agro-industries
--transport and communication
--community action
--related urban investments essential to furthering the other purposes of development in the region.

*internal structure and staff: ODRM would have a simple administrative structure and remain relatively small in size. Its principal technical staff would include, in addition to the two directors and legal counsel, the following (staff description is for illustration only):
--Program and projects (10 Haitian professionals and 5 expatriate))
--Finance (8 + 1)
--Administration (4 + 1)

This suggests an organization of less than 30 Haitian technical staff plus 7 expatriate technical advisers.

*coordination with regional planning: The intensification of project activities in rural development within Region 4, the vast majority of which would be carried out by existing ministries, would require for each of the

functional ministries concerned, an increased capacity for implementation in the region. Creating this capacity is clearly a responsibility of the GOH, but the pressure for improved performance (and increased operational budgets) is likely to be generated by the mere presence of ODRM and its stream of project funding. These projects, of course, must be integrated with overall regional development. In short, comprehensive regional rural development requires a serious and sustained planning and coordination effort.

Fortunately, the basis for such an effort has already been laid with the recent establishment of a Regional Planning Office by the Ministry of Planning (SEP) in Les Cayes. To carry out its expanded responsibilities effectively, this Office, which is one of four in the country, will require strengthening and support, including technical assistance.

In this upgraded form, the Regional Planning Office of SEP could become the Technical Secretariat of a Regional Planning Council (RPC) to be established by bringing together the principal staff of Ministries' field offices in the region. (If office regions do not coincide with Region 4, the Office Director with responsibility for the area in Region 4 will be asked to join the Council). In drafting the regional plan, the Planning Office of SEP would be in close contact with the program and project staff of ODRM, since it is the latter agency which, in the main, would fund the principal development activities in the region. (There would of course also be projects funded outside of ODRM's framework, and these would be included in the Plan).

Finally, the GOH may want to establish, in line with proposals already under consideration, a Regional Community Council (RCC) for to advise the RPC on project priorities and for establishing a direct link with the people of Region 4 at the level of planning.

In sum, then, the present proposal envisages, on the side of the Haitian Government, a greatly enhanced capacity for regional planning; for project design, selection, and implementation at the level of ministries'field offices and for program coordination. SEP's regional office would play a strategic role in this planning-implementation process and provide the direct link between ODRM and national planning. The Regional Development Plan, inclusive

of specific projects and programs, would require approval by the Interministerial Council (ICRD) before it could become the basis for implementation.

The following diagram attempts to provide a rough diagrammatic representation of the relationships discussed.

*Major functions:

a. ODRM would be authorized to make performance contracts in strict accordance with the approved regional plan, with both public and private agencies (both commercial and PVO's), and with universities, inside and outside of Haiti for work in the region. (Contracts would be made with functional Ministries and would be carried out through the regular administrative structure of Haiti).

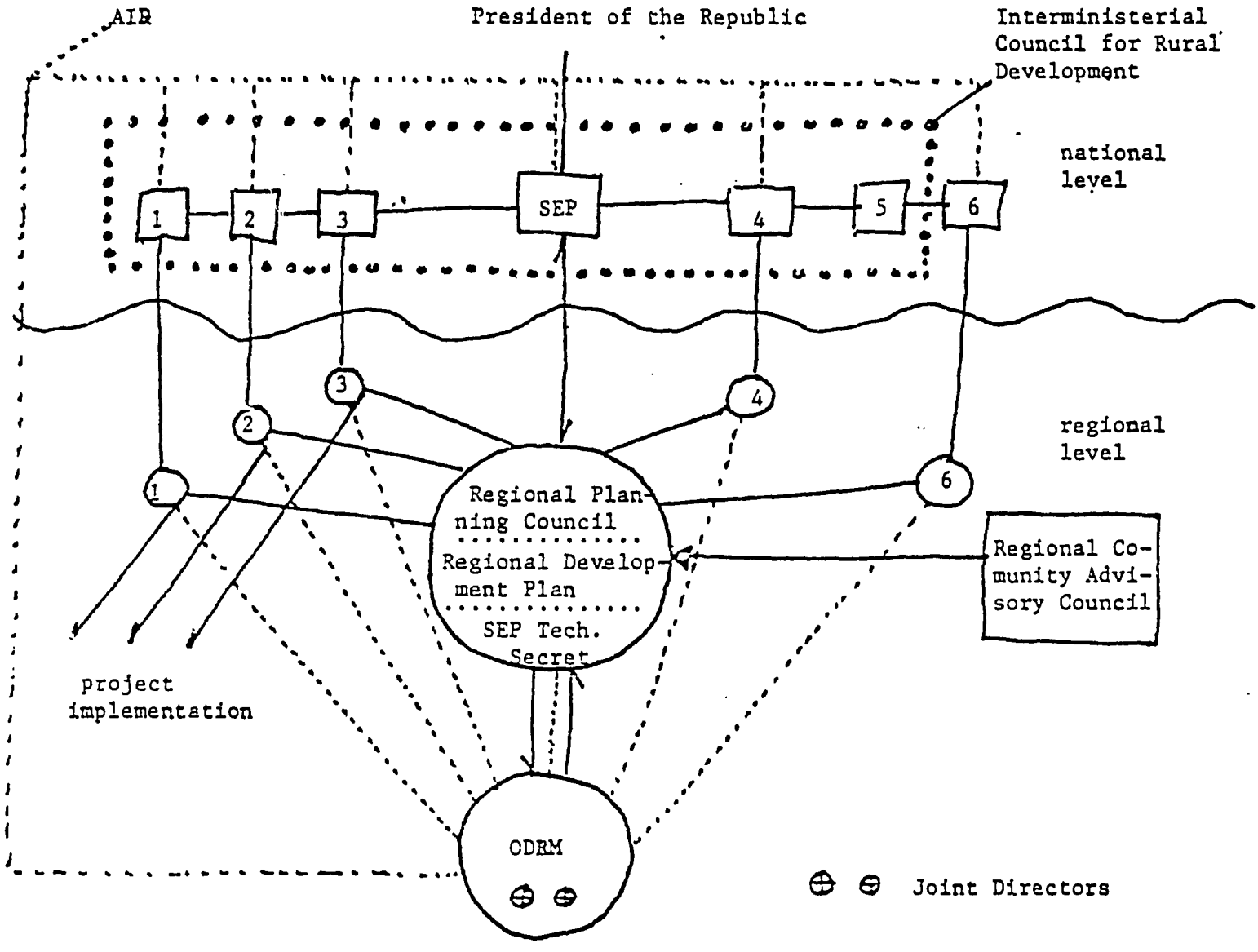
b. ODRM would be authorized to enter into cooperative agreements with other parties and to set up, when appropriate, small loan funds and to provide technical assistance.

c. ODRM would be charged with monitoring and assessing progress towards the outlined objectives of the Plan and to render an annual report of its activities to the ICRD.

*personnel: ODRM's Haitian staff would be recruited in the open market at salaries competitive with those in Haiti's private sector. In the event that staff members are seconded from positions in Ministries, they would receive comparable compensation with personnel recruited in the open market.

Assessment: In contrast to ODAM (Option (b), ODRM would not only be explicitly oriented to comprehensive rural development, but would act much more like a regional authority, being accountable to an Interministerial Council for Rural Development and using as its principal method of implementation the performance contract.

Another unique feature is the regional planning machinery which it would nuture into existence: the first attempt in Haiti to develop a regional



Ministries:
1 Agriculture
2 Public Works
3 Health
4 Education
5 Finance

ODRM: Organisme pour le Developpement Rural Meridionelle

A SCHEME FOR REGIONAL RURAL DEVELOPMENT PLANNING IN HAITI'S REGION FOUR (South)

plan consisting of actual and fundable projects. This plan would be drawn up by an agency of the Haitian Government, the Regional Planning Office of SEP, in collaboration not only with ORDM but with the principal ministerial field offices in the region. Eventually, a Community Advisory Council may be called into existence to establish a link to the political realities of the region.

If this approach were successful, it would clearly have far greater effects on living conditions of the Haitian people than either of the other options. Moreover, after some time, ODRM would undoubtedly attract other donor contributions and would thus become less dependent on AID.

Being deeply enmeshed into Haiti's bureaucratic structure, ODRM cannot long operate at levels of efficiency substantially higher than those prevailing elsewhere in the country. At the same time, however, the proposed operational structure is likely to have a disciplining effect on Haiti's public administration and lead to an overall improved performance. In other words, ODRM would be big enough in the Haitian context to have a national and not merely a regional effect.

Successful regional development in the South would lead to a regional imbalance among Haiti's rural areas. But such an imbalance is not necessarily undesirable if it encourages compensatory and countervailing efforts elsewhere.

It should also be noted that the proposed Interministerial Council for Rural Development would require a new law.

Successful implementation of Option (c) would require higher development assistance levels than those presently projected. Although the absorptive capacity of Region 4 is obviously limited, it may be assumed that after a few years as much as $20 million a year could be spent in the region, not counting Haitian contributions.

In short, Option (c) would represent a bold attempt at "turning Haiti around." It would have to be supplemented by other measures at the national level. And it would be a risky undertaking. For this reason, it may be seen as a long-term goal, rather than a short-term objective.

