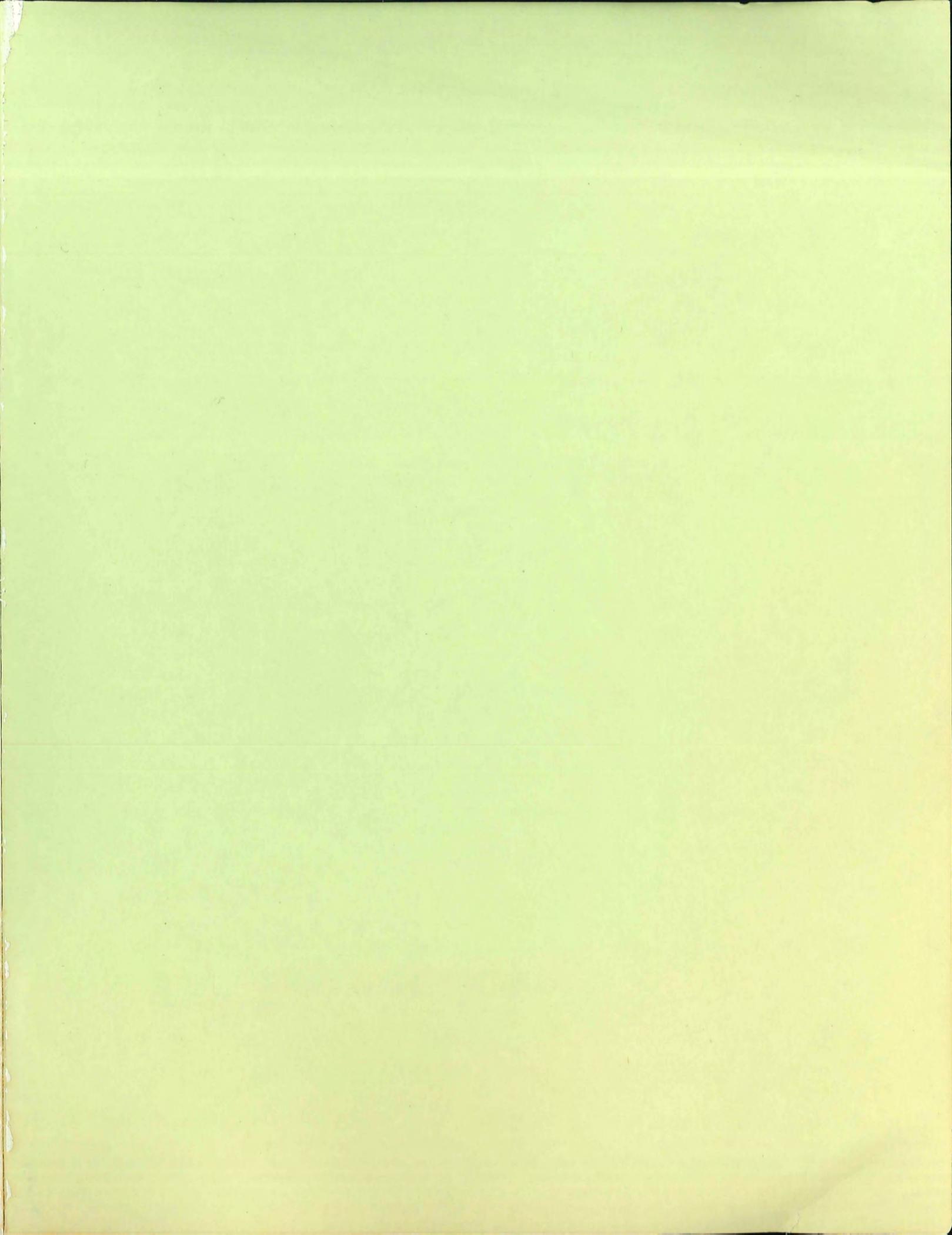


The Economics of Survival

A Study of Poverty and
Planning in Haiti

October 1980

Office of Urban Development
Bureau for Development Support
Agency for International Development
International Development Cooperation Agency
Washington, D.C. 20523



THE ECONOMICS OF SURVIVAL:

A STUDY OF POVERTY AND PLANNING IN HAITI

by

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October 1980

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Agency for International Development - International Development Cooperation Agency
Washington, D.C. 20523

A.I.D. Contract Numbers: 3178534, 3178535, and 3178536

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FOREWORD

The urban development policy of the Agency for International Development gives first priority among new areas of research and development to be addressed to "problems and prospects for employment generation, especially in the informal sector of big cities." [Policy Determination 67, "Urbanization and the Urban Poor" was issued on May 27, 1976, and reconfirmed on December 3, 1979.]

Prior to the issuance of this policy the Office of Urban Development (DS/UD) had determined that employment and productivity of the urban poor were important areas of concern in dealing with the consequences of rapid urbanization. Of particular interest was the "small-scale enterprise" sector, which includes also the "traditional," "informal," and "artisanal" sector, among other things. Difficult to define to everyone's satisfaction, to DS/UD it meant that grouping of activities at the very bottom end of the economic distribution and a multiplicity of activities seldom recognized in determining a nation's gross national or gross domestic product. Many of the urban poor, especially the rural-to-urban migrants, apparently made their living in this sector. While some people "made it" and became a part of the mainstream of the economy, others seemed to spend all of their working years in this sector. Indeed, little was known of the actual functioning of this sector, although some general descriptions were available.

To this situation was brought the investigative and analytical work of Simon Fass, now Assistant Professor in the Hubert H. Humphrey School of Public Affairs of the University of Minnesota. As a result of having lived and worked in Haiti earlier, he had gained knowledge of the overall fabric of Haitian society and of its social and economic relationships. In 1976 he did survey work in a low-income community in Port-au-Prince, gathering information on the household income and expenditures of a sample of poor families. His intimate knowledge of those data and of the conditions from which they were derived and his technical capability to analyze them and to present the findings provided an unusual opportunity to gain much-needed information. Consequently, DS/UD entered into an agreement with Mr. Fass early in 1977, whereby he would mine his data to meet DS/UD's need for information illustrative of employment conditions among low-income urban households and of the lifestyles and coping capabilities of the urban poor.

The result was a most informative and rather voluminous report, "Families in Port-au-Prince: A Study of the Economics of Survival," completed in September 1977. This report served immediately to inform DS/UD's program planning in the area of employment and productivity for the urban poor. Its content also made the report worthy of dissemination to a wider audience. The

nature and quality of the investigation and of the analyses on which it was based were noted especially by everyone who had an opportunity to read the report, as were the kind of ground-breaking information and other insights contained in it. However, the length of the report was seen as a constraint to its fullest distribution and use by a varied audience of development planners and practitioners.

Mr. Fass volunteered to edit the manuscript, which he resubmitted a year later as "The Economics of Survival: A Study of Poverty and Planning in Haiti." In its revised form, as the subtitle suggests, the report deals not only with the condition of life of a small group of urban poor people, but also with the apparent limited ability of "outsiders" (the host government, foreign assistance agencies, etc.) to bring about a substantial improvement in that condition. This made it an even more useful document than was the original report.

It took DS/UD another year to review and edit and to consult with the author on the new manuscript. The primary work of editing was done by Rickie S. Gilliard of DS/UD, who brought to the task considerable editorial skills and, most importantly, a professional background and a personal interest in the subject matter. Additional editing was done by William R. Miner of DS/UD.

The result is a considerably condensed version of the original 1977 report. What it lacks in the reportorial comments, somewhat personal observations, and sometimes warm emotions of the original, it has gained in a more straightforward presentation of the data and of the results of the analysis and in the delineation of policy and program implications. Given the increased interest in the subject matter since this study and this report were initiated, it can be expected that "The Economics of Survival" will enjoy a wide audience and that companion reports will appear.

The Office of Urban Development is grateful to Simon Fass for this report and for the contribution it has made to DS/UD's program. DS/UD is pleased also to have been associated with so important a contribution to the state-of-the-art.

INTRODUCTION

In 1974, when I accepted a professional contract with a multilateral assistance agency project in Haiti, I had no doubt that the terms of the contract required that I solve the urban poverty problem, or at least a sizeable portion of it. The thought that such an objective might perhaps be elusive never entered my mind. After all, I had been inculcated with just about everything one really had to know about international economic and social development theories, and was quite conversant on the subject. The legacy of recommendations which I would leave behind in the good and competent hands of government officials and foreign assistance agency technicians would, if simply implemented without delay, bring about the desired outcomes. These were the delusions of a novice.

Fortunately, my colleagues who preceded me had little patience with visions of grandeur and assigned me a set of tasks which assured that half of every day was spent in the slums of the city speaking with people and gathering information on various subjects. The other half was spent in the offices and hallways of public and international agencies speaking with officials and technicians and gathering more data, opinions, and ideas. This oscillation between the "top" and "bottom" of society began to erode the foundations of my illusion.

It took several months on the "bottom," but I finally became accustomed to the crowding, the shacks, the people sleeping in the streets, the fatigue of the elderly, the premature aging, the swollen bellies of the young, the sores on limbs and the small caskets being made by artisans throughout the city. These were images of the "norm" and I became convinced that our lives in North America, Europe, and the villas overlooking the city were the "exception." The "poor" became human and ordinary.

At the same time, the passage of each day in public offices and at cocktail parties made me less and less comfortable with the assumptions shared by those of us at the "top" regarding those at the "bottom." The conventional wisdom about "informality," marginality, backwardness, and other ideologies of poverty acquired in books and learned papers could not withstand confrontation with the daily evidence entering my nose, eyes and ears. It became increasingly difficult to pinpoint the exact location of the poverty "problem."

Eventually I decided that survival on an income of twenty cents a day was not the only "problem." The urban majority, in any case, had learned long since how to live with that amount. The "problem" had as much to do with "our" apparent inability to assist "them" effectively in changing the quality of their lives.

It occurred to me that, although "we" who are concerned with poverty from a distance are not a homogeneous group of individuals, we do share a wide set of

abstract beliefs about other people, which are reinforced continually by our general unwillingness to deal with "them" on a personal basis. This, in turn, too often compromises the few rigorous and potentially useful methods we have for carrying out meaningful social analyses (Myint, 1961), and thus limits the effectiveness of the actions we undertake. "We" are very much a part of the poverty problem.

However, rather than expend effort to identify, elaborate and critique in abstract fashion the articles of faith and conceptual frameworks which are implied in the foregoing, I have thought it more useful to demonstrate an alternative method of analysis and synthesis. This is the purpose of writing "The Economics of Survival."

As suggested by its sub-title, "A Study of Poverty and Planning in Haiti," this report examines two dimensions of what I have suggested is a single problem. One dimension is the condition of life of a small group of individuals who were surveyed in 1976 in a community called St. Martin in Port-au-Prince, Haiti. The incomes of the people averaged about \$40 per month per family, and they were to some extent representative of the financial status of some 320,000 people at the time, or about half of the urban population.* The other dimension is the limited ability of government and foreign assistance to bring about substantial improvement in the condition of St. Martin and places like it. Together, the two perspectives explore and define "our" relationship to the urban poor of the developing world.

There are five chapters which organize the examination. The first provides a brief overview of the history, economy and social structure of Haiti and Port-au-Prince; it identifies some of the reasons why the people are poor today and why they have been so for almost two centuries. The argument is made that a principal factor has been a societal structure in which two separate social entities share the same geographic space: the governors and the governed. Whatever the resource base of the country may have been at any given point, the unchanging structure of social-political organization, which has included the participation of foreign assistants among the "governors" from time to time, has compromised such development opportunities as did exist and such efforts as have been undertaken in the past. This structure continues today. It is emphasized that unless its existence is taken into account in the design of policies and program, current and future development efforts will have no more chance of generating enduring impacts than the various attempts undertaken in the preceding one hundred years.

The second chapter, carrying the title of this study, isolates a microcosm of the poverty that is characteristic of Haiti and Port-au-Prince. It is a general description of St. Martin and the families who live and were interviewed there. At the same time it outlines in simple terms a model of individual and family behavior drawn from capital theory which served three purposes: to organize data gathered during interviews; to explain market and non-market decisions and activities

*The currency unit in Haiti is the Gourde and is equivalent to U.S. \$0.20. U.S. equivalent values are used throughout this report.

of the household and its membership; and to identify theoretical points of technical intervention which would assist families in their struggle to survive. I argue here that families and individuals are prepared and willing to respond to any provided opportunity which they see as offering a vehicle for economic growth and development.

The third chapter is a detailed account of how individuals generated earnings from the sale of labor services, from trade, from manufacturing, as well as from non-labor sources, and the level and distribution of family incomes that resulted from these processes. For lack of a better term, this examination could be called an analysis of the "informal" sector, but it is argued that the complex determinants of wages and profits are those defined clearly and formally by economic theory. The determinants are basically the same as would be imposed by any reasonably competitive market economy subject to a wide range of "imperfections." Following from this argument, several technical ideas are presented which, in principle at least, could serve to increase productivity and demand and thus the earnings of workers and the incomes of their respective families.

The fourth chapter examines how incomes are expended for certain goods and services - in particular, for shelter, water, food, schooling and credit. More importantly (and based on the concept derived in the model presented in Chapter Two wherein family expenditures are regarded as investments required to produce work in the first place), an effort is made to explain why families spend as they do in St. Martin, why certain things are more important to them than are other things, and when they are more important. In all cases an effort is made to identify the determinants of the prices for the various goods and services from both the demand side and the supply side. This identification yields ideas of intervention which, if they could be implemented, might generate significant increases in household and individual productivity with respect to both market and non-market activities.

The fifth chapter discusses the basic "problem." Having suggested in preceding chapters several technical ideas on possible methods to assist the poor productively, the issue turns to the practical feasibility of implementing any of them. I suggest that stated or actual government policy is not at issue in Haiti and is not a constraint. Similarly, while financial resources are severely limited, they are more than enough to make a significant improvement in the lives of the urban majority. The key problem, as was highlighted in the account of Haitian history and society in Chapter One, is identified as the technical, administrative and managerial inadequacy of the institutions and personnel of the public sector, combined with the inappropriate methods by which assistance is rendered to that sector by international organizations and the foreigners which comprise them - i.e., "us." As a result of these critical weaknesses, implementation of most of the program ideas suggested in earlier chapters, as well as others which commonly are proposed, are found to be impractical. Therefore, I suggest that programs should be designed which simultaneously can provide benefits to the poor and provide effective vehicles for building up the capacities of public management agencies to provide basic urban services.

In a postscript to readers, I note that while the programs deemed feasible fall far short of the types of actions which "ought" to be undertaken on behalf of the majority of urban residents, their implementation would nonetheless require very dramatic changes in the structure of governance in Haiti and in the nature of foreign assistance to that country. Given that poverty has been present in Haiti for a very long time, in spite of efforts to deal with it, I suggest that "we" shift away from exclusive concern with that poverty and focus more on the reasons behind "our" ineffectiveness in assisting the government (and the governments of many other countries) to develop an understanding of the characteristics of its subject population and to develop a capacity to act positively on the basis of that understanding.

Finally, I must emphasize that I have had to engage a "multi-disciplinary" approach to the complex subject of this paper, and have drawn from economics, anthropology, sociology, psychology, geography, political science and several other arts as well. This is the method of planning practice. As such, the "Economics of Survival" is an entirely subjective study and the reader is urged not to confuse the "reality" which was observed with the interpretations which theories and other forms of preconception have imposed upon those observations.

I

HAITI

Haiti is the poorest country in the western hemisphere and one of the poorest in the world. It contains a people beset with great hardships. The characteristics of the current economy, which define Haiti's relative position among nations and which form the parameters within which its people must struggle from day to day, are the product of a long history. That history contains an unending stream of events which have served to provide the country with a type of "development" which, taking a positive view of things, effectively may be called stagnation. Superficial images and statistics aside, Haiti today is fundamentally little different from what it was two hundred years ago.

A feature which has been constant throughout its independent course has been the social-political structure of Haitian society. This has remained immune to the pressures of war, revolution, coups d'etat, elections, foreign occupation and foreign assistance. It is a "constant" and is perhaps a principal reason why the country has progressed so little.

It serves no useful purpose to suggest that this structure "ought" to change. If anything more substantive and positive is to be created "now" than has been the case in the past, it is essential to try to understand the nature of the social structure, the history that has given permanence to it and the economy which results from it. Appreciation of the acute limitations which those things impose upon possibilities for "development" and use of that knowledge to design policy with long-lasting effects around the severe constraints offer much better assurance of eventually bringing about necessary social change.

The History¹

A few years before the French Revolution of the late eighteenth century Haiti was a quiet and a very prosperous place for 30,000 French colonists who owned cotton, sugar, coffee and cocoa plantations, and 450,000 slaves to operate them.* The two principal towns of Cap Haitien (population 20,000) and Port-au-Prince (population 10,000) were centers of the elegance and depravity that marked the colonial period. There were tree-lined streets and squares, impressive churches, publishing works, several newspapers, repertory theaters, literary societies, gambling houses, and brothels famous throughout the French Empire. The whole of it was built upon a flourishing export trade, and it all ended in 1791 with the start of civil war between colonists and slaves.

At the close of the war eight years later, 20,000 colonists had left or been killed and 200,000 slaves were dead. In spite of the effects of the war, almost 70%

*At the time the total white population was 40,000. In addition to this group and the 450,000 slaves, there were about 30,000 mulatto "free people of color."

of the level of pre-war agricultural production was restored by 1802. These gains were wiped out immediately by a two-year war of independence (1802-1804) and by a subsequent decision of the United States, the most important customer for Haitian exports, to ban all further trade with a self-governing "black" republic (Moral: 1961).

In the period of relative political stability between 1804 and 1842, a system of small-holder subsistence farming gradually replaced the plantation system throughout the country. As export-oriented production and trade fell, so did government revenues. At the same time administrative competence still had not recovered from the effects of the civil and independence wars and was effectively non-existent. There were no public investments to speak of and negligible large-scale private investments. Thus, economic growth during the four decades did not occur.

The period of tranquil stagnation ended in 1843 and in the following seventy-two years uprisings and coups d'etat became a social pastime of the inhabitants of Port-au-Prince. There were forty-one revolts, of which two could be considered civil wars. The city was burned down in 1883 and again in 1886. There were twenty-two governments and only one government leader completed his elected term without interruption. Fourteen presidents were ousted by urban riots and forced into exile, three died in office, one resigned, one was poisoned, one was blown up in the palace, and one was torn apart by a city mob (Dorsinville: 1975). In this uncertain political atmosphere private capital investment was discouraged and agricultural and resource exports remained the only source of public revenues for the country. In spite of the fact that the country took on a series of heavy foreign debts in 1875, 1896, and 1908, little development was generated since corruption ran high and administrative ability continued to be very poor (Pritchard: 1910).

Nevertheless, the first serious public investments since independence began in 1879. A national bank was created, overseas telegraph links were established, and the country entered the Universal Postal Union. From 1889 to 1908 the country saw the building of bridges, canals, telegraph lines, and roads. Markets, government buildings, and schools were erected in Port-au-Prince. But in 1908 internal war erupted again. It lasted seven years and destroyed much of the gain made during the previous three decades.

United States Marines occupied Haiti from 1915 to 1934. Under the occupation and the supervision of civilian "advisers," 40% of public revenues became earmarked for immediate debt servicing and the building up of large cash revenues for potential future debt servicing (Schmidt: 1968). With such a large percentage of all public revenues directed to current and future debt servicing, public investment again was severely limited. Nonetheless some things managed to get repaired and built - i.e., roads, a telephone system, hospitals, more schools, irrigation systems, and a stormwater drainage system for Port-au-Prince. The occupation ended in 1934 and, although the physical structures remained, there was little technical or

administrative competence left to tend to them or to plan new works. Everything quickly fell into disarray and disrepair.

The first president elected by popular vote entered office in 1950 and solicited external aid for the preparation of a five-year economic development plan. Projects for the country included a census of population, rural health and irrigation projects, rural education and community development programs, a hydroelectric facility, new urban drainage facilities, improved urban sanitation, a slum-clearance project, worker housing projects, and industrial development programs.

Unfortunately, urban disorder was revived between 1956 and 1957, and during the next ten years relations between Haiti and other countries deteriorated. Export revenues, foreign aid, and private investment declined and once again many of the projects fell into disrepair for lack of funds and personnel to maintain or continue them.

Foreign relations and private sector confidence in the economy began to improve about 1967, and the 7% decline in GNP that took place during the previous ten years was reversed. Since 1968 technical assistance, major public projects and private investment have flowed into the country at a scale and rate never experienced in the past. Hundreds of foreign technicians have been working in the country improving roads, water supply, electrical distribution, telecommunication systems, the maritime port, and other things. Industrial exports, which in 1968 represented 23% of total exports by value increased to 54% in 1974. Haiti had been experiencing an economic "boom."

Unfortunately these development statistics are really meaningful only in Port-au-Prince where most of the new activity has been concentrated. Annual per capita income* in Port-au-Prince was estimated at \$276 for the 640,000 people who live there (Haiti, 1974b). In other major centers like Cap Haitien (population 46,000), Gonaives (30,000), and Les Cayes (22,100) it was \$194. As for the other 4,250,000 people in the country, annual per capita income was \$60.

Thus, in spite of the changes in some statistics, the condition of life of the vast majority of citizens has not improved much over the last two centuries. The current life expectancy of 45 years and the infant mortality rate of 172 per thousand live births (United Nations: 1971) cannot be much different from those in the 18th century. The average population growth rate of 1.8% still depends heavily on the mercy of nature.² In a year of rains the growth will exceed the average. During droughts, as in 1975 and 1976, it may be less than 1%. Medical services are still at a very low level, as evidenced by the following observations:

*measured in 1955 constant prices

1500 persons per hospital bed nationwide; 2100 persons in Port-au-Prince and 43,000 persons in rural areas for each doctor in the respective regions; and five million people suffering from endemic malnutrition, based on 37 grams of protein and 1580 calories per day per person.

These general indicators are the outward manifestations of the condition of life of the majority of individuals today. Haiti is evidently a people with problems that have persisted for many generations. In attempting to think about remedies now, it is essential to keep in mind the historical account. The people must overcome a record of negligible public investment, sorely deficient public services and extremely underdeveloped administration and public management capabilities - something which previous efforts at development largely have failed to do. After more than 175 years of continuing anarchy and neglect the challenge of social and economic progress looms ever larger.

The Economy

Although a large part of the population (about 42%) is under 15 years of age, the national labor force is estimated to comprise about 54% of the total population (or theoretically 92% of the economically active population over 15 years old). The high participation rate reflects a large proportion of women engaged in market activities* and, to a lesser extent, also reflects the need to introduce children below 15 years into productive roles.

About 72% of the labor force is engaged in agriculture, and this proportion has not changed very much since 1950 (International Labour Office: 1975a). Within this sector 48% are "family workers" and another 44% are self-employed cultivators. Sixty percent (60%) of Haitian farms today cover less than one hectare (Haiti: 1973).

Although agriculture employs the majority of workers, it provides only half of the gross domestic product (GDP) of \$380 million**, or an average of \$140 per worker per year. According to the World Bank, production decreased during the 1960s and increased by only 1% annually in the period 1971-1975 (IBRD: 1976a). Since population growth in rural areas during the period was only a bit less than 1%, there has been relatively little progress in per capita production and income.

* It has been estimated that 54% of all women in the population are in the labor force. This participation rate is considerably higher than averages obtained in other parts of the world--for example, North Africa, 11%; West Africa, 38%; "less developed" country average, 23%; and "developed country" average, 27% (Lundahl: 1979). These differences in participation rates may reflect different censal definitions.

**Measured in 1955 constant prices.

Analysts typically attribute the relatively poor performance of agriculture on inadequate education, resistance to technical progress, and long periods of insecurity. In Haiti, however, the average farmer has few if any resources with which to work. Government extension services have been virtually nonexistent, financial resources are extremely limited, the productivity of land has been depleted by erosion and subdivision, and so forth. A 1% annual increase in agricultural production really should be regarded as a remarkable achievement.

Non-subsistence income in rural Haiti always has depended on the success or failure of exports such as coffee, sugar, and sisal. In 1955 these goods represented 88% of total exports. By 1975 their proportion of total exports had dropped to less than 50% and volumes dropped to pre-1955 levels. The direct importance of agricultural exports to farming family income, therefore, has diminished gradually. As increased activity in other sectors (e.g., tourism and export-oriented manufacturing) draws more workers to Port-au-Prince, the urban demand for non-export agricultural commodities has been expanding. In principle urban and rural welfare are becoming more intimately tied, and the income of people outside the capital is coming to depend more and more on the success or failure of exports of non-agricultural goods and services.

In 1971 census figures indicated that 6% of the labor force was employed in manufacturing*, two thirds in rural areas and the remainder in the capital city. Because manufacturers in the city tended to operate on a large scale and were oriented toward exports, they were responsible for almost 80% of the total industrial production of \$45 million in 1975 (Haiti: 1974).

Trade currently accounts for about 10% of employment and 11.5% of total GDP. As in the case of manufacturing, workers in Port-au-Prince contribute significantly more to the total product of the trade sector (60%) than their representation in national sectoral employment (30%) suggests (Haiti: 1974b). One explanation for this concentration of trade activity in Port-au-Prince is the presence of large-scale commercial enterprises. Another explanation, perhaps more important, is that Port-au-Prince functions as the principal market of Haiti with thousands of traders moving daily between the city and the countryside.

Port-au-Prince is clearly the economic center of Haiti. Besides contributing the 80% of total industrial output and the 60% of the value added in trade noted above, the city concentrates 40% of total gross domestic product, 80% of the product of transport and public utilities, 70% of the activity in housing and real estate, 85% of personal and business services, and 70% of government services

*This 6% manufacturing employment figure, however, should be taken with caution since it excludes small-scale urban manufacturing and, more importantly, it excludes the manufacturing activities of farming families.

and administration. The inhabitants consume almost 25% of total agricultural production even though they represent only 12% of the population (Haiti: 1976a).

Urban Employment and Income

In 1976 the economically active population in Port-au-Prince was estimated to be about 320,000 or 50% of the total population and it is generally assumed that they all participated in the labor force. "Unemployment" was thought to be an inappropriate concept in a place where private and public transfer payments are virtually non-existent. As indicated in Table 1.1, major sectors of employment in Port-au-Prince were manufacturing, construction, commerce and services.³ Several interesting points emerge; therefore, it is useful to look more carefully at some of the sectors.

Manufacturing. Rapid growth in the urban economy over the past five years has been concentrated in manufacturing, particularly assembly industries. The annual increase in value-added during this period was estimated to be between nine and ten percent.

The labor-intensive assembly industries, which transform semi-finished imported materials into finished products for export, offer wages that are equal to or a bit below the official minimum rate of \$1.30 per day. Although directly employing less than 9% of urban workers, the recent high growth rate has had a beneficial impact on the amount of disposable income cycled through the local economy.

Approximately 90% of manufacturing workers were employed in 150 establishments that are sub-contractors for U.S. firms (ILO: 1976a). In 1976 the goods produced included finishing and embroidery of apparel (53% of employment), electronic sub-components (16%), baseballs (16%), toys (4%), and leather goods (2%). Income from the export of these products totalled about \$40 million. However, this figure is an overestimation; the net value accruing to the Haitian economy was more on the order of \$20 million after subtracting the value of imported components. Even \$20 million is somewhat exaggerated, because a portion of the gross profits usually is transferred abroad and basic public services (e.g., water, transport, electricity, etc.) are underpriced by the government in order to attract firms to Haiti (IBRD: 1976d).*

*The rapid growth of sub-contracting by U.S. firms was fostered by the U.S. tariff provisions for Offshore Assembly enacted in 1965, which exempts U.S.-made components of imported goods from import duties. Other incentives for locating firms in the city included the provision of an adequate supply of water and hydroelectric energy (1971), the adoption of a "laissez-faire" public industrial policy (1968), a 10-year moratorium on import and export taxes (1963 and 1968), the maintenance of an attractively low legal minimum wage, and stable political conditions.