Chapter VI: Role of PL 480 Food Aid Programs

6.1 Current Levels by Commodity and Program

Public Law 480 food programs continue to overshadow other concessional imports by Haiti, and to represent a substantial portion of the nation's supply of basic foods. Combined PL 480 imports supplied 15.5 percent of the wheat and 10 percent of the rice in Haitian diets. Despite sustained progress toward self-sufficiency in rice by 1985 and potential for improvements in domestic production of corn, sorghum and other foods, Haiti will become increasingly dependent upon PL 480 foods in the years ahead (Tables VI-1 to VI-3 below).

Wheat and wheat flour have become increasingly dominant in Title I shipments reaching 17,365 MT or 10.6 percent of baking requirements in 1981. Title I rice requirements are tapering off, with much of the 7,900 MT received in 1981 still in Magasin de l'Etat warehouses awaiting completion of the December-January paddy harvest. With the start up of the modern SODEXOL oilseed extraction plant, import needs have shifted abruptly from vegetable oil to soybeans and/or other oilseeds to supply the plant. Full capacity operation of the Minoterie-Maple Leaf feed mill will require substantial feedgrain imports.

The mix of Title II commodities brought into Haiti during the past fiscal year is detailed by PVO in Table VI-4. Soy fortified bulgar wheat is the dominant product at 11,238 MT, or 45 percent of total Title II tonnage. Corn-soy meal makes up 25 percent, followed by SFCM at 14.3 percent, non-fat milk solids at 7.4 percent and vegetable oil at 6.7 percent and flour at 1.5 percent of total volume. The commodity mix for each agency reflects program mix, area served and agency policy as well as relative demand by participants receiving the foods. [1]

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1. Smucker, G. and Smucker, J.N., HACHO and the Community Council Movement, USAID, 1980.

6.2 Recent Development Affecting Haiti's Needs for Concessionary Food Imports

Major developments affecting Haiti's needs and receptivity for PL 480 food programs include: (1) those growing out of the tightening foreign exchange situation, (2) those arising from the growing demand for bakery products, (3) those related to the SODEXOL plant and the vegetable oil situation, and (4) those related to the Minoterie-Maple Leaf feed mill and feedstuffs, poultry and livestock situation.

6.3 Adjustment to Tightening Foreign Exchange

The growing foreign exchange problem and related IMF negotiations, import controls and tariff revisions, summarized in the first section of this report, have major impacts on Haiti's forthcoming needs for PL 480 food aid. The nation must depend upon increasing volumes of concessional imports of wheat, oilseeds, feedgrains and other agricultural raw materials for domestic processing into food in the years immediately ahead if it is to avoid a major foreign exchange crisis or devaluation. The GOH must accept additional conditions and oversight by donors as necessary to attract the regional tonnage under PL 480 and other concessional programs. The complexities involved require the GOH to develop additional expertise in commodity situation analysis as well as capability to respond quickly and decisively. In light of these requirements, the team recomends that a portion of PL 480 I/III local currency proceeds be used by the GOH to hire an agricultural economist with expertise in such questions as marketing of PL 480 food aid commodities, their effect on domestic production incentives and the design and implementation of the Title III conditions described below. Comparable expertise and authority for decisive action must be lodged in USAID/Haiti.

6.4 Response to Growing Demand for Bakery Products

Some depth of understanding of Haiti's food situation is required to comprehend the rapidly growing commercial demand for bakery products and the derived demand for high-protein milling wheat -- a volume of demand projected to grow at an annual rate of 15 percent and to require another modern flour

mill by 1985. The demand for white bread and other bakery products in Haiti is very responsive to increases in income (high positive income elasticity of demand), and a major component of the growing demand comes from the relatively high income consumers in Port-au-Prince and smaller urban centers. Such consumers represent a small fraction of the total population, however, and cannot explain an annual growth approaching 10,000 MT of milling wheat. Despite their extremely low real disposable incomes, the masses of urban poor and rural peasants are buying more bakery products at prices which are high even by U.S. standards.

Three major factors seem to be combining to explain this phenomenon. The fact that bakery products are ready to eat gives them comparative advantage (1) as convenience foods and (2) in direct saving of increasingly scarce and expensive cooking fuel. Bread, crackers and other bakery products can be eaten at the market, on the road, and in the field with no time lag between expenditure and calorie intake, and with no additional expenditures for food preparation. These factors combine with (3) relative prices which make white rice more expensive than bakery products, and provide incentive for rice farmers to sell rice and buy crackers as well as maize, sorghum and plantains.

The processing and marketing system is in place to serve the growing demand for bakery products. The Minoterie-Maple Leaf flour mill located in the grain processing complex north of Damien has been remodeled and expanded to daily capacity of 11,000 bags (100 lbs. or cwt. per bag) of bakery flour. Current daily production is running close to 10,500 bags. Port facilities for receiving bulk wheat and loading bulk millfeed for export have been improved. Modern bulk grain storage capacity at the mill is 22,000 MT; bagged flour storage capacity is 100,000 bags and present policy is to maintain 50,000 bags. Through the exclusive agency of the Regie du Tabac, bakeries and wholesalers pick up flour at the mill in full truck lots. The mill does not produce soy-fortified flour or other speciality flours, and does not intend to do so. The present continuous flow system would require an estimated investment of $400,000 and operations outside the present multi-story production lines to produce speciality flours. Such flours continue to be imported as flours.

Minoterie-Maple Leaf executives anticipate the need for additional flour milling capacity by 1985. They indicate high probability of locating a complete new mill at an alternative site in the Port-au-Prince area rather than further expansion at the present grain processing complex.

Flour prices are controlled by GOH. Currently the most popular flour, Superior, has an ex-mill price of $21.88 per cwt. bag, but the price to bakeries and wholesalers is $24.90, representing a Regie commission, or tax of $3.52 cwt. Less than 2 percent of the output is retailed as flour, and sells at 26 cents per pound in local stores and supermarkets. Commercial imports of wheat flour are on the "controlled" but not "restricted" list of import commodities.

6.5 SODEXOL and the Haitian Vegetable Oil Situation

SODEXOL, a fully-modern solvent oilseed extraction plant located adjacent to the Minoterie-Maple Leaf mill, is in full operation, producing semi-refined oil and soy meal and flour from imported soybeans. The plant has a rated capacity of 360 MT/day of oilseed input which at 18 percent extraction can produce daily 63 MT of semi-refined vegetable oil and 280 MT of soybean meal. It is designed to operate 24 hours/day on a continuous basis, and currently is running at about 350 MT/day. It is served for bulk unloading of oilseeds and bulk loading of oilseed meal for re-export directly through the Minoterie-Maple Leaf port. Facilities are in place for receiving domestic oilseeds and loading oilmeal by truck in bulk as well as in bags. The facility is complete with mill equipment for producing specialized soy flour, laboratory, reserve water supply and employee cafeteria.

SODEXOL is capitalized at more than $12.5 million, including $2 million equity capital shared three ways by the Haitian Government, Haitian private investors (LINSA), and Universal Seeds and Oil Products, Inc. (a subsidiary of the Eisenberg group based in Israel and Panama). Details and projections are contained in World Bank Report 3079-HA. Implementation of the program was opposed by international donors because of negative impacts on the balance of payments, estimated to cause a net outflow of $14.5 million per year, its minimal need for Haitian workers, a negative impact on domestic oil refiners (increased price for semi-refined oil from $718/MT to $1067/MT) and

its perpetuation of prices of vegetable oils to consumers representing $470 MT (62 percent) the over world price for refined oil ($1223/MT vs. $753/MT). These objections remain valid, but are now in a sense irrelevant. The plant is a reality, and its financial cash flow to stockholders is assured by protective government policies, including restrictions on commercial imports of semi-refined vegetable oils. (See Chapter III above for additional discussion of these issues.)

The existence of SODEXOL provides an opportunity for a set of strategies fully consistent with USAID and PL 480 objectives. It provides a hungry and ready market for peanuts and other oilseeds which have potential in the farming systems of Haitian peasants. It provides ample supplies of high quality oilseed meal for livestock and poultry feeds for Haiti and other developing nations of the Caribbean. It provides an opportunity for domestic production of soy-fortified foods for distribution through food distribution and other health programs. It provides an opportunity to substitute domestic vegetable oils for imported oils under food and health programs. It provides an opportunity to consider soybeans as a PL 480 commodity under Title III in the magnitude of $25 to $30 million per year over the next five years. Such support should be associated, however, with significant reforms in agricultural price and tax structures along the lines recommended in Chapters I and II of this report.

6.6 Minoterie-Maple Leaf Field Mill and Feedstuffs Situation

The current feedstuffs supply and demand situation in Haiti is "dynamic" and difficult to assess. The Minoterie - Maple Leaf feed mill at the grain processing complex came on stream in 1980 with capacity to formulate 75 MT/day of poultry and livestock feeds. The feed mill is attached to the bulk port facilities of the flour mill and has the pelleting equipment formerly used for export wheat millfeed at the flour mill. Major feed ingredients are soybean meal from the adjacent SODEXOL plant and commercially imported No.3 yellow dent corn from the USA. Pre-mixes of trace ingredients are imported from the Dominican Republic. Growth in demand for prepared feeds has been disappointing and the mill is operating far below capacity and sustaining large financial losses. Feeds are distributed through private distributors to

integrated broiler producers, and caged layer operators, mostly in the greater Port-au-Prince area. Prices to the user ex-mill in bags are $18.60/cwt. for 20 percent protein broiler grower mash and $16.95/cwt. for 18 percent protein layer mash. These prices are barely competitive in Port-au-Prince with imported feeds from the Dominican Republic and are reported to be $2.00 to 2.50/cwt. above competitive imports in outlying areas.