TABLE 1.1
 Estimates of Employment and Relative Productivity
 in Port-au-Prince, 1976

| Sector | Subsector | Number of Workers | Percent of Total | Relative Value-Added per Worker |
|-------------------|---------------------------|-------------------------|------------------------|--|
| 1. MANUFACTURING | 1. Assembly Industries | 27,500 | 8.7 | 1.87 |
| | 2. Other Large Industries | 9,000 | 2.8 | 3.10 |
| | 3. Cottage Industries | 2,000 | 0.6 | 1.33 |
| 2. CONSTRUCTION | | 18,000 | 5.6 | 1.36 |
| 3. COMMERCE | 1. Large Scale Commerce | 17,000 | 5.3 | 2.71 |
| | 2. Small Scale Commerce | 40,000 | 12.5 | 0.40 |
| 4. SERVICES | 1. Personal Services | 20,000 | 6.3 | 1.59 |
| | 2. Domestic Services | 80,000 | 25.1 | .29 |
| | 3. Miscellaneous Services | 74,000 | 23.2 | .21 |
| 5. TRANSPORTATION | | 3,500 | 1.1 | 4.00 |
| 6. GOVERNMENT | 1. Public Services | 2,000 | 0.6 | 8.00 |
| | 2. Administration | 26,000 | 8.2 | 1.91 |
| TOTAL (AVERAGE) | | 319,000 | 100.0 | (1.00) |

Source: Plan de Developpement de Port au Prince et de sa Zone Metropolitaine, Phase II, Vol. 1, Mai 1975: CONADEP/Travaux Publics/Nations Unies, Port au Prince, Haiti.

Because foreign firms send the most labor-intensive parts of their operations to contractors in Haiti, manufacturing is highly sensitive to small internal and external changes. For example, many plant activities were suspended in 1975 because of declining international economic conditions. In the first half of 1977 most factories closed down because of a drought which reduced hydroelectrical generating capacity. (The factories have had no particular incentive to invest in the increased costs of independent stand-by power facilities.)

Other large industries are engaged in the relatively capital-intensive manufacture of cement, flour, soap, and fibers. These products are primarily for local consumption. They employed a bit less than 3% of all urban workers. Recent growth has not been as great as in the case of assembly activities, but the higher average wage paid to the more skilled workers make a significant contribution to the level of disposable income and to the level of government revenues.

Table 1.1 suggests that "cottage" industries* employed only 0.6% of total workers in Port-au-Prince. However, the information presented in Chapter Four questions this number and suggests that manufacturing employment conceivably may be as high as 35%; many workers classified in the (self-employed) services sector of Table 1.1 in fact may be involved in very small-scale manufacturing. It should be noted also that the employment figures for larger-scale enterprises refer to "in-plant" workers only and do not take into consideration the large number of workers who are sub-contractors (e.g., those who work at home). Evidence indicates that these numbers are not insignificant.

Construction. The other growth sector in recent years has been construction. While some of the estimated 9% annual growth in this sector can be attributed to industrial building, most has been in residential construction. Important investments in housing have been made by citizens returning after a number of years abroad, by families receiving funds from members working outside the country, and by the new industrial workers earning relatively high wages.

The construction sector in Port-au-Prince contains some moderate size firms; for the most part, however, it consists of informally organized teams working under the supervision of a foreman who has obtained a contract and self-employed groups of one to three individuals who specialize in small houses. With the exception of supervisors who are the most skilled workers in a team, workers earn approximately \$1.00 per day irrespective of the size of the firm or the type or scale of the contract involved. 5.6% of the labor force in 1976 was engaged in construction.**

* Wood, fiber and metal artisans who operate on a very small scale and produce tourist-oriented and local household goods.

**This figure does not include persons who build their own houses.

Commerce. Commercial activities employed 17.8% of the labor force, of which 17,000 workers were engaged in larger-scale, more capital-intensive enterprises and 40,000 in smaller-scale, more labor-intensive enterprises. The large-scale activities offer wages averaging \$1.00 a day.

Small-scale activities, for which overall wage and earnings data are not available, are characterized by self-employed vendors of various products. Most of these workers operate from fixed locations on sidewalks and streets. It has been anticipated that the effects of increased migration, on one hand, and capital intensification of larger-scale commerce, on the other, will reduce the productivity and the incomes of workers in this subsector.

Services. The services sector is the largest employer of workers in the city. Aside from personal services* (6.3% of employment) which offers relatively high wages, employment in the services sector is generally thought to be characterized by low productivity and low wages.

Domestic services (servants, gardeners, guards) contain approximately 25% of employment. Although money wages sometimes may run as high as \$40 per month, the typical income consists of remuneration in food, perhaps lodging, and sometimes a money wage of less than \$5 per month.

The 23% engaged in miscellaneous other services (car watchers, porters, boot-blacks and so forth) occupy the lowest rung on the occupational ladder. Although a full day's labor might provide up to \$0.60 or perhaps one dollar, many days or weeks may pass before the worker accumulates a full day's pay. This group appears to function as a residual labor pool; much of the time of its members is spent searching for work. From time to time short-run employment is found, but periods between jobs may be longer than the periods actually spent earning income.

From the foregoing it is evident that the more productive sectors of the city are unable to employ all of the actual labor supply on a continuous basis, even at low-wage rates and high degrees of labor intensity. Nonetheless, the large purchasing power of higher wage workers results in an indirect generation of a large number of occupations with lower productivity that provide incomes to a great many people that are close to what might be called a "normal" subsistence level. There is a limited demand relative to the supply of workers, and this relationship is the definition of urban poverty.

In the aggregate, 40% of households have incomes of less than \$20 and 70%, of less than \$40 per month. These 80,000 families constitute the "low-income"

*These include tailoring, dry cleaning, hair cutting, and so forth.

population of the city.* Twenty four percent (24%) of households defined as "middle income" earn between \$40 and \$100 per month, though more than two-thirds of them obtain less than \$60. The remaining 6% are the "high income" group and they receive almost half of total income in the city. This extraordinary concentration of wealth is coincident with the structure of Haitian society.

The Social Structure

In 1797 pre-revolutionary Haitian colonial society was visualized as being divided into three groups, with two sub-groups within the first and third one (Moreau de St. Mery: 1958). At the "top" were the whites, split into those of more importance (e.g., government officials and slave-owning planters) and those of lesser importance (such as shopkeepers). In the "middle" were the "free people of color" who were originally mulatto products of white men and black slave women and had been granted non-slave status by their fathers. These people were smaller property owners and artisans and were somewhat educated. At the "bottom" were the black slaves who were divided into house servants of local birth and field hands who were born in Africa. The whites numbered 40,000, the "free" people 30,000 and the black slaves 450,000 at the time.

After the civil and independence wars there were no "whites" left. Then Haitian society was believed to function along the lines of a "caste" system with "elites" and "masses" (Leyburn: 1941). The former apparently represented 5% of the population and the latter, 95%. The "elites" were the property owners, merchants, liberal professionals, and the members of government. They lived in the cities (mostly in Port-au-Prince), were educated, French-speaking, and maintained a "Western" outlook and behavior in all respects, including domestic family organization. They were a sort of aristocracy. The second group, the peasantry, was composed of rural farmers who spoke only Creole, were uneducated and illiterate, believed in voodoo, and engaged in common-law and polygamous marriages. The maintenance of this "caste" structure presumably was promoted explicitly by the "elites" who held the reins of social, economic, and political power.

Subsequent analysts discounted the "caste" view (Simpson, 1941; Price-Mars, 1942; Lobb, 1946; Bourignon, 1952; and Moral, 1959) in favor of a "class" structure, wherein two groups differing in culture and goal orientation existed side by side in the same society.

More recently Wingfield and Parenton (1965) tried to describe four basic strata. The "top" 2% of the population was labelled the "traditional" urban "mulatto bourgeoisie;" the next 4% consisted of an emerging "black middle class;" the third 6% was a "black urban proletariat;" and the bottom 88% consisted of a "black peasant mass." In addition, about one-tenth of one percent of the population consisted of foreign "whites" and Syrians which together were ascribed an important economic role within an "unintegrated sub-cultural" group of the bourgeoisie.

*This definition of low-, middle-, and high-income groups is one which has been developed by the Government of Haiti. The category of "poverty group" has not been defined by the Government.

Within this model of society the bourgeoisie is seen as a prestige class which is becoming smaller and smaller because of emigration and lower birth-rates. It resides exclusively in Port-au-Prince and occupies most professional, managerial, and administrative occupations. The "non-elite" foreigners and Syrians in this group wield little or no direct political power, although they are influential through their control of large-scale industry and commerce. Together with the "mulattoes," they also control a sizeable amount of urban land. Members of the bourgeoisie reportedly take a paternal view toward the "masses" and see them as being simple and honest folk who, if educated, could have a much better life. At the same time, they are very suspicious of the "middle class" who replaced them in government during the regime of Dr. François Duvalier (1957-1971).

The "middle class" of Port-au-Prince is characterized by a fluid membership and a lack of traditions and of shared class values or solidarity. Here material wealth is supposed to provide social status. The prominent members are the "black bureaucrats," top government officials, government employees, and military officials. This group is socially insecure, self-conscious, sensitive, and suspicious. The lower echelons of the class are shopkeepers, teachers, lower government employees, clerks, and skilled artisans who are often the owners of their own establishments. More than half of the middle class are salaried and are directly or indirectly dependent on government for their occupational security. Their income in 1965 ranged from \$500 to \$2,000 per year and the major aspirations centered on better salaries, education for children (who might have to earn a living outside the country) and opportunities for saving against the insecurities of a tomorrow.

The "bottom" in the city, only a small notch above the rural peasantry, is the urban "proletariat" comprising more than half the city's population. These persons are primarily peasants who migrate to Port-au-Prince in search of employment and a better life. They live in slums and it is assumed that their hope for a better life ends up inevitably as an exchange of one form of misery for another.

Although some do find employment, most go unemployed. The "luckier" ones consist of more regularly employed semi-skilled artisans, truck drivers, market women, household servants, lottery ticket vendors, and a few factory workers. They are the bulk of the urban labor force.

The unlucky ones, the majority of the proletariat, are unemployed or sporadically employed and are forced to depend on relatives or their own ingenuity to meet daily subsistence needs. Poverty among this group is thought to be "endemic and worse" than in the countryside. They constitute the "hordes" of shoe-shiners, peddlers, beggars, porters, and dock workers of the city. They are essentially the same as the rural "peasant masses."

Then comes the rural peasant mass. Writing about rural Haiti in 1937, and the way peasants stratify themselves, Herskovits (1971) reported that the very "bottom" was composed of the "indigent" who for whatever reason had lost their family connections, their property and had to beg in order to eat; they were a small minority. One step up were those who were "miserable" and who were usually, though not always, "incompetent." They were considered to be generally unlucky, in terms of crop failure and yield. Most of the population in the rural area considered themselves to be in the third group, the "middle class." They reportedly were situated comfortably according to Haitian standards, living frugally on their habitations with their families and pursuing a predictable course throughout their lives. Above this group were those regarded as having wealth and position or spiritual power - i.e., the successful members of the community.

Given this very brief look at models of Haitian social organization, attention now turns to an examination of the relationship between those who rule (i.e., the government and its allies) and those who are ruled. This is the key feature of the social structures which have been described.

Governance

In whatever the manner they are subdivided or aggregated there is a fundamental cleavage between the group of people who comprise the official (or unofficial) political and economic institutions of the country and the remainder. Mintz (1974) puts the issue (and the problem) in clear if somewhat dramatic terms:

Haiti still lacks - or has come to lack - the unifying institutional forms through which ...conflicts could be mediated, settled or fought out; and this lack is related to both the nation's isolation during the first century of its existence and to the effects of North American colonial rule not long thereafter. It is not enough to bemoan the feebleness of institutional forms, or to indulge in sanctimonious discussions of the dreary succession of petty tyrannies that have plagued the Haitian people. The will of the people is not heard by those who are content to rule. This is the real problem of Haiti.

The day-to-day concerns of those simultaneously in government, industry and commerce whose interests range beyond immediate job security, wages, and profits do not overlap very much with those of the rest of the population. The former was and still is interested primarily in the collection of taxes, the distribution of tax revenues, and in "keeping tabs" on the population. Official governance tends to be exercised in the production and distribution of coffee,

sugar, sisal, and a few other commodities that have export tax value. In areas where these items are produced there often is tension between officials and the populace; in most of the rest of the country there is, if anything, mutual indifference.

It would be an error to imply, as Mintz does, that the institutions of governance are totally absent from among the group that is not tied to government directly. Because "government" in Haiti has not come as close to representing the idealized, contemporary conception of what a government is supposed to be and do, those not in government, especially in rural areas, have organized themselves in recent times to carry out specific tasks of common value and interest. The country and city are dotted with organizations of citizens involved in such things as collecting "taxes" and forming committees and work groups to build roads, dams, bridges, health and community centers, schools, and nutrition programs. Sometimes these community organizations work well, sometimes not; they usually are not tied to government. They vary considerably in size; some have active memberships numbering in the thousands and are tied together into loose regional federations. Two ubiquitous characteristics of these organizations are the extreme paucity of resources they have to work with and an explicit definition of the "state," which refers to the people who run the government rather than to the general population of Haiti, or to its "representatives."

This political aspect of society has not been static; indeed, there recently have been some promising and not-so-promising changes. On the positive side the government has begun to support rural organizations and has even started programs to develop new organizations from the bottom up when they have been absent. There is interest also in starting such organizations in the neighborhoods of the capital. These trends warrant some degree of optimism, although the efforts are miniscule in comparison with the scale of organization necessary to carry out even the most rudimentary public actions.

Conclusion

The brief overview of Haitian society has several implications for policies which could serve to ameliorate the condition of the urban poor. First, it points to the need for a sensible approach to policy formulation which would be sensitive to the history of the country and would require that policy actions be adapted to the current social structure, whatever its gross shortcomings. Specifically, policy must not be designed on the basis of the ideal concept of "government" which many analysts implicitly assume to exist. Aside from the technical and resource limitations on institutional action, which are discussed in Chapter Five, the attitudes of those who "govern" must be accepted as a basic constraint to effective public action.