The mill reports to have no direct domestic competition. Other major operations coming to the attention of the team are integrated private sector feed mill broiler producers, who have their own corn plantations. The one near Hinche reportedly has 3.000 ha. in corn production for this purpose.

In spite of the current problems, the present feed industry provides the needed basis for developing profitable supplemental poultry, livestock and possibly fish pond enterprises consistent with existing farming systems. A PL - 480 (Title III) strategy which includes corn or grain sorghum for feed manufacture could enhance the poultry and livestock industry. If and when domestic sources of alternative high - energy ingredients for formula feeds can be developed (e.g. cassava chips), potential benefits will be magnified accordingly.

6.7 Recommendations for Title I (Title III) Programs

Recommended commodities for Title I (Title III) food assistance include milling wheat, rice, soybeans and feed grains. With the exception of rice, these commodities serve as agricultural raw materials for domestic processing into food and can be received in bulk. Wheat and soybeans produce substantial quantities of exportable by - products so that foreign exchange earnings are generated in addition to direct foreign exchange savings represented by the food content of the imported grain.

Wheat and flour imports (in wheat equivalent) to support Haiti's bakery industry reached 164,222 MT in 1981, and are expected to reach about 200,000 MT annually by 1985 (Table VI-1). These figures exclude Title II fortified bulgar wheat but include the wheat equivalent of fortified flour. If 20 percent of the projected milling requirement is met by Title I (III) wheat,

needed tonnages would increase from 34,487 in 1982 to about 40,000 in 1985. Using 1983 as base and an average export price of $175/MT, representative annual counterpart fund generation from wheat would be $6.3 million. At prevailing milling rates, about .27 MT of millfeed can be exported for each ton of wheat imported. For the 1983 base this means 9,777 MT of millfeed, which at $125/MT would generate more than $1.2 million in foreign exchange. Annual average requirements for the period 1981/1984 would be 36,211 MT.

Rice import requirements are projected to average only about 2,000 MT for the next three years and come to an end thereafter (Table VI-2). If the total requirement is met by Title I (III), at an average export price of $500, annual counterpart fund generation from rice would be $1.0 million for the next three years.

Soybean and other oilseed requirements to supply Haiti's vegetable oil needs are projected to increase from about 127,000 MT in 1982 to 147,000 MT in 1985 (Table VI-3). The total oilseed requirement for the plant is currently imported, but potentials for peanuts and other locally-produced oilseeds look promising. The World Bank analysis is based on domestic production of 10 percent of plant requirements by 1985 and 50 percent of requirements by 1989. For the next three years total annual oilseed import requirements are likely to average 130,000 to 135,000 MT. Using the lower figure and an average soybean import price of $275/MT results in estimated foreign exchange outlay of $35.75 million per year. If 75 percent of the total requirement (97,500 MT)were supplied by Title III soybeans, the annual counterpart fund generation would average $26.8 Million. Assuming the entire oilseed meal by-product were exported, average annual tonnage would be about 78,000 MT; at a realized average export price of $250/MT, the foreign exchange earnings to Haiti associated with Title III soybean imports would be $19.5 million. As domestic production of oilseeds, such as peanuts, expanded, the need for imports, including PL 480, would decline.

The team recommends that certain objectives and conditions (described below and in the next section) be attached to the provision of PL 480 soybeans. These conditions suggest that soybeans might be a possible component of a Title III program.

As vegetable oil accounts for a significant portion of the calorie intake of urban and rural Haitians, it is important to maximize the potential nutritional impact of providing soybeans on a concessional basis for local extraction. Under a Title III program there are at least three ways positive nutritional impact might be achieved: (1) a negotiated reduction in vegetable oil prices (to the consumer), (2) an agreement by the GOH to contribute refined oil to Haitian and International PVO feeding programs, and (3) an agreement by the GOH and the Minoterie to use a portion of the oilseed (soy) meal to produce a blended weaning food to be sold through existing channels and to be distributed through public sector delivery systems (hospitals, clinics, etc.)

From a nutritional perspective minimum requirements for providing 75% of the oil seed to be utilized by SODEXOL would be that the GOH contribute refined oil to existing and planned feeding programs and that a major portion of the oilseed meal be utilized for activities related to local human consumption (e.g., blended flows, weaning food, etc.) as opposed to animal feeds or re-export.

Feed grain imports that supply Haiti's poultry and livestock producers through the Minoterie-Maple Leaf feedmill complex could vary from 1500 MT to 10,000 MT per year, depending upon the competitive position of the industry. Feed mill executives indicate that 1500 MT of Title III No. 3 yellow dent corn in 1982 would go far toward helping resolve current problems. If this is true, and feedstuffs demand increase as expected, dent corn imports might reach 5000 MT in 1983 and 8000 MT by 1984. If one uses an average annual base of 5000 MT of corn or other feed grain under Title III for the next three years and a projected world price of $140/MT, the potential annual counterpart fund generation is $700,000.

Total annual potential Title III magnitudes by commodity arising from the above calculations over the next three years are:

Commodity	Metric Tons	Counterpart funds	Export Earnings
Wheat	36,211	$6.3 million	$1.2 million
Rice	2,000	1.0 million	-
Soybeans	97,500	26.8 million	19.5 million
Feed grains	5,000	0.7 million	-
Totals	140,711	$34.8 million	$20.7 million

6.8 Recommended Title III Strategies for Haitian Implementation

A Title III program could be phased-up over a 5-year period while the current Title I program is phased-down, so as to protect development projects now dependent upon Title I proceeds for counterpart. Recommended strategies to achieve USAID and PL 480 objectives for implementation by Haitian agencies under Title III include (1) reform of agricultural prices and tax structure, especially for coffee and other export crops, (2) reduction in vegetable oil prices to the consumer, (3) provide feed mill technical assistance and access to small poultry (50-100 bird flocks) and livestock producers, and (4) improvement in efficiency of wheat flour distribution and marketing by permitting wholesalers, bakers and other purchasers to buy flour directly from the Minoterie flour mill. Additional strategies include: (1) substitution of domestic for imported vegetable oils in food distribution programs targeted to the poor and malnourished, (2) domestic production of specialized high-nutrition food products, (3) introduction of corn and soy flours into bakery products and (4) gradual increase in import duties on wheat and wheat flour in line with their world prices. Implementation of these strategies will require breaking new ground, but can be accomplished under PL 480 Title III guidelines.

6.9 Substitution of domestic vegetable oil in food distribution programs

Vegetable oils of U.S brands have been an increasing component of Title II commodities, reaching 1,656 MT in 1981. Haiti is now self-sufficient in vegetable oil extraction and refining capacity, but requires large volumes of oilseed imports to supply their capacity. Continued importation of US vegetable oils under Title II would work at cross purposes with import of Title III soybeans. Furthermore, there is risk of imported oils distributed under Title II programs finding their way to Port-au-Prince supermarkets. Perceived differences in quality and resulting price differences throughout the indigenous marketing system provide the incentive to bring the US brands back container by container. We believe that these problems can be overcome by a contractual arrangement for supplying domestic vegetable oils to Haitian and international PVOs for distribution aimed at alleviating health and nutrition problems just as is now the case for imported Title II

vegetable oils. Oversimplified as it may be, we visualize the scheme working as follows:

(1) The needed amounts of local currency generated from Title III soybeans would be immediately assigned to a responsible GOH agency for the purchase of domestic vegetable oil.

(2) The GOH agency would place the delivery call to selected oil refiners under annual contract for supplying agreed quantities and quality of vegetable oil, with copy to the international/Haitian PVO(s) requiring oil under the given delivery call, and copy to USAID.

(3) Upon acknowledged receipt of the oil by the PVO(s), the refiner's invoice for the delivery call order would be paid by the GOH agency.

(4) The GOH agency would submit copies of the paid invoice to the responsible office of the Ministry of Finance and to USAID indicating proper expenditure of the counterpart funds allocated to the program.

Because the SODEXOL plant operates on a continous basis, the time for the process, from receipt of Title III soybeans, use of the beans for production of semi-refined oil, production of the refined oil and delivery to PVOs can be minimized. Perhaps 2 to 4 weeks is all that is required. This aspect of the recommended program makes it potentially much easier to handle than is true of counterpart funds used for capital development programs.

6.10 Domestic production of specialized high-nutrition food products

With the capacity of SODEXOL to produce specialized soy flour products and its excellent laboratory facilities, together with potentials for blending both dry flours and liquid products, Haiti has potential for producing speciality high-nutrition products so needed in health and nutrition programs. We visualize two distribution outlets for such products. One is through the PVOs, both international and Haitian. Those voluntary programs which are consistent with the health programs of USAID and GOH could be supplied with identified specialized products under a scheme parallel to that described above for vegetable oil.

The other outlet for special zed high-nutrition foods is the existing marketing systems for packaged food and pharmacy products. This part of the

strategy might be implemented through a joint SODEXOL-GOH-USAID (and/or other donor agency) project, and financed with Title III counterpart funds. Once the design, market testing, advertising and promotion, etc. have been worked out and demonstrated, the program should be commercially viable and require no more financial assistance.

Obvious scale economies and transfer effects will exist between the welfare channels and the private channels of the program as visualized. We see these interrelationships as desirable, amd recommend capitalizing on them through such things as common package design, product and/or brand names, advertising and promotion materials, etc.

6.11 Introduction of corn and soy flours into Haitian bakery products

Haiti's increasing dependence upon imported wheat can be tempered somewhat through introduction of corn flours and soy flours into blends with wheat flours to make a variety of tasty and nutritious bakery products. The more modern and innovative bakeries in the industry are the most promising target groups for such a program, with corn millers, SODEXOL, and Minoterie-Maple Leaf as supporting actors.

The introduction of corn flour into bakery products can reduce costs to the consumer as well as reduce Haiti's dependence on a food grain with no potential for domestic prodution. By increasing the demand for corn in relation to wheat, the strategy can enhance corn prices for added economic incentive and income for Haitian peasants. These are the goals of the corn-flour bakery-product strategy. The nutritional impact would be minimal.

The introduction of soy flours into bakery products would not reduce costs to consumers nor enhance incomes of peasants, but would add to the nutritional value of the ready-to-eat convenience foods which are becoming so popular in Haiti. With the SODEXOI plant in operation, the needed soy flours for bakery blends can be supplied to exact specifications. Once the educational work is done, the soy component of the bakery product strategy should be commercially self-sustaining. If not, use of a small amount of Title III counterpart funds

for a negative tax on soy flour would be more than justified on the basis of nutrition and human productivity.

We visualize implementation of the strategy through a carefully designed program with and for the commercial bakery industry. Training on technical aspects of flour blending and baking as well as the needed technical assistance could be programmed directly with Title III counterpart funds. Specialized practical training on flour blending and baking is available at the American Institute of Baking in Manhattan, Kansas, and could be conducted in the French language if desirable. Such training would incorporate the use of special additives to achieve the desired appearance and taste of bakery products from blended flours. The training also could be brought to Haiti through the centrally-funded cooperative agreement with the Food and Feed Grain Institute at Kansas State University.

The program will be most successful if targeted at a size to make a real impact. We believe a goal of 20 percent corn flour and 10 percent soy flour in individual bakery products is not unrealistic. If these products are designed to reach the urban and rural poor through the existing system of market women, then a market penetration within five years of 30 to 40 percent of total bakery products through these channels is realistic.

6.12 Gradual Increase in Import Duties on Wheat and Wheat Flour

The existing duties and taxes on wheat and wheat flour are helping to maintain a reasonable price relationship between bakery products and domestically produced foods such as rice, corn and sorghum. They are passed directly to consumers, and more regressive than one might suppose given the widespread consumption of wheat products. A reduction of the duties would favor bakery product consumers, but increase dependence upon wheat. An increase in duties on wheat and wheat flour would have the reverse effect.

Given the dilemma, we recommend no change in existing duties and taxes on wheat and flour for the next twelve months. The level of taxation of wheat and wheat flour should be adjusted over time to maintain the existing relationship between the world and domestic price.

6.13 Program Emphasis in Use of PL 480 Counterpart Funds

The team has reviewed the total Title I counterpart fund budget for FY 1982 and participated in discussions regarding the need to expand that budget by a factor of three in order to make a sustained impact toward development goals. We have not, however, attempted to address the mix of counterpart funds by sector and program. Much will depend upon the priority strategies and organizational approaches finally selected for programming by USAID. The current FY 1982 allocation of Title I local currency proceeds is shown in Table VI-5 below. One specific recommendation made at the beginning of this chapter was to use a portion of the Title I/II local currency proceeds to hire an agricultural economist with expertise in food aid marketing and possible domestic production disincentives. This expert would play a critical role in helping to design, implement and monitor the various Title I/III recommendations made above.

We have also in the various chapters and sections of our report, identified recommended priority programs, and for some of them developed rough budgets reflecting ballpark figures of needed inputs to achieve targeted impacts. In the present section we have identified two closely-linked areas for special emphasis in order to make significant progress in controlling the pests (rats, birds, and insects) which Haitian peasants can so ill-afford to maintain. We visualize attacking the losses caused by these pests in the two-dimensional farming-system/food-system context.

The pay-off of success in such programs is immediate and direct. A reduction in field or post-harvest loss of food is a gain in amount of food avaiable to Haitian consumers. If the benefit from field loss reduction and half the post-harvest loss reduction accrues to farmers, the added net farm income impacts are also direct and measurable. To put the potential benefits into perspective, consider rice alone. The team estimates 1981 domestic rice production at 66,500 metric tons (Table VI-2), which at an average wholesale price of $48.00 per hundred weight, is valued at $70.2 million. A one-percent reduction in field loss plus a one-percent reduction in post-harvest loss means 1,330 additional metric tons of food for Haitian consumers and $1.4 million additional disposable income in rice areas such as the Artibonite Valley.

6.14 Post Harvest Loss Reduction

We propose a major thrust of applied research, demonstration and extension to reducing post-harvest food losses. The approach would be within the food system context, but with emphasis on the farm and first assembly levels. Without attempting to address program design, the general approach of the small UNDP-Damien project is a start (see Chapter II on agriculture). The team visualizes three field demonstration efforts in a region or regions, one in a rice area, one in a corn-sorghum area and one in a general farming area where beans and peas are important food crops. This plus research and technical support at Damien, short course participant training in the U.S., and travel and per-diem support for TDY technial assistance could make real impact within 2 to 3 years with an annual budget from counterpart funds of (G)2,750,000 ($550,000).

A rough annual budget for such a program is:

Ministry of Agriculture support	(G)500,000
Research (Texas A&M counterpart)	250,000
Regional demonstration and extension programs:	
Rice emphasis	500,000
Maize-sorghum emphasis	500,000
Beans-peas emphasis	500,000
Training and technical assistance:	
Short course in USA (10 persons at 2 months)	300,000
Technical assistance support (20 mm at $100/day)	200,000
	(G)2,750,000

6.15 Reduction of Field Losses

Field losses to maize, sorghum and millet, rice, beans, peas and other food crops from vertibrate and insect pests are alarmingly high in Haiti, and warrant sustained programs to cope with them at much higher levels of input than has been true in the past. Title III counterpart funds seem to be the logical source of assuring that is done.

Of highest urgency is continuation of the vertibrate pest control program now partially supported from AID/W funding which may be lost to USAID/Haiti.

Preliminary program budgeting indicates needed support from Title III counterpart funds to maintain the present program of about (G)600,000 ($120,000 US).

In order to make a sustained positive impact in field losses across the major food producing regions of Haiti, the present effort is only a start. We would suggest a budget and program parallel to that outlined for reducing post-harvest losses, preferably in the same areas selected for the post-harvest program. Our recommendation, therefore, for total annual Title III counterpart funding to support field loss reduction of food crops is (G) 2,750,000 ($550,000 U.S.).

6.16 The Title II Program in Haiti

It is the objective of the PL 480, Title II Program to provide supplemental foods of high nutrient value to improve the nutritional status of the malnourished and to enhance the general development process through the provision of a nutritional incentive. In Haiti, as in many developing nations, Title II foods are almost entirely directed toward three programs: School Feeding (SF), Food for Work (FFW), and Maternal Child Health (MCH).

School feeding programs normally serve a dual purpose: (1) they provide a needed nutritional supplement to the diets of students and (2) in societies such as Haiti's where food availability is often severely constrained, these programs serve as an important incentive to regular school attendance and increased alertness and awareness while in class. In this manner, the benefits of the School Feeding Program extend beyond the desired nutrition-related impact.

However, it should also be noted that there are potential negative characteristics to school feeding programs. First, it is frequently difficult, if not impossible, to target school feeding foods to malnourished children without also feeding comparatively well-nourished children at the same time. This may be somewhat less of a problem in a nation such as Haiti where there is such a high proportion of malnourished children in the general population, but this difficulty should not be overlooked. Also, foods

provided at the school may supplant, rather supplement, foods normally served at home, thus diluting the nutritional effect of the school lunch. In Haiti, it has been demonstrated that there is further dilution resulting from too little food being divided among a larger than planned number of students. This is an administrative problem due to fluctuating student populations.

Food for Work projects provide benefits to the development process. FFW support is normally directed toward small, community oriented self-help projects inspired by community members themselves. Such projects may relate to the construction of a school, clinic, or road, a reforestation effort, or of similar developmental importance as perceived by the community. The food is provided as wages "in kind" thus augmenting the severely limited incomes of the local people while encouraging their active involvement in developing their own resource base for community development. Further, the food is taken home to peasant families and serves as a supplement to a limited diet which is frequently of poor nutritional value, although dilution is again a problem in Haiti as the ration is divided among more than just the immediate family.

On the other hand, FFW projects can be extremely difficult and costly to administer by the private, voluntary organization concerned. Food for Work projects are typically small, of short duration, and numerous. The PVO staff are likely to find such projects very time-consuming (and thus resource consuming) to fully monitor and evaluate the activities of all the varied efforts. It must be considered if the nutrition and/or community development benefits of FFW projects are worth the time and resource investment necessary to oversee them or if real community development and participation benefits can be achieved in the short timeframe characterizing these projects. Furthermore it is all but impossible to evaluate the nutritional impact of the foods provided to the recipient family, again due to lack of organizational resources. Finally, it can be argued in some instances that the payment of FFW commodities may undermine the very community spirit of voluntary labor it is meant to enhance by providing "wages" for what otherwise might have been freely-given labor.