It should be assumed that high-level public officials are more likely to promote their private industrial, commercial and business concerns to the detriment of programs aimed at alleviating poverty. Among other things, this

means that it is unlikely that they would be willing to compromise their private income by supporting a public policy aimed at reducing or changing it in a negative way. Similarly, mid-level officials should be assumed to be more concerned with job security and material wealth than with any broad purpose of civic responsibility.

Under these circumstances it is hard to see how specific public actions could get implemented without major institution-building programs that would limit the outside interests of high-level public officials, and provide job security and better salaries at mid-levels.* However, even though institutions of government do not reach the majority of urban citizens, several kinds of non-government institutions exist with capacities to execute many types of local actions in various parts of the city. Although far less organized or extensive than in the rural areas, urban community organizations do exist and do carry out some interesting projects, such as savings and loan associations, community centers, schools, cooperatives, and neighborhood rehabilitation programs. These operations are financed at such low levels that they are practically unnoticeable, but they can be found and incorporated into programs as necessary.⁴

Therefore, rather than imply that institution-building programs must necessarily precede other types of actions, the observations which have been made tend to suggest that projects and programs should be designed as vehicles upon which to build institutions so that in the long run it may be possible to obtain greater integration of social institutions (both governmental and non-governmental) with the population as a whole.

The implications for program design are quite clear: they have to be far more specific, less sophisticated and far different from those which are usually proposed.

Finally, it seems important to mention that the characteristics of the urban and national economy do not offer much in the way of hope that the poverty of Haiti could be alleviated significantly in the near future, even if all technical "solutions" could be implemented immediately. On the other hand, the history of the country and the recent increase in economic activity in the city strongly suggest that the potential capabilities of Haiti extend far beyond actual levels. The welfare of the population for the time being depends less on the limited nature of productive resources and more on what government, external assistance organizations, and private households and firms choose to do with what is available, a conclusion reached by others in the past as well (e.g., Moore: 1972).

*Programs of this type have been implemented to a limited degree, but the effects will not be evident for some time.

Notes

¹This overview is borrowed from varied sources. For more indepth analyses of the history of Haiti, see Bellegard: 1953; Dorsinville: 1975; Moral: 1961; Rothberg and Clague: 1971.

²The crude birthrate is approximately 3.7% and the crude death rate is 1.6%. Emigration takes place at a rate of 0.3%.

³This estimate was based on a number of direct and indirect information sources. The underlying assumption was that unemployment did not exist, and so the services sector includes all labor force participants who could not be allocated to the other sectors and who could not be classed as unemployed.

⁴In St. Martin, for example, there is a group of men who have organized something like a limited membership social club called the "Duvalieriste Brothers." One of the more influential members began a program of paving the mud pathways in one part of the neighborhood so that garbage and waste would drain away from houses and into a ravine that passes through the center of the community. Although he could have "demanded" donations for the project, he did not, because once his crew of ten workers started to actually do things, donations began to flow in from residents at a rate of about \$15.00 per day.

II

THE ECONOMICS OF SURVIVAL

As was indicated previously, there are a great many poor people in Haiti and Port-au-Prince. Those at the lower end of the income spectrum may be viewed as functioning close to what is sometimes called a "subsistence frontier." Given the economic and social conditions which exist in Haiti, it should be evident that great efforts are required continually by individuals just to survive. This struggle in an environment of limited possibilities is referred to as the "economics of survival."

St. Martin*

The approximately 3800 families who live in St. Martin vary in household size from one person to 24 persons, with the most frequent size being four, and the average about 5.3.¹ The majority of families are renters. A small proportion (8%) rent on a weekly basis, but most rent units on a monthly basis (35%), on an annual or semi-annual basis (30%), or rent land and build their own units on it (17%). A very small number of residents actually own land. Most of St. Martin's property is in the hands of a relatively small number of non-resident owners, including the government. Because of this, households tend to move a great deal. Almost half the residents stay in one dwelling less than a year. Most movement of households, however, takes place within the St. Martin area rather than between it and other parts of the city. For example, 54% of residents in the survey identified their previous home as being in or in the immediate vicinity of the community; another 15% moved in from the central market area which is the receiving ground for very low-income migrants to the city. Nine percent came directly to St. Martin from rural areas. In terms of social mobility, St. Martin is considered a step up for those who move in from the market or directly from rural areas. At the same time, it is a step down for those who move in from other parts of the city.

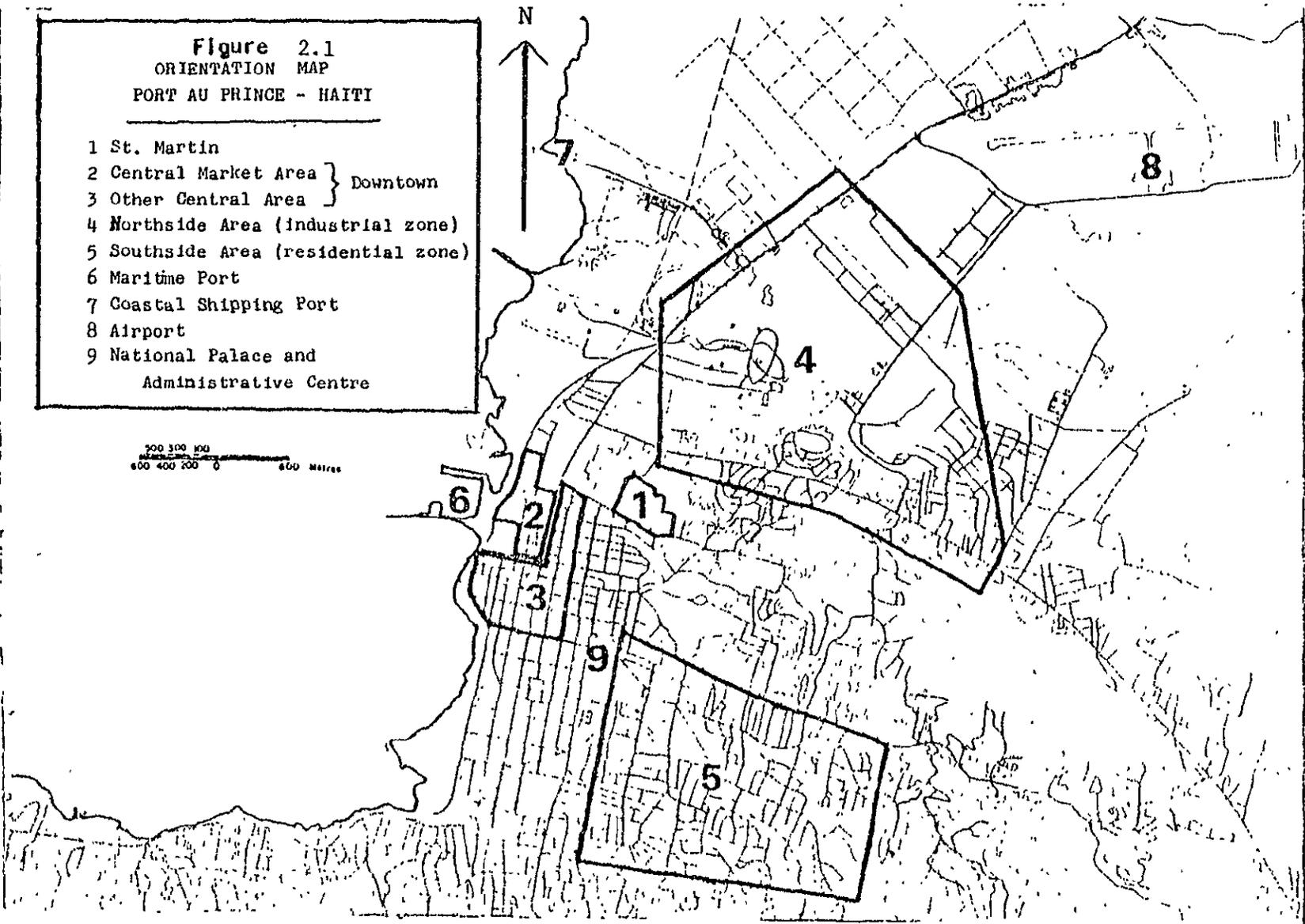
The households in St. Martin are composed almost exclusively of related individuals; unrelated individuals and servants represent less than 2%. Most adults are married and live with their spouses (67%) and only a very few are involved in polygamous relationships (3%). About 10% of the adults are widowed, divorced, or separated. The remainder are single and, among women, a quarter of these have children. With respect to general population characteristics, women outnumber men

*St. Martin is a neighborhood located about twenty minutes by foot from the center of Port-au-Prince and the central urban produce market of Croix-des-Bossales (Figure 2.1). Informal interviews with 88 households, containing 464 individuals were conducted in 1976. For a detailed description of the survey process, see Appendix A, "The Survey Method," and Appendix B, "The St. Martin Survey Codebook."

Figure 2.1
ORIENTATION MAP
PORT AU PRINCE - HAITI

- 1 St. Martin
- 2 Central Market Area } Downtown
- 3 Other Central Area } Downtown
- 4 Northside Area (industrial zone)
- 5 Southside Area (residential zone)
- 6 Maritime Port
- 7 Coastal Shipping Port
- 8 Airport
- 9 National Palace and
 Administrative Centre

0 100 200 300 400 500 METERS



by about 20%, children under five represent about 24% of the area population and children under 15 represent 45%. These general demographic statistics correspond closely with those of the total lower-income urban population, as do income distribution figures. See Table 2.1.

The approximately 20,000 people of St. Martin are compressed into an area of 13 hectares where all of the buildings are one story in height. The gross density of 1500 persons per hectare (625 per acre) is one of the highest in Port-au-Prince (Haiti, 1976b).

A major stormwater drainage ravine passes through the center of the community carrying garbage and debris from other parts of the city. The ravine is used also as a garbage dump and feeding area for pigs by local residents. During periods of heavy rain debris from upstream builds up dams and causes severe flooding and stagnant ponds. As a result, the ravine is a breeding ground for a host of diseases, including parasites carried by pigs, malaria carried by insects, and typhoid carried in drinking water.*

The only roads suitable for vehicles are on the western and southern sides of the neighborhood (Figure 2.2). There is no vehicular access to the interior. Access by pedestrians is also limited. There are ten major pedestrian paths, two on the west and eight on the south which provide exits and entrances for residents. The northern limit and much of the eastern limit are bounded by a ten-foot concrete wall topped with barbed wire. The major paths are complemented by a network of minor paths which feed into the major paths and do not give access to the surrounding streets. The interior of the neighborhood is much like a maze with minor pathways, sometimes only two feet in width, zigzagging throughout the area.

The typical structure, averaging about 40 square meters, is made of wooden planks obtained from construction sites or from crates used in the import of goods. Floors are usually of earth and roofs of corrugated iron sheets. The current replacement value of such structures is about \$25 per square meter.

Large structures are subdivided into six or seven dwelling units or apartments with mud, plywood, or sheet-metal walls. Persons residing in these dwelling units frequently subdivide them further simply by hanging a curtain across the

*The Interamerican Development Bank plans to finance a major reconstruction of the ravine that would remove some of these problems. In addition, the CARE Foundation has been negotiating a working arrangement with a local community organization to clear the upgraded ravine of debris in a "food for work" type of program using AID contributions.

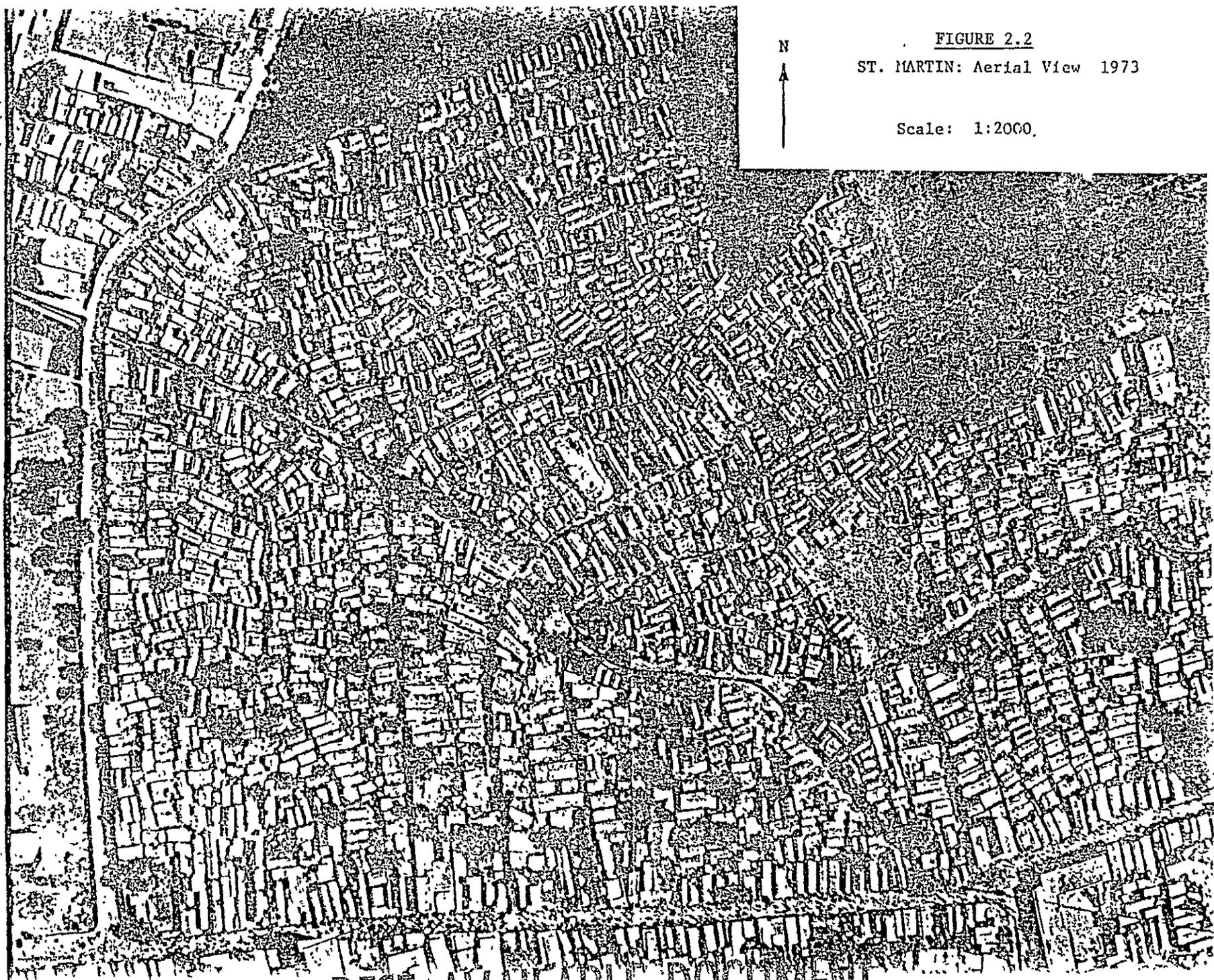
TABLE 2.1

Distribution of Monthly Household Income
by Income Class in St. Martin and Port-au-Prince*

| Family Income (per month) | Percent of Population | |
|---------------------------------|-----------------------|------------------|
| | St. Martin | Port-au-Prince** |
| \$ 0 - \$40 | 61 | 72 |
| \$41 - \$60 | 28 | 17 |
| \$61 - \$100 | 11 | 11 |

*The distribution for Port-au-Prince contains only those lower-income households with earnings of \$100 per month or less.