The third category, maternal-child health program support, is of particular interest from a nutritional viewpoint. Fundamentally, foods

provided through MCH and pre-school feeding services are the most readily targetted to the high "at risk" groups; children under 5 and pregnant or lactating mothers. Unlike other Title II programs, trained staff are normally available at the site of final distribution to see that the foods are distributed only to those clearly in need. Furthermore, records are maintained of each individual's health/nutritional status at the first visit and of their improvement or worsening over time. In cases of malnutrition, educational services are provided to teach the individual or his/her parent methods by which locally available foods can be prepared and served to shift the responsibility for health maintenance from the MCH service to the family, where it must ultimately rest if long-term improvement is to be expected. Where possible, further education for adults is made available in simple agricultural techniques to improve the quality and quantity of family food production in rural areas. This is currently done in some PVO and GOH Bureau of Nutrition projects in Haiti. While the wide-spread nature of malnutrition in Haiti and the lack of local resources are clear constraints, the potential for shifting responsibility for provision of foods to the government or other concerned local organizations is greater with MCH programs than with SF or FFW programs due to the greater ability to target foods to those who need it, to provide education that can deal with the problem at the family level over the long-term, and the lesser amounts of food required to implement a more carefully targetted program.

For all their values, especially in terms of nutritional targetting, MCH programs also present serious difficulties in effective implementation. The most significant problem faced in Haiti is the lack of a sufficient delivery infrastructure to provide MCH services to those most in need who frequently live in remote areas where access is difficult at best and where services are currently completely unavailable on any other than a very sporadic basis, if that. As will be mentioned a little later in this section, USAID's support of an expansion of the Haitian rural health delivery system may at least partially address this constraint. Other problems can be created with the introduction of foreign, Title II foods that will not always be available to the recipients. On the one hand, the individual will not always be able to find similar foods to continue the same therapy and, on the other hand,"tastes" may be created for foreign foods that depress demand incentives

for locally-produced foods. However, these problems are greatly mitigated by insistence that locally available foods be utilized in all education classes and Title II foods used only in cases of severe malnutrition when an immediate intervention is required.

In brief summation, each of these three major programs of the current Title II program in Haiti faces some difficulties that must be overcome, but each also provide certain benefits. School feeding complements the national education program, Food for Work encourages community organization and implementation of small-scale development projects, and maternal-child health provides both short and long-term nutritional benefits to at-risk groups suffering from severe malnutrition.

6.17 The Current Situation

6.17.1 Commodities Received

Table VI-6 provides a brief summary of the type of commodities to be imported during the course of Fiscal Year 1982. Soy-fortified bulgar wheat makes up nearly half of the total tonnage imported under Title II. In addition, it should be noted that whereas vegetable oils, particularly calorie-dense commodities of great importance in a calorie-deficient nation such as Haiti (as described in the Introduction to the report), represent only a little more than 6% of the total tonnage, they represent fully 17% of the total value of all commodities. Their importance should be kept in mind as a program for substitution with locally-produced oils is discussed in the section of this report dealing with the potential for a Title III program.

6.17.2 Recipients Served

Title II services in Haiti are provided largely by four US private, voluntary organizations: CARE, Church World Service, Catholic Relief Services, and Seventh Day Adventist World Services. Table VI-7 provides a breakdown of recipients receiving services on a combined basis from the four organizations. Statistics are provided for both 1980 and 1981 to demonstrate current trends in program levels. It should be noted carefully that the

statistics provided indicate the number of recipients served on a quarterly basis. On an annual basis, each program will provide services to a greater number of recipients than are enumerated in Table VI-7. This results from the fact that precisely the same people are not affected during each of the four quarters. This is especially true of Food for Work projects where the total of recipients annually may be three times or more the quarterly average. It should be reasonable to assume that more than 1,000,000 Haitians receive some assistance under Title II or approximately 20% of the population.

Table VI-7 clearly demonstrates that the school feeding program is far and away the largest program offered in Haiti. It surpasses both Food for Work and maternal-child health programs by a very wide margin, representing 70% of the current distribution. This figure should not be surprising as the Haitian school system, both public and private, provides an already established, comparatively wide-spread system through which to channel assistance. Of approximately 3,000 Haitian schools (2,050 private and 950 public), 1,368, or about 46%, are currently covered by the school program. In comparison, Food for Work projects are not related to a discrete system and the maternal child health system is still relatively undeveloped. However, in terms of measureable nutritional impact, it is not encouraging to note that school feeding is receiving the bulk of resources, but is also absorbing a growing proportion of total resources.

6.18 Discussion and Recommendations

The food availability situation in Haiti is unlikely to significantly improve in the near future. On the contrary, it is only wise to assume that food availability, particularly to rural peasants and the urban poor, will decrease over the next few years, should there be any clear trend. As determined by the National Nutrition Survey in 1978 and other similar surveys referred to in this paper's Introduction, malnutrition is a wide-spread and serious health problem in Haiti. Should the short-fall in the availability of nutritionally beneficial foods continue to worsen, nutritional status can only be expected to fall in accord. Not only will Title II foods be required to meet this short-fall in nutritional terms, they ought to be increasingly directed toward alleviation of the more severe health consequences of malnutrition.

Under the auspices of the USAID program in Haiti, a Rural Health Delivery System expansion and improvement project has been initiated in concert with the Government of Haiti and its Department of Public Health. When completed, this new system will bring better health services to more Haitians than ever before possible. It is planned that this project will incorporate the use of Title II foods for the treatment of severe malnutrition in its expanded program. The Food Sector Strategy team endorses this planned activity and encourages the redirection of the Title II program to increase its emphasis on targetting its benefits to those most in need in the most direct and effective manner possible. It is further recommended that the concerned PVOs make every effort to expand their MCH coverage to include as many private centers as possible to fill gaps remaining in the national health delivery system, especially in remote areas.

In regard to the school feeding program, it is recommended that participation be "capped" at the current level. Thus, assuming an adequate increase in the availability of Title II foods, the expanded MCH program will be provided with sufficient inputs to fill its requirements. Should the increase be inadequate for this purpose or should there be no increase, it is recommended that a phased decrease in school feeding programs be undertaken sufficient to provide the MCH program with sufficient support.

In regard to the Food for Work program, it is recommended that its level of commodities also be capped in the same manner as with the school feeding program and for the same reasons. It is further recommended that priorities be established for the type of activities allowed under the FFW program. Highest priority should be given to efforts directed toward improved food production, such as irrigation, soil conservation, and reforestation. Should it be determined that the current resources available to the PVOs are inadequate to implement the new priorities and to monitor and evaluate the resulting work efforts, USAID should give serious consideration to an OPG designed to assist the PVOs in this area.

It is recommended that the focus of PL 480, Title II food distribution programs continue to be national in contrast to concentration on any given region or regions. As mentioned in the Introduction, problems of malnutrition

have been shown by the National Nutrition Survey to be equally prevalent throughout Haiti with the only significant difference being between Port-au-Prince and the rural areas as a whole. Therefore, there is no justification, in nutritional terms, for providing any one rural region with any greater assistance than any other rural region beyond that called for by differences in regional population size.

Finally, it is recommended that a council of private voluntary organizations be established to meet on a regular basis for the purposes of sharing information, planning implementation strategies, and coordinating activities. AID should be prepared to provide technical assistance to this PVO council as deemed necessary by the Council and the USAID mission to Haiti.

Assuming that the above recommendations are adopted and implemented in the Haitian PL 480, Title II program, it can be expected that the coming years will see a steady increase in the proportion of Title II foods directed toward targetted, at-risk groups in the population and a concurrent improvement in the effectiveness and efficiency with which cases of severe malnutrition are successfully dealt with, both in the short and long-terms.

Table VI-6

Fiscal Year 1982 Title II (approved)

Commodity	Total (metric tons)	Total (dollar value) (000)
Soy Fortified Bulgar	11,237.7	3,517.4
Corn Soy Milk	6,864.8	2,755.6
Vegetable Oils	1,656.1	1,707.4
Non-fat Dry Milk	1,835.9	769.2
Soy Fortified Corn Meal	3,550.3	1,200.0
Flours	378.0	136.0

Table VI-7

Recipients of Title II Foods by Program per Quarter
(Fiscal Years 1981 and 1982)

Program	Fiscal Year 1981		Fiscal Year 1982	
	Number	Percentage	Number	Percentage
MCH	69,500	13.1	55,900	9.8
Other pre-school	20,000	3.8	26,000	4.5
Combined	89,500	16.9	81,900	14.3
Food for Work	74,500	14.0	79,000	13.8
School Feeding	359,100	67.6	403,400	70.4
Other Programs	8,500	1.6	8,500	1.5
Total	531,600	100.0	572,800	100.0

ANNEX A

Regional Resources and Development Potential[1]

A. General Features

Haiti has a tropical climate with average temperature fluctuating between 24° and 27°C. The northeastern trade winds bring abundant rainfall to many parts of the country, up to 3,600 mm in the mountainous parts of the southwest. Large sections, however, receive only 600 mm or less, especially the northwestern peninsula, the neighboring Plaine des Gonaives and the southeastern coastal area. Rains are irregular. The northwest peninsula, for instance, suffered from severe droughts in 1967-68, 1972, 1975 and 1976-77. On the other hand, rainfall intensity is high and causes severe erosion.