**Source: Plan de Developpement de Port-au-Prince et de Sa Zone Metropolitaine, Phase II, Vol. I, Mai 1975.



N



FIGURE 2.2

ST. MARTIN: Aerial View 1973

Scale: 1:2000.

BEST AVAILABLE DOCUMENT

middle and subletting one side. The investment for the structure is spread thinly across a large number of people who pay approximately \$4.50 a month for about six and a half square meters.

Each structure or pair of structures usually has a latrine for the exclusive use of the 30 or 40 people that surround it. Although the technical quality of these latrines leaves much to be desired, they provide better service than more technically sophisticated facilities provided by the government in some other areas. One reason for this is that all of the users know each other and, therefore, it is in the interest of each not to misuse a communal facility.

Water facilities do not exist inside the area. There are three public fountains on the street, but they rarely flow. About a dozen homes on the west and southern roads have taps and reservoirs and sell water to mobile sellers and to residents. The main method of obtaining water is to buy it from the several hundred water sellers who transport it daily from surrounding neighborhoods. Electrical service is not available.

Although there is considerable selling and manufacturing activity inside the neighborhood, the local focus of economic activities is along the street on the south side. There is a neighborhood produce market on the southwest corner and its activities spread along the length of the street. Next to it is a garbage dump, which, although not ideally located in the middle of the street, at least has the advantage of being collected once a day. The rest of the street is lined with small shops and workshops, pawnshops and credit establishments, a cinema, two bakeries, schools, and a church. Though the street has some importance, it is minor since the activities of residents are concentrated in the downtown area and its central urban market.

There are seven major primary schools and two schools combining primary and secondary levels around St. Martin. They are all private institutions and have a total enrollment of about 6,000. The schools do not serve the community exclusively and residents send their children to schools all over the city. Crude estimates have suggested that up to 80% of children between six and fifteen in St. Martin go to school. Data collected during this survey suggest that only 50% attend school.

Although extension agents of the Department of Public Health periodically pass through the neighborhood carrying family planning devices, there are no health facilities or programs in the area or anywhere nearby. Similarly, there are no adult literacy programs available to the community.

The physical attributes of St. Martin just described are not unique. Fifty two percent of the urban population of Port-au-Prince live in similar surroundings (Haiti, 1976a). Such areas, because of overcrowdedness and the lack of basic infrastructure, are very dangerous. They are nurturing grounds for diseases which,

once started, can be readily spread throughout the entire population. In addition, these areas are extreme fire hazards. The density of wooden structures, the lack of access routes and the absence of water services make them very susceptible to major disasters. Indeed, fires in 1973 and 1975 left 11,000 people homeless in neighboring areas.*

While these conditions are less than desirable, they do make up the physical environment in which and against which the population must strive to survive.

The Family

To comprehend better the manner by which people operate in areas such as St. Martin and in the all-pervasive socio-economic environment of which the community is an integral part, it is essential to understand the dynamic characteristics of the population's basic unit of economic organization. In Haiti this unit generally is defined as the nuclear household consisting of mother, father and children (Bastien: 1951). At the same time the family includes a wider extension of relatives of both parents, so the nuclear unit is part of a larger, extended group (Herskovitz: 1971).

This type of family structure draws its traditions from Africa, where descent usually is counted only on the side of the mother or only on the side of the father, and from France where custom ties children to the relatives of both parents. This hybridization results from two factors: the partial destruction of the African family tradition during the period of slavery, and the desire of post independence governments to model family organization along the lines of their European counterparts.

Formation

Although some residents of rural areas marry through the church and obtain legal unions, most form families through common law means. The legal union is relatively expensive to obtain and carries more prestige than the common law union, but both forms are regarded as permanent and are treated as constituting true marriage. Either form of union requires parental consent. One of the requirements of the young man is that he own a piece of land, a house, and animals. This demonstrates, among other things, his financial ability to sustain a new household.

Many men of relatively substantial means engage in plural marriage and may have two or more wives; however, the force of religious and social sanctions behind monogamy and church marriages tends to keep this practice limited or, at least, hidden from view. If practiced at all, men with more than one spouse will tend to locate them at a distance from each other so that they have little opportunity to meet, even though each will know that the other exists.

*A program to build an access route and some fire hydrants is under way. Financing of this action is being assisted by grants from the United Nations Capital Development Fund (UNCDF).

As a result of the plural mating system many men remain single by choice and because they lack the economic means to compete for wives. One effect of this is high levels of prostitution and homosexuality which are found in both urban and rural areas, though the latter is far more prevalent in urban areas (Herskovitz: 1971).

Although liaisons are formed relatively easily, it is difficult to break one up through divorce or separation. The basic causes for divorce or dissolution in Haitian society are sterility, constant quarreling, and sometimes the practice of sorcery by one partner when the other is a practising Christian. Neither adultery, persistent neglect of household duties, bad rearing of children, regular beatings, nor jail sentences warrants or results in separation. Part of this recalcitrance about divorce and separation is the required division of wealth between the individuals involved (Comhaire-Sylvain: 1961).

Division of Responsibilities

Within the immediate family a husband is expected to be stronger than a wife in order to be able to work harder, to control her and to protect her. It is his duty to procure food for the family. In rural areas the produce of harvest is given to the wife who retains part for the needs of the house and sells the rest in the market, in order to buy other necessities. A part of the market earnings is used for purchase of animals and anything left over is saved to eventually purchase land. Thus, the woman functions as salesperson, banker and investor for the family. Quarrels do arise, particularly when a man questions his wife's accounting or when he wants money for cock fights, drinking or other personal needs. In most cases the problem is resolved by men who deduct a sum from their separate earnings without telling their partners (Herskovitz: 1971).

The woman is also responsible for management of the day-to-day business of the household, for only she is supposed to know the basic needs. If she is sick she may ask another woman to do the buying, and if she is away or very sick her husband may do the cooking, child care, and everything except laundry. Otherwise the husband stays in his fields or passes the time with his friends (Comhaire-Sylvain: 1961).

In a great number of cases both men and women have control over separate income sources. The wife often works her own plot of land and/or engages in independent trade activities. In these situations her income covers her personal expenses, food and clothing for children, and their medical expenses. Fathers who contribute to the welfare of children are praised but are rare; they are not considered "bad" fathers if they do not contribute at all. On the other hand, with the additional expenses of sending children to school, fathers are being asked by school administrators to cover these costs and usually do. Even if fathers do not contribute much to family welfare from their own income sources, part of their income goes to this purpose anyway. Wives market the produce of their husband's fields and deduct substantial amounts from these sales earnings. If there are no children,

the amounts get skimmed off anyway for household expenses and for accumulation of savings for the purchase of land or the building of a house.

While a man usually is willing to give his wife a plot of land to work, he rarely will give her money to start trade activities. She will have to save for this purpose or borrow from her mother or friends.

Children are expected to help in the fields, care for animals, fetch water, and assist their mother in household duties. Boys start helping their fathers in the field at about four or five years of age and continue until they are able to cultivate their own fields. At 17 or 18 years of age a boy is given a field and seed for sowing. The produce is sold by his mother and she saves the income from it for him until he marries. Girls learn to sew, cook, wash and iron from their mothers until the time when they are considered ready for marriage. Girls are trained also in the techniques of marketing and are given small articles to sell. After accounting to their mothers, who evaluate their "on-the-job" training progress, the proceeds of their market activity belongs to them.

Responsibility for childcare is shared among other members of the family. Parents who have considerable means then entrust some of their children to relatives in the city for education. The parents pay for clothing and school expenses and contribute to their maintenance with gifts of food and produce. Very poor parents send their children to wealthier relatives or to strangers for better care and, perhaps, education. Here the child can work as household servant in exchange for room and board, and often is mistreated by unrelated "parents." In addition to the above, children are sometimes sent to close relatives, such as a childless sister, a widowed mother, or a lonely father to keep them company and help them out in their economic activities.

Sharing

Sharing of living quarters is not uncommon in Haiti and adult relatives frequently move in with each other. Depending on a number of factors, treatment may range from honored guest to servant. Self-supporting guests usually would not think of paying or offering to pay for their food or lodging but would give occasional gifts of coffee, corn, or a child's dress on special occasions. Poorer guests would be expected to buy their own clothing and offer their work in exchange for food.* Servants who enter the family as children and who are not related to the family generally are not paid in cash. They eat the same as everyone else but do not receive as many clothes. Although there is a high propensity to share shelter, food and services in Haiti, the sharing of cash is another matter. Cash is scarce and is seen as "capital" which can be saved and accumulated for investment that will yield future increases in wealth. The opportunity cost for spending

*This work includes the sale of produce on commission.

or transferring cash to another person is high and usually will take place only in dire circumstances.

Market Activities

Families in rural areas who do not work the land or market produce are a minority. These find income sources in a variety of other activities.* The majority of families, however, work the land and sell their agricultural labor services to sugar, cotton and sisal plantations. More importantly, a great many engage also in a remarkable set of secondary occupations that address a variety of rural-based demands for goods and services (Metraux: 1951). A few of these activities are crafts, such as basket making which is part of the African tradition (Herskovitz: 1971), but the vast majority are small-scale manufacturing activities that are today essentially the same in rural and urban areas as they were in the pre-revolutionary period.**

That a large part of the population already is engaged in industrial activity is important. It indicates that the inheritance from one generation to the next will not only include the transfer of agricultural skills and capital but will include also the transfer of non-agricultural skills and capital.

Given the range of economic activities that most rural families are engaged in, they cannot be accused of not trying to increase their incomes. Yet, as Mintz (1974) points out and as was shown in Table 2.1, "Their energy and daring can do little to increase the level of productive activity since, for most of them, the scale of enterprise is so modest and the available economic opportunities so limited."

Under these conditions one cannot construe migration from rural areas to the city as a simple case of rural "push." The wide variety of enterprises in rural areas and skills to be found in the rural farming household suggests that there may be a certain inherent mobility within a family, and the decision to migrate or send someone to the city may be based on the simple fact that the city is seen as a place to obtain a higher return on investment (e.g., Sjastaad: 1962). Families migrate to Port-au-Prince in search of higher returns in the

*Primary among these are legal services, herbal medicine, woodwork, carpentry, masonry, tailoring, dressmaking, shoemaking, mattressmaking, iron work, baking, distilling, milling, hairdressing and jewelry making.

**These industries include leatherworks and tanneries, lime kilns, charcoal burners, metal tool works, comb makers, grass and bamboo weaving works (that produce carrying bags, fish traps, and baskets), woodworks (that make bowls, mortars, pestles, tool handles and spoons), sheet metal works (that transform tin cans into dippers, pots and candelabras), clothing manufacturers, dugout makers, and shipbuilders, sail and seine makers, pottery and ceramic makers, shoemakers and distilleries (Mintz: 1974).

same way and for the same purpose that firms migrate to Haiti from New York and Miami (e.g., Hoover: 1948).

Rural-Urban Transformations

Some studies suggest that after migrating the family in urban areas is fundamentally different from the family in rural areas. Legerman (1975) for example characterizes the situation in an urban slum as one in which

...poverty and uncertain economic resources seemed the crucial factors in...unstable marriage and mating patterns and in the particular forms taken by the 'family' and household. Women in the slums were often professional or semi-professional prostitutes ...and in contrast to the ...peasant, men residing in the urban slum could pay for the domestic services of women ...without entering into some form of ...union. For the urban woman, the possibility of wage employment reduced her economic dependence on the man...In the city, men might find it more expedient to enter temporary unions ...(but) ...these unions were weak and often threatened by poverty and unemployment, by the lack of established community sanctions and controls, and by the over-population of the slums...

This description bears little relationship to what one sees in the urban slums in Haiti. In fact, there appears to be little fundamental difference between family organization in the city and that in the countryside (Herskovitz: 1971; Comhaire-Sylvain: 1961; Metraux: 1951; and Courlander: 1960). Other studies of urban families (Laguerre: 1975a and 1975b) tend to support the view that urban family life is not as destitute or as different as is sometimes assumed.*

There would appear, however, to be some differences in inter-family relationships, based on the observation that the city provides more opportunities for higher income, greater education, more neighbors, and so forth. These differences stem from the fact that the common economic base, the locational stability and the common orientation to agricultural production are more conducive to the formation of institutions such as community development committees, personalized credit arrangements, cooperative work groups, and exchanges of favors than are the varied economic base, locational mobility and neighborhood anonymity that are characteristic of urban areas.

*Pierre (1975) noted that while most migrants to the city maintain their basic intra-family relationships, some who have attained relatively high education levels (in either the city or prior to coming to it) develop strong ties to friends outside the family structure.

Whatever the extent of changes in the relationship between families, the majority opinion among researchers remains that intra-family characteristics are not altered by a move to the city. The formation of households still requires "resources" to be demonstrated by potential "partners." Internal family responsibilities still need to be allocated. Sharing remains an integral aspect of interdependence within the extended family and productive market activities are still essential to family maintenance.

The Model

The foregoing description has outlined how family formation occurs, how responsibilities are divided, how sharing takes place and some of the kinds of market activities pursued. To understand the economics of survival, however, it is more important to determine "why" these things happen. Capital theory in economics has appeared well-suited for this purpose.²

In the context of the theory, it is useful to assume that the goal of households* is to maximize benefits or all things perceived as "good."³ Benefits may not always be tangible or quantifiable; they may vary from household to household and from society to society. Therefore, the reason that households produce things is that production is "good" in its own right (e.g., work is enjoyable). Alternatively it is a "bad" intermediate step required to get something else which is "good" (e.g., work to obtain money to buy food).

In order to produce, a household must have at its disposal the means to produce. These "factors of production" can be grouped into (a) human capital (e.g., strength, functioning limbs, learned skills, capacity for learning, etc.), (b) physical capital (e.g., food, tools, money, land, etc.), and (c) time (sometimes called "raw" labor). Production requires use of discrete quantities of all three factors, which are inherited by a household from its "parent household." For example, as we have seen, girls become ready for marriage when they have demonstrated successfully a mastery of household management, trade, and so forth. Boys become ready when they have demonstrated skills in agriculture and have accumulated land, animals, and other things. In both cases the individuals have been endowed by their parent households with the means to function as independent households. Marriage offers the possibility of forming a larger household with more and more varied production factors and, hence, a larger range of production possibilities than would have been possible without such a union.

If the factors are not sufficient to permit mastery of the environment, households cease to exist. They do not survive or they become reabsorbed into their "parent households." It is not uncommon for people in Haiti temporarily to move in with each other. A rural migrant to the city, who is unemployed, has little in the way of savings and knows little about the urban environment,

*The household may be defined in a number of ways. For this paper a household is a person or group of persons who share shelter and food and who also produce goods and services for internal use and/or for external exchange in the market.

would have to spend considerable time learning about the city. Not only does this place him in considerable hardship, he might starve before he figures out a way to earn a living. Moving in with friends or family is perhaps the only viable alternative.*

In any case, once a household is established, its total output of marketed and non-marketed goods and services depends on the production factors which it has available and how it uses them. Equivalent earnings can be obtained by substituting one highly skilled worker for two less skilled workers in market activities. Since the factors of production are limited, however, at a certain point use of skills reaches a limit and withdrawing more unskilled workers results in a decline in total earnings. Put in simple terms, participation in market activities can increase to the point where it is subject to diminishing returns. This is especially so if income production reduces the level of production of essential non-market goods and services, such as cooking, eating and child care.

While maximizing benefits, the family at the same time must strive to minimize the costs of producing any given output. If a family wishes to obtain a given amount of food each day, the purchase of food is best performed by the person who minimizes the cost (time, money and skill) of buying and whose opportunity cost is lowest. In Haiti, where food purchasing requires intensive bargaining, adults are more likely to shop than children, and women, given their specialized training, are more likely to engage in it than men.

The same accounting tells us where a woman is likely to shop. If there are two market places available, one nearby with higher prices than another further away, the choice of places to shop depends on whether the money savings are worth more or less than the time savings. If time is worth more, the minimum cost location is the one nearby.

The cost-minimization rule can also lead to cessation of income production altogether. If earnings are lower than the cost of producing earnings, then a household has to minimize its losses by producing few, if any, market activities for a while. In this case one is compelled to interpret observations of "unemployment" and "underemployment" very carefully.

*In wealthy countries with institutionalized welfare systems, the individual or household without adequate means becomes a temporary or permanent ward of all households (orphans, the indigent, the unemployed, etc.).

However, to understand the importance of factors of production, especially when applied to a place like Haiti, it is useful to look at the minimal condition of the household composed of a single individual whose most important perceived benefit is survival. Under this condition we may assume that the most important thing to be produced is food, not necessarily because food is "good", but because it is an intermediate means to produce time (i.e., "tomorrow"). In order to produce food in an urban setting the individual first must produce a good or service which can be exchanged in the market for food. He has to work, **but** there is only so much **that he can do because work depletes the stock** of factors necessary to produce it. Eventually work will have to stop, earnings will have to be collected, food will have to be purchased and cooked and eventually it will have to be eaten in order for factor stocks to be built up to reproduce work all over again.⁴

More concretely, let us suppose that work requires 200 calories an hour and that non-work (non-market work) requires 100 calories. We may also assume that at the start of the day a person has capital stock of 1000 calories left over from his last meal. In theory, he could spend up to five hours working or ten hours not working. In both cases, he would have depleted his stock of factors at the end of those periods.

If getting paid, buying food, cooking it, and finally eating it requires three hours (300 calories), then work is limited to three and one-half hours (700 calories) before it becomes mandatory to stop. In order to return to the original starting position of 1000 calories the individual's earnings from work must be equivalent to 285 calories an hour (1000 divided by 3.5), even though the work itself demands 200 calories an hour. The 285 calories represent zero net earnings and zero profits to the producer.

To break out of this closed cycle the individual must find a means to do one or more of the following while holding other things constant:

- a. increase earnings from work,
- b. reduce caloric requirements for work,
- c. reduce non-work time, and/or
- d. reduce caloric requirements for non-work.

All of these options point to the fact that income should increase relative to the cost of producing income, or that "productivity" should increase. Two things are important here. First, two of the four options available have little to do directly with productivity changes in market work. Second, the process of "finding a means" to increase productivity requires time and calories, neither of which is available to someone living in a closed system.

Let us now suppose that some form of external assistance has been rendered successfully and that hourly earnings increase. The individual is able to expand beyond his closed system and modify his whole set of activities. If all

he had been doing was selling his labor services in pure form, he might decide to use his labor to produce goods for sale, since "surplus" earnings can be saved and invested in materials and tools which might even obtain higher revenues and benefits. He can work also a bit less and spend time looking over the housing market and then move to a less costly place which would help his situation even more. Given this, there is nothing wrong or irrational about working less and it is, therefore, unwise to prejudge the forms which the reactions to an increase in income might take. If we observe individuals shifting from wage employment to self employment, or buying more food, or spending more on housing, or simply working a lot less, it does not follow necessarily that they are saving less or investing less in the future. Given that the "future" is often no more than several days, it becomes counterproductive to speak disparagingly of "consumption" or "disincentive" effects to productivity increases.

One of the most important first steps in initiating assistance programs is recognition that the "target" of policy usually knows and understands the details of his limited environment better than does the outsider, especially in places like Haiti. The implication for program formulation in this sort of situation, in the short run anyway, is that it forces one to focus less on the set of specific actions which might remedy a situation and more on setting up the mechanisms whereby the "target" can identify and find the "means" to increase his income and maximize his benefits.

Conclusions

The physical environment of St. Martin is a microcosm of the conditions in which the majority of the inhabitants of Port-au-Prince are required to live. It is also a stark manifestation of the manner by which the history and social structure of the country have yielded an inability to provide basic urban services and an urban management capability. However limited the possibilities of the economy may be in providing means whereby families can move beyond a subsistence level of existence, the immediate environment in which most of them must struggle serves to compromise many of the opportunities they might have. It is easy to fall ill, to have food attacked by rodents and to have possessions destroyed by fire. St. Martin clearly is not an area conducive to an increase in household productivity, and much needs to be done to improve it.

With respect to the family itself, the information drawn from sociological and anthropological analyses is supportive of the notion of rational economic behavior. It would be misleading to suggest that a major obstacle to increasing household productivity and income is resistance to social and cultural change (Mintz: 1974), or an inherent backward way of life and attitude that would require major re-education to correct (e.g., Francisque: 1968). The preceding discussion has tried to demonstrate that if individuals and households can see the direct benefits of policies, they will respond appropriately.

In this context, however, care should be taken in selecting the manner in which income increases are to be generated. Ten dollars in cash is not the equivalent of, say, ten dollars of housing. Income is basically capital and the various productivities of different forms of capital will yield correspondingly different subsequent returns of income. If one understands the properties of income and the forms it takes, it is easier to formulate effective actions to promote household economic development.

More generally, one should recognize that income is the manifestation of dynamic processes that involve market work to maximize revenues, non-market activities to minimize costs of producing work and internal operations to turn inputs into outputs. Policy aimed at increasing productivity, income and welfare can, in principle, address any one or all of these elements of the income equation.

Notes

¹To date there have been no major surveys published of the social characteristics of the population of St. Martin. For the remainder of the text, data collected during this survey are used as the basis for discussion.

²For a discussion of the evolution and applications of this model, see Mitchell: 1912; Reid: 1934; Becker: 1964, 1965, 1976; Lancaster: 1966; Tax: 1973; Schultz: 1974; and Nerlove: 1974.

³Two points of clarification are needed here. First, as in the case of all assumptions of theory, the goal or objective function is not subject to proof or disproof. It serves only to indicate that families have a reason for doing whatever they do (Alchian and Allen: 1969).

Second, households (or firms for that matter) are descriptive aggregations which aid theoretical conceptualization and empirical analysis. They are not operational entities, and thus do not behave -- only the individuals within them do. So that, when we make the assumption that households "behave" as if they maximize benefits, the underlying operating assumption is that individuals, who behave as if they maximize personal benefits, perceive only those benefits which are "good" for everybody in the family, including themselves. While the implicit assumption of a joint or communal objective function can be quite useful, it can also be a hindrance for planning whenever observations are made that do not conform to it. Analytic flexibility is increased if we assume separate objective functions which may be coincident in certain cases and may not be in others.

⁴Sometimes economists will deal with the work-nonwork situation in terms of a "work-leisure" model. The model has good explanatory power, but the choice of the term "leisure" is less than desirable because it does not suggest that part of (or sometimes all) nonwork activities are complementary to the production of work.

III

INCOME GENERATION

The average family in St. Martin must live with an income of about \$40 a month; by any standard of comparison it is a poor family. However, to define poverty solely in terms of an income statistic is misleading, because this does not convey a meaningful picture of what life is like for a family surviving on \$1.30 a day or an understanding of the great effort required by the family in order to produce \$1.30.

In the discussion which follows an attempt is made to highlight some of the efforts families make to generate an income. This chapter also considers the specific determinants of earnings, non-labor income sources and the distribution of household income resulting from all these revenue flows.¹

Labor Income

Almost all families interviewed in St. Martin obtain income from the work earnings of individual members, and almost all members who are capable do participate in market activities. In order to determine the rate of market participation, survey respondents were asked the usual daily activity or activities of each household member during the previous year. Answers were classified as: earning money income, basic household management responsibilities, attending school, apprenticeship, earning income and household management, earning income and attending school, and other.² The result, shown in Table 3.1, indicates that 35% of those between 12 and 16, and 95% of those 17 or older were engaged in some form of economic activity. Fifty-three percent of the entire sample was economically active. This definition of the economically active population differs from convention in that it includes both market and non-market activities which complement and support work. Using a more conventional procedure, the data indicated that out of 260 persons 14 years and older, 198 work more or less regularly.³ (See Table 3.2.)

The majority of the workers are self-employed (Table 3.3) and fall into three types: those who work alone, those who work in partnership with other household members and draw proportional shares of earnings, and those who regularly employ the services of others outside the household.⁴ The remainder are "employees" in the usual sense and work for firms, other households (e.g., domestic servants), or other members of their own households.*

In situations where a large number of people are self-employed, it is difficult to estimate an "unemployment" statistic.⁵ Nevertheless, each individual was asked if he or she engaged in an income-producing activity during the

*Convention classifies individuals who work for other members of their own household as "unpaid family workers." In most cases in St. Martin such individuals are paid, so the conventional classification was not used.

TABLE 3.1

Primary Activity of Individuals
by Age Group

| Type of Activity | 5 or Less | | 6-11 | | 12-16 | | 17 or More | | Total | |
|-------------------------------------|------------|------------|-----------|-----------|-----------|-----------|------------|-----------|------------|------------|
| | No. | % | No. | % | No. | % | No. | % | No. | % |
| Earning Income | - | - | 2 | 3 | 4 | 6 | 109 | 49 | 115 | 25 |
| Household Management | - | - | 2 | 3 | 10 | 15 | 29 | 13 | 41 | 9 |
| Attending School | - | - | 41 | 63 | 27 | 41 | - | - | 68 | 15 |
| Apprentice | - | - | - | - | 3 | 4 | 2 | 1 | 5 | 1 |
| Earning Income and HH Management | - | - | 1 | 2 | 4 | 6 | 75 | 34 | 80 | 17 |
| Earning Income and Attending School | - | - | - | - | 3 | 4 | - | - | 3 | 1 |
| Other: Too Young | 109 | 100 | - | - | - | - | - | - | 109 | 23 |
| Retired or Handicapped | - | - | - | - | - | - | 4 | 2 | 4 | 1 |
| No Specific Activity | - | - | 19 | 29 | 16 | 24 | 4 | 2 | 39 | 8 |
| TOTAL | 109 | 100 | 65 | 14 | 67 | 14 | 223 | 48 | 464 | 100 |

TABLE 3.2

Labor Force Participation
by Sex

| Type of Activity | Number of Persons | | |
|-------------------------------------|-------------------|-----|-------|
| | Women | Men | Total |
| Earning Income (incl. Apprentices) | 28 | 87 | 115 |
| Earning Income and HH Management | 73 | 7 | 80 |
| Earning Income and Attending School | | 3 | 3 |
| Total | 101 | 97 | 198 |
| Population 14 yrs. and older | 150 | 110 | 260 |
| Participation Rate | 67% | 88% | 76% |

TABLE 3.3

Classification of Workers
by Type of Employment and by Sex

| Type of Employment | Men | | Women | | Total | |
|--|-----|-----|-------|------|-------|------|
| | No. | % | No. | % | No. | % |
| <u>Self-Employed</u> | | | | | | |
| Works alone | 22 | 23 | 52 | 51 | 74 | 36.7 |
| Works with another in the household | 21 | 22 | 20 | 19.8 | 41 | 20.9 |
| Employs others not in the household | 13 | 13 | 0 | 0 | 13 | 6.6 |
| <u>Employed</u> | | | | | | |
| Works for others not in the household | 37 | 38 | 26 | 26 | 63 | 32.1 |
| Works for another in the household | 4 | 4 | 3 | 3.1 | 7 | 3.6 |
| Total | 97 | 100 | 101 | 99.9 | 198 | 99.9 |

day of the interview, irrespective of whether the activity yielded income that day or not. For those classified as "employees," unemployed referred to persons searching for work. In the case of the self-employed, those who were not actively buying, transforming, selling or carrying on any other activity related to income production were considered "unemployed." The result indicated an "unemployment" rate of 30% during the day of the interview. The 59 individuals were unemployed because of an inability to find jobs, client contracts, etc., but also because of illness, nursing obligations and an inability to find starting capital (Table 3.4).*

Needless to say, a one day "unemployment" statistic is of little use; therefore, it was necessary to specify a time period over which "unemployment" was to be measured. Since the objective of measurement was to assist in estimating earnings and income rather than producing a statistic for its own sake, it seemed important that the individual have worked during the high market activity months (September to January) which immediately preceded the interview period. If he or she had not worked during those months, earnings and the contribution to family income would register as zero. With the period of measurement limited to 24 weeks, an "unemployment" rate of about 7% was obtained (see Table 3.5).