The country covers 27,700 km^2. Most of it is mountainous, as shown by the following:

Elevation (m)	% of Land
0-200	20
200-500	40
500-800	20
above 800	20

In addition, some 63% of the land area is on slopes with an inclination of more than 20 percent. Land resources, in effect, are scarce when compared to population. The average density is 168 people per sq. km. However, when the suitability of land and actual land use are taken into account, the land resource scarcity can be seen as a very acute situation. There are 393 people/km^2 of arable land, and 587 people/km^2 of land actually being cultivated. Moreover, a comparison between land use suitability (Table 1) and actual use (Table 2) suggests a heavy use of land for cropping. Although a significant portion of cropping on mountainous land is in tree crops that do a better job of holding the soil, an overutilization of marginal land has resulted in severe and accelerating soil erosion.

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1. Extracted from Current Economic Position and Prospects of Haiti, IBRD, December 22, 1978.

TABLE 1
LAND USE SUITABILITY

Soil Class	Potential	% of Total Area
II	Suitable for rainfed and irrigated agriculture; few limitations	8.4
III	Suitable for rainfed agriculture and for irrigation of high value crops; more limitations; requires soil conservation measures	11.0
IV	Limited possibilities for field crops; suitable for permanent crops (pastures, trees)	9.2
V	Severe limiting factors (salinity, drainage, fertility); requires substantial investments for field crops such as rice.	2.8
VI	Suitable for trees and pastures; requires terracing for field crops	13.8
VII	Suitable for tree crops, forestry, and pastures	51.0
VIII	Mountain areas and coastal marshes, best suited forest or game reserves	3.8
Total		100.0

TABLE 2
ACTUAL LAND USE

Irrigated cropping	2.6
Rainfed crops - plains and valleys	10.4
Rainfed crops - mountains	29.9
Pastures	10.8
Forests	9.3
Waste Land	37.0
Total	100.0

B. Regional Characteristics

The Ministry of Agriculture (DARNDR) has proposed seven more or less homogenous agricultural development regions for the purposes of general agricultural planning.[1] Each region coincides with the limits of a

1. It should be noted that different Ministries define regions in different ways for different purposes. The DARNDR regions do not correspond to those of the Planning Ministry. Almost all regional definitions coincide with the limits of administrative subdivisions, or arrondissements; and so only minor technical adjustments need to be made to reconcile the coverage of different regional definitions.

catchment area and, with few exceptions, with those of the arrondissements. The regions differ in area and population, as shown in the following table:

Region	Area	Population 1971		Density	
	000 sq km	Rural	Total	Rural	Total
		------ 000	-----	persons/sq km	
North	2.69	424.8	528.9	158	197
Northwest	4.46	433.3	500.0	97	112
Artibonite	7.18	733.8	809.7	102	113
Port-au-Prince	4.71	628.6	1,151.8	133	245
Southeast	2.49	331.8	351.3	133	141
South	4.04	618.1	670.0	153	165
Grande Anse	2.13	264.6	302.8	124	142
Haiti	27.70	3,435.0	4,314.5	124	156

1. The Northern Region

The northern region includes the major part of the North and Northeast Departments, excluding the southern slopes of the Massif du Nord, with drain into the Artibonite basin. An alluvial plain, the Plaine du Nord, covers much of the area. The clay and clay loam soils are among the most productive of the country. Some areas are poorly drained or subject to flooding. Excellent alluvial soils also occupy the Limbé valley and the small Plaine du Borgne. The Massif du Nord, essentially a limestone formation, rises to an average of 900 m; the potential of its soils is limited by slope and shallowness, except for valley bottoms.

Rainfall averages 1,300 mm in the plain (about 1,800 mm in the west, less than 1,000 mm in the east), and 1,500 to 2,000 mm on the northern slopes of the Massif du Nord. Rivers flowing from the Massif du Nord and underground water resources create a good potential for irrigation.

A large portion of the plain is devoted to sugarcane, some of it grown in relatively large holdings (8 ha or more). Rainfed crops include corn, sorghum, plantain, cassava, beans, yam, cocoyam and rice; coffee and cocoa are also grown on the foothills and mountain slopes. In the eastern part, sisal has declined and has been replaced in part by cattle ranches. Currently some 2,000 ha are irrigated in the Quartier Morin district. Rehabilitation of the existing system, expansion of the irrigated areas, and

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intensification of irrigated agriculture should be priority actions. In addition, given the low levels of technology and inadequate land use, simple, low-input improvements are possible for rainfed crops. Furthermore, there is ample room for improvement of coffee growing and expansion of fruit tree plantings on the upland slopes in connection with erosion control.

Currently, the northern region benefits from several important projects: agricultural development in the Plaine du Nord with IBRD assistance, soil conservation in the Limbé basin, with FAO assistance, coffee improvement with AID assistance, and improvement of the transport infrastructure with IBRD and AID assistance.

2. The Northwest Region

The Northwest region comprises the Northwest Department, the Plaisance, Marmelade and Gonaives Districts, and part of the Dessalines district or, in other terms, the Northwest Peninsula, the Plaine de Gonaives, and the downstream area of the Estere River.

The Northwestern Peninsula is mostly hilly (limestone), but also has 30,000 to 40,000 ha of plains, partly coastal, partly river (Trois Rivières). The Gonaives Plain has an irrigated alluvial section, and an arid section called Savane Desolée.

The northwest region's main feature is the arid climate. Rainfall averages less than 600 mm in most parts. The Port-de-Paix area receives 1,200 mm, the higher elevations (Massif du Nord) over 2,000 mm allowing for coffee and cocoa growing.

Subsistence smallholders prevail throughout the peninsula. Banana production, important for export until the 1950s, remains significant. Small to medium scale irrigation can be developed in the plains, while much of the highlands are best suited for forestry, with some scope for coffee, cocoa and fruit tree expansion. The area is currently subject to deforestation for charcoal production.

The Savane Desolée supports practically no population. The alluvial part of the Gonaives plain supplies dryland cotton and sorghum and, from several thousand hectares of irrigated land, cotton, corn, plaintain, bananas, beans, and vegetables.

The region was hard hit by drought in 1975 and 1976-77, which led to disaster relief programs. Long-term projects have been underway in community development through the HACHO program with CARE and AID support (the latter having terminated assistance only recently), and in tubewell irrigation in the Plaine des Gonaives with German assistance. New programs include completion of an IBRD-supported coastal shipping port at Port-de-Paix which will facilitate the movement of goods in and out of that relatively isolated part of the northwest region; and the possiblity of feasibility studies for hydroelectric plants on the Trois Rivières to be financed with German assistance. It may be possible that IFAD supported irrigation schemes become attached to the dams at some point. A major program of agroforestry outreach has recently been initiated by AID for the peninsular area, as well as in the South Region, the Central Plateau and around Port-au-Prince.

3. The Artibonite Region

The Artibonite region covers the entire Artibonite watershed, with the Centre Department (plus the southern slopes of the Massif du Nort) and the Artibonite Department (excluding the areas included in the northwestern region). It comprises two distinct agricultural zones: the Central Plateau and the lower Artibonite Valley (downstream from the Peligre Dam) each with specific development prospects and problems.

The Central Plateau (about 200,000 ha) is surrounded by the Massif du Nord and the Montagne Noire with elevations ranging from 400 m along the edges to about 200 m at the center and southeast. Thirty-five streams and alluvilal valleys cut deeply through the sedimentary formations (limestone, conglomerate, sand, sandstone, marl). Soils over sediments are subject to erosion, and have low fertility, but good potential for irrigation. Rainfall averages 1,500 mm (concentrated in seven months, from April to October) in the center and southeast, but only about 700 mm in the northwest. Water resources for irrigation and village water supply are not known.

The northern part consists of about 100,000 ha of grass savannah, which is sparsely populated and, in spite of some excellent soils, poorly utilized. The reason is not clear; it could be the limited or erratic rainfall or the fact that Government owns some 80,000 ha of land. The savannah was an important livestock rasing area until the enactment of a law requiring tethering or grazing stock. The area is probably suitable for controlled grazing, and for crops adapted to limited rainfall.

The center consists of a slightly undulating plain, while the southeast is more dissected and therefore more prone to drought. The area is fairly densely populated. It used to be important for tobacco and perennial cotton. Cotton production declined sharply from 1935 to 1965 as the result of boll weevil infestations. Other crops include sugarcane, sorghum and sweet potatoes, corn and fruits.

Because of the savannahs, the Central Plateau has a lower average population density than the rest of the country (about 100 per km^2). Farm incomes remain below the national average, apparently because of limited marketing. Lack of transport infrastructure appears to have been the main constraint to development, but with improvements to roads undertaken in recent years this obstacle is gradually being removed.

Major projects which have been discussed recently include a 5000 ha sugarcane scheme developed by the Government and a cattle breeding project outlined by the FAO. These and other types of major programs, however, have been hampered by inadequate knowledge of the area's resource base (especially soils and hydrology) and agricultural production potential. A resource inventory and cartography project is being undertaken with UNDP assistance, and therefore the data base required to launch major programs will become evident as time proceeds.