This figure has relevance as a singular estimate of the proportion of people who do not work over an extended period; however, it is not as important as an estimate of the number of days worked. The former indicates the workers who do or do not earn, but the latter helps to determine how much is earned. As indicated in Table 3.6, two-thirds of the active labor force work an average of 26 days a month and almost three-quarters work 22 days.

When they do work, individuals in St. Martin engage in many different kinds of activities. One conventional way of classifying these activities is by skill or occupation. This is straightforward enough for those who are "employees", but is more difficult for the majority who are self-employed. The latter typically engage in a number of occupations across the range of their entrepreneurial activities. A rug manufacturer for instance may be occupied during part of a day or week in machine or benchwork operations and for the balance of time in sales of his rugs. Thus, it is difficult to isolate a single occupation for him.

It is nonetheless possible to classify workers in terms of a "primary" occupation. For example, Table 3.7 describes the primary occupation of workers sampled in St. Martin together with the occupational breakdown of overall urban employment surveyed by the Haitian Institute of Statistics in 1970. In comparing the distribution for St. Martin and for the city, we can note that the basic difference lies in the proportion of service workers relative to workers in processing, machine trades and structural occupations. Part of this difference is explained by the larger reach of the city-wide survey, but is due also to the large percentage (48%) of the labor force classified at the time as unemployed by the Institute.

*"Nursing" here and elsewhere refers to breast-feeding obligations.

TABLE 3.4

Reasons Cited for Not Working,
by Sex

| Reason | Men | Women | Total |
|--|------|-------|-------|
| Cannot find work (<u>i.e.</u> , jobs, clients, contracts, etc.) | 92% | 28% | 56% |
| Cannot find starting capital | - | 9% | 5% |
| Temporarily ill | 4% | 30% | 19% |
| Temporarily nursing, or about to | - | 24% | 14% |
| Temporarily laid-off from work | - | 6% | 3% |
| Not specified | 4% | 3% | 3% |
| Total | 100% | 100% | 100% |
| (Number) | (26) | (33) | (59) |

TABLE 3.5

Unemployment Rates

| Number of Weeks Since Last Work Activity | Unemployment Rate for the Period |
|--|-------------------------------------|
| 1 week or less | 22% |
| 1 - 4 weeks | 20% |
| 5 - 24 weeks | 7% |
| 25 - 50 weeks | 4% |
| 51 weeks or more | 0% |

TABLE 3.6
Monthly Days of Work,
Annual Average

| Number of Days | Percentage of Workers |
|----------------|-----------------------|
| 1 - 5 | 8 |
| 6 - 10 | 4 |
| 11 - 15 | 8 |
| 16 - 21 | 6 |
| 22 - 25 | 7 |
| 26 - 30 | 67 |
| Total | 100 |

TABLE 3.7

Occupational Distribution of Primary Work Activities

| Occupation | St. Martin | Port-au-Prince* |
|-------------------------------------|------------|-----------------|
| Professional, Technical, Managerial | 4% | 9% |
| Clerical and Sales | 29% | 30% |
| Service | 16% | 26% |
| Processing | 5% | |
| Machine Trades, Benchwork | 35% | 25% |
| Structural Work | 5% | |
| Other | 6% | 20% |
| Total | 100% | 100% |

*Source: Institut Haitien de Statistique (IHS), Enquete Socio-Economique
Premiers Resultats (1970), Port-au-Prince, 1975

Another conventional way of classifying activities is by use of an industrial sector breakdown. There remains, however, the problem of classifying those activities which overlap two or more sectors. The rug producer, for example, sometimes will be in manufacturing, sometimes in wholesale trade and sometimes in retail trade. Table 3.8 nonetheless provides a comparative picture of the "primary" sectoral structure of work activities. The differences in the proportion of workers in manufacturing, trade and services are not as great as they appear since only persons who operated in and around the official markets of the city or who worked in fixed commercial outlets were included in the citywide estimate. Those who were involved in trade elsewhere were excluded and this severely underestimates the number of traders in the city. In addition, a large number of individuals were classed in the services sector who are actually involved in small-scale manufacturing, such as dressmakers, tailors, and metal workers.

One way of addressing the classification problems associated with conventional methods is to view all workers as being self-employed, as implied by the model presented in the previous chapter. Their market activities, therefore, are defined and classified by what they sell -- namely, "services" or "goods." Table 3.9 classifies activities using this criterion. In the first category are workers who sell various labor services. They include professionals, technicians, construction workers, salespersons and factory workers, and may be subdivided further by occupation and by sector. In the second category are workers who sell goods which have not been substantially transformed by the household. Here the value-added by a worker is derived from marketing, bulk-breaking, and so forth. The third category contains those who are involved in selling goods which undergo a major transformation in the household.

While the types of classes contained in Table 3.9 can be improved and further disaggregated, and while there remain hazy areas of distinction - e.g., at what point does a traded good undergo sufficient transformation to become defined as a manufactured good? - there is no problem in dealing with employed and self-employed workers and there is no overlap such as those encountered when using the occupation and sector classifications.⁶ One useful property of this method is that it provides distinct and mutually-exclusive sub-groups of activities which can be examined in detail.

Labor Services

A bit less than half of all workers (43%) sell their labor services. The types of activities in this category are listed alphabetically in Table 3.10.*

*Although 86 persons in the sample earned income by selling their labor services, only the 77 in the table provided useful information about the work which they did during the six-month period preceding the survey.

TABLE 3.8
Sectoral Distribution of Primary Work Activities

| Sector | St. Martin | Port-au-Prince* |
|------------------------------|------------|-----------------|
| Construction | 6% | 6% |
| Manufacturing | 35% | 12% |
| Transportation and Utilities | 3% | 2% |
| Wholesale Trade | 3% | 18% |
| Retail Trade | 31% | 54% |
| Services | 17% | 8% |
| Public Administration | 2% | - |
| Other | 3% | - |
| Total | 100% | 100% |

*Source: Plan de Developpement de Port au Prince et de Sa Zone Metropolitaine, Phase II, Vol. I, Mai 1975.

TABLE 3.9
Classification of Activities
by Type of Product Sold

| Type of Product Sold | Men | Women | Total |
|---|-------|--------|--------|
| Labor Services (<u>i.e.</u> , laborers) | 56% | 30% | 43% |
| Traded Goods (<u>i.e.</u> , traders) | 6% | 47% | 26% |
| Manufactured Goods (<u>i.e.</u> , manufacturers) | 38% | 23% | 31% |
| Total | 100% | 100% | 100% |
| (Number) | (97)* | (101)* | (198)* |

*Includes all workers defined as being in the labor force.

TABLE 3.10

Average Earnings of Laborers

| Services Sold | Daily Earnings (\$) | Average Number of Work Days Per Month | Monthly Earnings (\$) |
|-----------------------------------|---------------------|---------------------------------------|-----------------------|
| 1 Baker | 1.30 | 26 | 34.00 |
| 2 Bead Collar Assembly | .20 | 30 | 6.00 |
| 3 Bead Collar Assembly | .10 | 30 | 3.00 |
| 4 Building Maintenance | .40 | 25 | 10.00 |
| 5 Building Maintenance | 1.00 | 30 | 30.00 |
| 6 Building Maintenance | .60 | 22 | 13.00 |
| 7 Building Maintenance | .60 | 22 | 13.00 |
| 8 Building Maintenance | .60 | 22 | 13.00 |
| 9 Building Maintenance | .40 | 25 | 10.00 |
| 10 Butcher | .40 | 30 | 12.00 |
| 11 Carpentry - Master - Buildings | 10.00 | 7 | 72.00 |
| 12 Carpentry - Buildings | 4.00 | 20 | 80.00 |
| 13 Carpentry - Furnicure | 1.00 | 10 | 10.00 |
| 14 Carpentry - Coffins | 2.00 | 13 | 26.00 |
| 15 Clerk - Customs Department | 2.50 | 25 | 50.00 |
| 16 Clerk - Tax Department | 2.50 | 22 | 51.00 |
| 17 Customs Broker | 3.30 | 15 | 48.00 |
| 18 Coffee Washer | 1.00 | 22 | 22.00 |
| 19 Coffee Washer | 1.15 | 25 | 29.00 |
| 20 Coffee Washer | 1.15 | 25 | 29.00 |
| 21 Day Worker | 1.30 | 1 | 1.30 |
| 22 Day Worker | 1.30 | 1 | 1.30 |
| 23 Day Worker | 1.30 | 1 | 1.30 |
| 24 Day Worker | .20 | 7 | 1.40 |
| 25 Dental Technician | 2.70 | 22 | 59.00 |
| 26 Doctor - Priesc | 9.50 | 5 | 48.00 |
| 27 Doctor | 2.40 | 5 | 11.00 |
| 28 Doctor | 2.50 | 7 | 18.00 |
| 29 Domestic Service | .20 | 5 | 1.00 |
| 30 Domestic Service | .20 | 5 | 1.00 |
| 31 Domestic Service | .30 | 26 | 8.00 |
| 32 Domestic Service | .30 | 26 | 8.00 |
| 33 Domestic Service | .20 | 25 | 5.00 |
| 34 Domestic Service | .20 | 25 | 5.00 |
| 35 Domestic Service | .20 | 25 | 5.00 |
| 36 Domestic Service | .60 | 12 | 7.30 |
| 37 Domestic Service | .40 | 25 | 10.00 |
| 38 Domestic Service | .20 | 25 | 5.00 |
| 39 Drainage System Maintenance | .80 | 26 | 21.00 |
| 40 Drainage System Maintenance | 1.30 | 22 | 29.00 |
| 41 Driver - Public Transport | 1.65 | 30 | 49.00 |
| 42 Driver - Public Transport | 4.50 | 14 | 63.00 |
| 43 Electronic Repairs | 2.50 | 12 | 29.00 |
| 44 Embroidery | .40 | 30 | 12.00 |
| 45 Embroidery | 1.30 | 26 | 34.00 |
| 46 Embroidery | .80 | 13 | 10.50 |
| 47 Fire Protection | 2.30 | 26 | 60.00 |
| 48 Games of Chance | 1.10 | 26 | 29.00 |
| 49 Knitting | .90 | 22 | 20.00 |
| 50 Laundry | .30 | 10 | 3.00 |
| 51 Machine Operator - Twine | 1.70 | 22 | 37.00 |
| 52 Machine Operator - Twine | 1.20 | 26 | 31.00 |
| 53 Machine Operator - Cloth | 2.00 | 25 | 50.00 |
| 54 Machine Operator - Leather | 1.65 | 26 | 43.00 |
| 55 Mason - Master | 5.00 | 5 | 27.00 |
| 56 Mason | .80 | 13 | 10.00 |
| 57 Mason's Assistant | 1.30 | 6 | 8.40 |
| 58 Mason's Assistant | 1.30 | 3 | 3.40 |
| 59 Mechanic | 5.00 | 3 | 15.00 |
| 60 Mechanic's Assistant | 1.20 | 6 | 7.00 |
| 61 Musician - Drummer | 2.00 | 20 | 40.00 |
| 62 Musician - Guitarist | 5.00 | 5 | 22.00 |
| 63 Numbers - Lottery | 1.40 | 15 | 21.00 |
| 64 Numbers - Lottery | 1.40 | 15 | 21.00 |
| 65 Painting Master-Houses | 5.00 | 20 | 100.00 |
| 66 Painter - Houses | 1.30 | 4 | 5.00 |
| 67 Painter - Houses | 1.20 | 20 | 24.00 |
| 68 Polisher - Leather | 2.00 | 22 | 44.00 |
| 69 Porter | 1.00 | 26 | 26.00 |
| 70 Prostitute | 3.00 | 15 | 45.00 |
| 71 Salesman - Home Appliances | 2.50 | 26 | 65.00 |
| 72 Sculptor - Wood | .50 | 11 | 5.50 |
| 73 Ship's Captain | 3.50 | 20 | 70.00 |
| 74 Ships Crewman | 1.00 | 20 | 20.00 |
| 75 Shoemaker | 2.30 | NR | NR |
| 76 Shoe Repair | 1.20 | 27 | 32.00 |
| 77 Waitress | 1.40 | 30 | 42.00 |
| Average | 1.72 | 19 | 25.40 |

The list reads like a sample of urban occupations that can be found, in varying proportions, in any city. The services range from the least sophisticated manual activities of day workers to the highly sophisticated services rendered by a dental technician. They run from age-old activities, such as herbal medicine and prostitution, to the most contemporary services, such as the repair of electrical appliances.

A bit fewer than three-quarters of the workers in this group are "employees" in the usual sense.* The remaining 26% are self-employed and include master craftsmen in the construction specialties, customs brokers, herbal medicine practitioners, public transport vehicle drivers, electronics repairmen, gamblers and lottery ticket sellers, a prostitute and several others.