The Artibonite Valley stretches toward the northeast, between the Montagne Noire, the Chaine des Matheux, and the Chaine du Trou d'Eau. The valley, downstream from the Peligre Dam, widens to some 30 km and comprises about 33,000 ha of alluvial soil suitable for irrigation. Rainfall decreases from over 2,000 mm in the Peligre area to 600 mm in the lower semi arid part. Soils in the lower valley have salinity problems; reclamation through irrigation and drainage is possible.

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The Artibonite Valley offers the highest agricultural potential in the country. It has therefore been given high priority in the country's agricultural development strategy. The current irrigation system serves about 24,000 ha (72 percent of the irrigable area); it needs rehabilitation, protection from erosion, and provision for drainage. The Artibonite Valley Development Agency, ODVA, is responsible for agricultural development of the entire valley. Some 4,000 ha are now being rehabilitated with IDB support.

4. Port-au-Prince Region

The Port-au-Prince region covers the West Department, plus the Leogane District. It comprises the metropolitan area, the Cul-de-Sac plain, the coastal plains of Duvalierville and Leogane, Petit Goave, and the Gonave Island.

The Massif de la Selle and the Chaine des Matheux are made up of limestone formations. The Cul-de-Sac, Duvalierville, Leogane, and Petit Goave plains occupy coastal limestone terraces of moderate productivity. Rainfall is relatively high in the Massif de la Selle and the Leogane/Petit Goave areas, but marginal to deficient in the Cul-de-Sac and Duvalierville areas (600 mm in the eastern Cul-de-Sac plain).

The region benefits from proximity to the country's main market, the metropolitan area. Sizable parts of the Cul-de-Sac plain are irrigated and produce sugarcane and vegetables. Corn, sorghum, and cassava are the main rainfed crops. The eastern part of the plain supports no agriculture because of salinity and arid climate. The other plains are also irrigated and produce vegetables, plantain, sugarcane, and rice; irrigation systems need to be rehabilitated and expanded. The Cul-de-Sac plain, additionally requires drainage. In the mountain area, south of the capital, the production of vegetables and fruits has developed especially around Kenscoff, but the area suffers from servere deforestation and ensuing erosion. The eastern part of the Massif de la Selle is best suited to forestry.

The Cul-de-Sac plain has benefitted from a program of improved irrigated agriculture with Israeli aid. Further irrigation development is being carried out with IDB support. An integrated rural development project, including irrigation and soil conservation, has been implemented in the Petit Goave and Petit Trou de Nippes area with CIDA support (DRIPP project); but has recently been terminated.

5. Southeast Region

The southeast region coincides with the Southeast Department. It consists essentially of the southern slopes of the Massif de la Selle, and a series of narrow coastal plains with productive alluvial soils: Bainet, Jacmel, Marigot, Belle Anse, Anse à Pitre. The Massif, mostly steep slopes, also includes a limestone plateau (plateau de Savane Zombi), and a number of narrow but fertile valleys. Rainfall is abundant to adequate, except in the southeastern coastal area (Belle Anse, Anse à Pitre) where it drops to 600 mm.

The mountain area is devoted to coffee and fruit trees, with cereals in the valleys. The Plateau de Savane Zombi produces potatoes, maize, vegetables, and pastures. The small plains of Belle Anse and Anse à Pitre offer limited possibilities because of arid climate and lack of good roads. The Jacmel and Bainet plains are intensely cultivated with bananas and coconut. While the Bainet plain suffers from lack of transport infrastructure, the Jacmel plain is linked to Port-au-Prince by a recently rebuilt road. Irrigation can be improved and expanded, but the plains are subject to flooding. The area also has a good potential for tourism.

6. The Southern Region

The southern region comprises the South Department, and the Nippes District of the Grande Anse Department. It corresponds to the middle section of the southern peninsula, which is crossed by the Massif de la Hotte, a mostly calcareous mountain with ingenuous and metamorphic areas. Soils are shallow and rocky, except for the small valleys. The Rochelois plateau in the center of the region includes the relatively important inland alluvial valley of the Serpente river. The region has a number of alluvial plains with excellent soils suitable for irrigation: Aquin, Cayes, Miragoane, Anse à Veau,

Baradere, Cateaux, Tiburon. The Plaine des Cayes, with over 6,000 ha under irrigation and good to fair soils, is the most important. The entire region benefits from adequate rainfall (1,000 - 2,000 mm), but the Aquin plain is relatively dry.

Coffee and fruit are grown in the higher parts, while the plains and valleys are devoted to sugarcane, corn, rice, vetiver, and animal husbandry. The mountain tops are still well forested in the west, but deforestation increases toward the east.

The region is very densely populated; emigration to the Port-au-Prince area is high. It is estimated that more than 60 percent of net internal migration to Port-au-Prince comes from the Southeast, South, and Grande Anse regions. Some of the reasons for migration appear to be: (a) cut-off opportunities for seasonal employment in sugarcane cutting in Cuba since the 1960s; (b) the hurricanes in 1961, 1963, and 1964, which devastated coffee and other tree plantations and did extreme damage to the irrigation systems; and (c) the lack of public investments and services in the area until very recently. The region suffers from lack of communications. While the main road linking Les Cayes to Port-au-Prince is now completely paved, the northern coast is practically cut off from the rest of the country. Besides the improvement of transport infrastructure, the region needs rehabilitation and expansion of irrigation systems, improvement of hillside agriculture, and soil conservation. An ongoing AID supported scheme in the Cayes plain involves 900 ha of the Dubreuil irrigation system together with soil conservation in the watershed and applied research and extension.

Donor interest in this as well as the Grande Anse region (see below) has been recently expressed. The EEC and IDB are currently completing a feasibility study for a road construction program for the Southwestern coast (Les Cayes to Tibruon) and are planning a rural development program in the Asile area. The region will also be included in the recently initiated agroforestry outreach program identified earlier and supported by AID.

7. The Grande Anse Region

The Grande Anse region (along the Northern Coast of the Southern Peninsula) corresponds to the Grande Anse Department, less the Nippes district. The region has physical features similar to those of the southern region, except that the mountains reach higher altitudes with steeper slopes, the rainfall is higher (up to 3,600 mm), and there are fewer valleys and coastal plains. The main agricultural area is in the Grande Anse plain and valley (50,000 ha) and the Plaine des Abricots.

The region's agricultural potential is not well known. Main resources are forest and tree plantings (coffee, cocoa, fruit, and rubber). The area is also important for corn and cocoyam, and it offers the potential for renovation and expansion of cocoa plantings.

One of the region's major problems has been its isolation from the rest of the country, and an absence of roads within the area. Road access from Cayes is now possible in dry periods when river crossings are possible. Access from Barradères, to the east, may become possible as a result of a contemplated road construction project to be financed by FAC. This has now made it possible to consider larger-scale rural development projects.

ANNEX B

HISTORY OF THE U.S FOREIGN ASSISTANCE PROGRAM
IN THE FOOD AND AGRICULTURE SECTOR IN HAITI

I. INITIAL U.S PROGRAM IN HAITI

In 1944, the United States initiated its first official foreign assistance program in Haiti. A technical cooperation program agreement was signed in August 1944, with the intent to increase agricultural production in Haiti through direct technical assistance and training of Haitian agricultural technicians. The "Point IV" program of the U.S. International Cooperation Agency (ICA) was initiated in Haiti in 1949. It substantially expanded the technical cooperation program in the agricultural sector, and broadened U.S. foreign assistance to the fields of rural education, public health, public works and public administration. Direct supply of agricultural commodities to Haiti under PL 480 began in 1955, initially as a disaster relief program to areas of Haiti hardest hit by Hurricane Hazel.

The United States Operations Mission (USOM) administered the ICA's Point IV Program in Haiti from 1949 to 1961, when the Agency for International Development was established. The USOM consisted primarily of technical advisers assigned to work directly with Government of Haiti Ministries, and by 1961, there were 25 regular advisers working with the GOH Ministry of Agriculture. U.S. assistance to the Ministry during this period focused on soil conservation (in the Peligre watershed), crop research, livestock improvement, establishment of an agricultural credit system and improvement of the agricultural extension service. In addition, two major regional agricultural development programs were carried out in the Artibonite Valley (ODVA) and the North Region ("Operation Poté Colé").

Relations between the United States and Haiti deteriorated badly during the early years of the Francois Duvalier regime, partly because of abuses of foreign assistance then being provided. Finally, in 1963, President Kennedy withdrew the A.I.D. Mission to Haiti, and the U.S. maintained no official development assistance program in Haiti for the following decade. However, during this period some food and agricultural assistance was provided to the

disaster stricken Northwest Region through a substantial grant to CARE in 1966 to carry out a relief and community development program through the Haitian American Community Help Organization (HACHO).

II. EARLY AID EFFORTS IN AGRICULTURE

A.I.D. officially returned to Haiti in 1973, and immediately focused on the agricultural sector as its highest priority. The CARE/HACHO program in the Northwest was substantially expanded through the Rural Community Development Project (No. 521-0061; 1972-1979), and focused to a substantial degree on soil conservation and reforestation, small-scale irrigation systems and the construction of feeder roads.

The first major food/agriculture sector project with the GOH Ministry of Agriculture (DARNDR) after AID's return was the Agricultural Development Support I Project (No.521-0069, 1973-78). Its principal outputs were a variety of detailed subsectoral assessments (eg. fertilizer use and marketing, soils classification, grain and rice production and storage, freshwater fish production, agricultural credit needs, etc.), pilot projects in grain storage and rice seed multiplication, the testing and improvement of maize varieties, and the preparation of studies for rehabilitation of two major community irrigation systems.

ADS I focused almost exclusively on food production for domestic consumption. Shortly after its initiation, A.I.D. began a second large project in the sector focused on Haiti's major foreign exchange earner, coffee. The Small Farmer Development Project (521-0073; 1974-1981) had as its primary purpose an increase in the income of the peasant farmer through the increased production of improved coffee varieties. Assistance was provided to two agencies of the DARNDR, the Agriculture Credit Bureau (BCA) and IHPCADE, the special agency for promotion of coffee production and exportation. The agricultural credit delivery system was substantially expanded and capitalized through subsidized fertilizer for coffee production, seven regional coffee research/extension centers were constructed and penetration roads to isolated coffee areas were constructed by labor-intensive methods.

Nonetheless this project did not achieve a number of its stated objectives. Serious questions regarding the profitability of the technical package were raised early in the project and never resolved. Partly for this reason the BCA loans of fertilizer in kind had a poor repayment record. Also, the relatively low farmer price expectations for coffee discouraged production and led farmers to sell the fertilizer or divert it to other uses. There were long delays in construction of some of the research/extension centers and subsequent staffing and use have been spotty.

III. RELATED EFFORTS IN INFRASTRUCTURE AND NUTRITION

Related to these early major efforts in the sector were AID's initial road maintenance and rehabilitation, projects carried out with the GOH Ministry of Transportation and Public Works (TPTC). These efforts initially focused on the establishment of a national road maintenance service which would assure permanent maintenance of the major highways then under construction (with other donor assistance) as well as of the secondary feeder roads then being planned by AID. This maintenance service, known as SEPRRN, has been established through two consecutive AID projects (Highway Maintenance I No. 521-0084; 1973-1978; and Road Maintenance II, 521-0084; 1977-1983). The AID Agricultural Feeder Roads Project (No. 521-0074; 1976-82) has rehabilitated almost 300 kms of roads in rural Haiti, and more importantly has established within TPTC an institutionalized commitment to the use of capital-saving, labor-intensive, road construction techniques. These road projects have been considered among the most successful in the AID porfolio in Haiti, and a major follow-on Secondary Roads Development Project (No. 521-0149; 1982-86) is now in the design phase. It is intended to add an additional 400 kms to the secondary road network, and will focus on substantially expanding the access to and from food producing areas and rural public markets. It will also establish a semi-autonomous national service for the construction and rehabilitation of secondary roads within TPTC (Service des Routes Secondaires).

On the consumption side, AID's first major effort to improve nutritional status in Haiti was through the Nutrition Improvement Project (No. 521-0075; 1976-1981). Nutritional status in Haiti is considered a public health matter, and is not an area of activity by the Ministry of Agriculture. The AID

project strengthened the nascent GOH Bureau of Nutrition (BON) a semi-autonomous agency of the Department of Public Health and Population (DSPP), and partially financed a nationwide survey of the nutritional status of young children in Haiti ("Haiti: Nutrition Status Survey 1978"). The project also established over 30 community nutrition education centers (CERNs) in rural Haiti, whose function was to treat malnourished children and to teach the mothers improved nutritional practices (choice and preparation of foods). The CERNs also provided limited technical assistance in home gardening to participating families. However, after extensive studies of the cost-effectiveness of the CERN approach made clear the limited potential for expansion of the program (due to high per capita costs), AID decided to alter its approach to the nutrition problems of Haiti, and address malnutrition through a major new component of its Rural Health Delivery System Project (No. 521-0091, 1979-1984). The nutrition component of this project is intended to provide for the full integration of the BON into divisional status at the DSPP and to further strengthen the capabilities of the division. It will also (1) establish a nutrition surveillance system through training of the community, health worker (agents de santé) and auxiliary nurse working in rural areas; (2) provide nutrition education to rural women through the foyer de demonstration (community-based nutrition demonstrations) method; (3) expand the agricultural/nutrition extension program (home gardening); (4) provide curative interventions (e.g. food supplements or recuperative feeding at special centers) when necessary; (5) carry out additional nutrition research, and (6) provide technical assistance to the Ministry of Plan to strengthen its capacity to formulate and oversee implementation of national food and nutrition policies.

IV. CURRENT AID EFFORTS IN THE AGRICULTURAL SECTOR

AID's current focus in the agricultural sector is on food production, agricultural credit, resource conservation and coffee marketing. The largest active project with the Ministry of Agriculture is the Integrated Agricultural Development Project (PDAI, No. 521-0078, 1976-1984). The purpose of this project is to develop the institutional capacity of the Ministry of Agriculture to deliver agricultural inputs and services to small farmers focusing on selected watershed areas. The Project was quite complex in design

and suffered many delays in implementation. In 1979, a major revision of the Project was negotiated by the Mission and DARNDR, which consolidated several components and reduced the geographical scope to insure that the highest priority objectives would be attained in the proposed project period. The PDAI project now focuses on the provision of assistance to DARNDR in administration and the improvement of DARNDR's field services in two major watersheds (Les Cayes in Southwest, Jean Rabel in Northwest) in the following areas: (1) Irrigation; (2) Soil Conservation and (3) Research and Extension. The research component of the project, carried out principally through the semi-autonomous College of Agronomy is the most successful to date, and some progress is being made by the technical advisers and their counterparts in administration andirrigation. The soil conservation component continues to experience the most problems and delays.

AID plans to provide technical assistance and training to DARNDR in the areas of agricultural statistics and small farmer cropping systems through funding from the currently inactive Agricultural Development Support II Project (No. 521-0092, 1978-1982). Originally conceived to establish a national program of agricultural research and statistics, the project has been inactive since the agreement was signed, and the project will need some redesign prior to being activated for this purpose.

With respect to coffee, AID's current efforts are in assisting peasant coffee farmers in processing and marketing the coffee in order to increase producer incomes as a percentage of export market price. This work is being carried out through the Small Farmer Marketing Project (No. 521-0083; 1977-82), which is assisting peasant farmers in the establishment of coffee marketing cooperatives and is assisting a federation of these cooperatives in the establishment of a processing and storage center. This center will permit peasants to sell their coffee to exporters or to export directly through the federation in a "washed" and sorted condition. It is also expected to assure the producer of a better price than traditionally received from speculators and intermediaries, partially due to an increased ability to be aware of export market prices and to store coffee until prices are satisfactory.

In July, 1981, the A.I.D. Mission began significant project effort with the above-mentioned Bureau of Agricultural Credit (BCA), a semi-autonomous agency of the DARNDR. The purpose of the Strengthening Rural Credit Institutions Project (521-0122; 1981-1985) is to strengthen the capability of the BCA to provide credit, savings and other financial services to peasants in rural Haiti, with an emphasis on lending for food production and marketing. The BCA is a long-established but relatively weak institution with substantial operating deficits. It is, however, the only institution that has the capability to effectively provide credit to the peasant farmer, and its traditional cash lending program (as distinguished from the in-kind fertilizer lending program to coffee producers), and its modus operandi of utilizing farmer credit societies (SACs) with joint and several liability have proven relatively successful over time, with a good repayment record. This project is intended to strengthen the BCA's administrative capabilities and financial viability while expanding the coverage of the lending program. It will also introduce a rural savings mobilization effort.

The A.I.D. Mission's most recent major project effort in the agriculture sector is distinct from all those described previously, as it is being undertaken entirely through non-governmental organizations. Given the large number of projects supported by AID and the other bilateral and multilateral donors in Haiti which are currently being implemented through DARNDR, and further given the gravity of the problem of deforestation and the requirement for immediate restorative efforts in the field, AID determined to undertake a major agroforestry effort in Haiti through private voluntary organizations, community councils, church groups, peasant "groupements", and even individuals, as appropriate. Through the Agroforestry Outreach Project (521-0122; 1981-1985) grants have been made to three non-profit non-governmental organizations for different but complementaty purposes. Operation Double Harvest (ODH) located in the Cul-de-Sac Plain North of Port-au-Prince, is establishing a major, modern tree nursery facility and select seed production orchards and storage center. It is also carrying out extensive experimentation (species trials, etc.) and establishing large-scale demonstration tree farms, using fast-growing hardwood varieties. CARE will work with HACHO to establish new community nurseries and substantially expand

its limited reforestation efforts in the Northwest region. The Pan American Development Foundation (PADF) has received a grant to establish an agroforestry resource center in Port-au-Prince, through which any other private voluntary agency, community or church group can obtain both the material and technical assistance to carry out reforestation activities in rural Haiti. The project is currently progressing very rapidly, as the interest (demand) for such assistance in the private sector is proving to be very high.

AID has historically provided a great deal of assistance to private voluntary agencies in Haiti, though it has been predominantly through food aid (PL. 480 Title II). However, in recent years, the AID Mission in Haiti has undertaken a very active effort to make grants to PVOs operating in the fields of agriculture and rural development, and the Agroforestry Outreach Project is something of a culmination of this trend. It should also be noted here that the AID Mission currently funds active grant projects in the agriculture/food sector with CARE, Catholic Relief Services and Save the Children Federation.