As indicated in Table 3.11, about 15% of these people work at home or in the immediate neighborhood of St. Martin, a third are located near or in the central market area, another 20% are in the industrial area on the north side of the neighborhood, and 12% to the south where most of the wealthy employers of servants reside (see figure 2.1). Finally, 20% work all over the urban area, and these are mostly construction workers.

These locations are also the places where individuals search for work. The day workers, for example, leave home about 5:00 a.m. to seek work in the downtown area and return home at 10:00 a.m. if they have not obtained any work. They do not search any longer because most jobs are reported to be taken by 10:00 a.m. Similarly, women who seek out factory work, either in-plant jobs or home consignment, will leave at 6:00 a.m. to stand outside the factory gates. If they have not obtained anything by midday, they too return home. At the opposite extreme, construction workers will meander, tools in hand, from job site to job site from dawn to dusk.

The varying degrees of temporal and spatial intensity in the job search process indicate that workers have some understanding of the activity cycles and spatial characteristics of the markets for their services. The degree to which inadequate job market information hinders employment among this group is an open question.

*This description should be taken with some caution as the nature of employment is sometimes different from that in other parts of the world. For example, a porter who transports packages from the interior of a food store to the automobiles of customers is not paid anything by the store owner. His earnings are derived from any small change which customers might decide to give him, although they are not obliged to give him anything. The store which ostensibly "employs" him only provides the right of access to their interior and the right to render a service there.

TABLE 3.11
Work Places of Service Sellers

| Location | % of Workers |
|--------------------|--------------|
| At home | 6 |
| St. Martin area | 9 |
| Central market | 11 |
| Other central area | 21 |
| Northside area | 20 |
| Southside area | 12 |
| General urban area | 20 |
| Rural areas | 1 |
| Total | 100 |

Earnings. The average person who sells labor services earns about \$25 a month and works 18 days to obtain it.⁷ The median number of workdays, however, is 22, so half the workers work less than this amount. Among service sellers who work less than 22 days a month, half earn considerably less than the average of \$25 a month. One-third of these individuals are domestic servants in the homes of the wealthy.⁸ The remainder are employed by the "modern" sector, but not "formally."

In manufacturing, for example, much of the work (i.e., bead collar assembly, embroidery, knitting) is done at home on consignment. Since the work is not done inside the plant, these workers are not covered by social insurance legislation and they receive only one-half to one-tenth of the official minimum wage. Another example is a wood sculptor who is given materials and tools to work with and then is directed to work just outside the workshop door on the public thoroughfare. At this location he is paid less than the minimum wage because the law does not apply to his work "outside" the plant. Since the goods produced outside the plant at low wage rates are the same as goods produced inside at higher rates we can see that "modern" manufacturing activities are not necessarily as attractive (or as "formal") as is sometimes assumed.⁹

Similar practices adversely affect wages for workers inside plants also. Coffee bean washers, for example, should earn the stated minimum of \$1.10 for an eight-hour day. However the law permits employers to pay \$0.65 for a "half-day," the length of which is not stated. Employers unilaterally define the "half-day" as being six hours and thereby save in per unit labor costs (i.e., 10.8¢ vs. 13.8¢ per hour). Employers use this technique most often during peak production periods when export coffee prices are unpredictable and they need to cushion themselves against potential losses resulting from possible payment of too high local prices. Thus, when the demand for coffee processing is high, workers' earnings decline.

The public sector operates in much the same fashion. Building maintenance workers, attending night school and employed full time at a local air force base earn only \$0.60 per day rather than the minimum wage because they are not considered "true" workers. A worker who clears the storm drainage system for the Department of Public Works on a contractual basis earns \$0.80 per day and another worker who does exactly the same thing but on the payroll of the Department earns \$1.30 per day.

More sophisticated workers (clerks, machine operators, transport workers, and most of the construction workers) earn more than the official minimum wage whether they are active in "modern" enterprise or not.

One important determinant of daily earnings for persons who sell their labor services appears to be the type of employment. Based on the survey, the self-employed, those with "entrepreneurial" ability, earn significantly more (\$2.80/day) than wage workers (\$1.40/day). This, however, is related simultaneously to the occupation or the skill which a worker offers for sale. Workers who sell pro-

professional, technical and managerial services (mostly self-employed) do best on any given day (Table 3.12). They are followed by workers in the construction trades. Further down are machine and benchwork trades in industrial enterprises. Their lower average earnings, \$1.45/day, result from some workers obtaining above-average wages in plants and the "outsiders" obtaining significantly less. The lowest earnings category is filled by service workers, largely domestic servants.

If we shift attention to monthly earnings, the sector of employment, which has little significance for daily earnings, now takes on greater importance.* One reason for this appears to be that the number of workdays is determined by the sector in which an individual works rather than by the occupation which is pursued.

It would appear that the factors which determine earnings amongst sellers of labor in St. Martin are entrepreneurial ability, skill or occupation and sectoral demand. They basically are the same as would be found in any more or less competitive economy.

Traders

Approximately one quarter (51 persons) of all workers fall in this category.** They are mostly women and, as indicated in Table 3.13, sell a variety of goods. Although seasonal variations in supply may affect the overall stock of agricultural products, traders are generally conservative and do not change substantially their commodity sets during the course of the year. A major change in the type of goods sold involves considerable risks since an individual who has experience in the market for one set of goods will be a relative novice in the market for other goods.

Table 3.14 illustrates the spatial characteristics of the activities carried out by this group. The importance of the central market and its surrounding area is readily apparent. 80% of all traders purchase goods in and around the area and slightly less than 40% use the central market area as their place of sale. This suggests that a large number of traders expect to obtain net profits as a result of marginally transferring goods from one locale to another, besides a return from any bulk breaking which may be involved.

The second important location for selling is the home, where traders sell limited amounts of miscellaneous goods (macaroni, carbonated beverages, canned and powdered milk, palm oil, tobacco, matches, cigarettes, rum). Unlike other goods, sales of almost all these involve no bargaining because the prices are more or less well-established. "At home" traders are basically tapping a residential market for goods which can be obtained anywhere in the city at the same unit prices. Their earnings, therefore, do not depend so much on sales skill as

*See footnote, Table 3.12.

**Complete information was obtained from only 41 individuals.

TABLE 3.12

Variations in the Earnings of Laborers
by Type of Employment, Occupation, and Industrial Sector

| Category | Average Daily Earnings | Average Monthly Earnings |
|-------------------------------------|---------------------------|-----------------------------|
| <u>Type of Employment</u> | (F=2.61) | F=3.25) |
| Self-Employed | 2.80 | 29.00 |
| Employed by Other | 1.40 | 23.00 |
| <u>Occupation</u> | (F=5.83) | (F=2.17*) |
| Professional, Technical, Managerial | 3.90 | 35.00 |
| Service | 0.75 | 16.00 |
| Machine Trades, Benchwork | 1.45 | 23.00 |
| Structural Work | 3.30 | 37.00 |
| <u>Industrial Sector</u> | (F=1.99*) | (F=3.30) |
| Construction | 3.30 | 37.00 |
| Manufacturing | 1.05 | 23.00 |
| Transport and Utilities | 2.15 | 42.00 |
| Retail Trade | 1.65 | 44.00 |
| Services | 1.60 | 18.00 |

*F value not significant at the 0.05 level. The F ratio, or variance ratio, is used here and in Tables 4.2, 4.3, 4.5, 4.6 and 4.7 as a relative measure of discreteness between classification variables. Thus, for example, although distinct average daily earnings figures are indicated for industrial sectors (d.e., construction, manufacturing, etc.) above, the F value of 1.99 suggests that individual earnings figures are spread widely around each average. There is considerable overlap among sectors and so the averages are not really as distinct as they might first appear. The F value of 3.30 for monthly earnings, on the other hand, suggests a better separation between monthly averages. Thus, the relationship between monthly earnings and the sector in which an individual works is relatively more significant than the relationship between sector and daily earnings.

TABLE 3.13
Average Earnings of Traders

| Traded Goods | Daily Earnings (\$) | Average Number of Work Days Per Month | Monthly Earnings (\$) |
|------------------------------------|---------------------|---------------------------------------|-----------------------|
| 1 Grain | 1.00 | 26 | 26.00 |
| 2 Grain | 1.40 | 26 | 37.00 |
| 3 Grain | .70 | 24 | 17.00 |
| 4 Grain, Charcoal | .50 | 30 | 15.00 |
| 5 Charcoal | 2.80 | 26 | 74.00 |
| 6 Tobacco | .90 | 26 | 23.00 |
| 7 Bananas | 2.70 | 26 | 69.00 |
| 8 Bananas, Potatoes, Yams | .90 | 26 | 23.00 |
| 9 Eggs | .30 | 30 | 9.00 |
| 10 Sugar | .70 | 26 | 18.00 |
| 11 Sugar, Cooking Oil | .60 | 28 | 17.00 |
| 12 Sugar, Biscuits | .30 | 27 | 8.00 |
| 13 Sugar, Biscuits, Coffee (Prep) | .30 | 30 | 9.00 |
| 14 Sugar, Butter, Rum | .20 | 30 | 6.00 |
| 15 Fish | 1.30 | 26 | 34.00 |
| 16 Fish | 1.30 | 26 | 34.00 |
| 17 Biscuits | .20 | 30 | 6.00 |
| 18 Biscuits, Tea (Prep) | .70 | 26 | 18.00 |
| 19 Cooking Oil | .90 | 26 | 23.00 |
| 20 Laundry Soap | .80 | 26 | 21.00 |
| 21 Laundry Soap | .20 | 25 | 5.00 |
| 22 Hand Soap, Kitchen Utensils | .30 | 23 | 7.00 |
| 23 Hand Soap, Face Powder, Linen | 1.10 | 26 | 29.00 |
| 24 Linen, Handkerchiefs | .50 | 28 | 14.00 |
| 25 Handkerchiefs | .50 | 28 | 14.00 |
| 26 Underwear | .50 | 26 | 13.00 |
| 27 Underwear | 1.40 | 26 | 37.00 |
| 28 Underwear | .20 | 20 | 4.00 |
| 29 Cloth | .60 | 27 | 16.00 |
| 30 Tablecloths-Plastic | .30 | 27 | 8.00 |
| 31 Dishes, Glassware | .40 | 25 | 10.00 |
| 32 Cigarettes, Candies | .50 | 26 | 13.00 |
| 33 Sugar Cane, Miscellaneous Goods | .70 | 30 | 21.00 |
| 34 Sugar Cane, Miscellaneous Goods | .70 | 30 | 21.00 |
| 35 Miscellaneous Goods | 1.00 | 30 | 30.00 |
| 36 Miscellaneous Goods | .50 | 30 | 15.00 |
| 37 Miscellaneous Goods | .20 | 30 | 6.00 |
| 38 Miscellaneous Goods | .20 | 30 | 6.00 |
| 39 Miscellaneous Goods | .10 | 30 | 3.00 |
| 40 Miscellaneous Goods | .40 | 25 | 10.00 |
| 41 Construction Poles | 5.80 | 26 | 151.00 |
| | 0.84 | 27 | 22.40 |

TABLE 3.14

Spatial Characteristics of Trade Activities
by Percent of Workers

| Location | Percent of Workers: | | |
|--------------------|---------------------|------------------|------------------|
| | Purchasing Goods | Storing Goods | Selling Goods |
| Home | 2 | 83 | 29 |
| St. Martin | 8 | - | 14 |
| Central market | 44 | 9 | 35 |
| Other central area | 36 | 2 | 4 |
| Northside | 2 | 2 | 4 |
| Southside | 2 | - | 2 |
| General urban area | 4 | 4 | 12 |
| Rural areas | 2 | - | - |
| Total | 100 | 100 | 100 |

the locational advantage of their homes within the St. Martin area. Most of the "at home" vendors are women who sit in front of houses that are located in principal pedestrian paths that crisscross the area. They operate in much the same manner as small neighborhood stores that can be found in any residential area.¹⁰

Another important observation from Table 3.14 is that 83% of traders store their goods at home.¹¹ This underscores the potential impact which disasters (such as fire, floods, and rodents) can have on an individual's and a family's ability to generate income.

Earnings. Among traders, 69% usually work by themselves, 22% work with others in the same household, 8% are "employees" of other workers in their respective households and only one individual, a wholesale distributor of wooden poles for the construction industry, is an employer in the usual sense with three regular workers.

On the day of the interview about one-fifth of the traders were not working. Of these, 40% were nursing recently-born infants, 30% were temporarily ill and showed symptoms of fever and fatigue and the rest did not have funds with which to restart business. In this last group were women who had lost their capital through a number of bad market transactions, women whose cash and/or goods were stolen and women who had to use their capital to pay medical bills of other family members. All these women had been working at some time during the previous six months.

Since many individuals were inactive due to lack of funds, it is apparently difficult to obtain capital with which to start in trade, and the "easy entry" notion typically associated with "informal" sector employment is subject to question. The usual sources of capital for women are their own savings. However, even supposing that they had been working prior to attempting to enter trade, their earnings, if used to support other family members, could not easily provide the opportunity to save even \$5.00 or \$10.00.

Other sources of capital are the women's parents and sometimes other members of the immediate family, such as a working child. Husbands, as is generally the case in Haiti, either could not or would not lend or give money to their wives. The few exceptions to this were younger men who had relatively high earnings from their own work.

The final source of capital is commercial credit which, as discussed in the next chapter, is difficult to obtain. In order to borrow money at a "low" interest rate of 25% per month, a woman would have to secure a \$10.00 loan with collateral assets worth about \$30.00. Therefore, women who borrow funds usually have no marketable assets and must obtain unsecured loans where the interest rate ranges between 50% and 100%.

A \$5.00 investment in trade yields an average gross return of about \$14.00 at the end of one month. At a 50% interest rate a woman borrowing \$5.00 would have to repay the lender \$7.50. That would leave her \$6.50 to allocate between further reinvestment and all other household expenditures for which she is responsible. Even if it were possible to obtain the \$5.00 loan at a 50% interest rate, it would be difficult to maintain trade activities within the constraints imposed by the price of borrowing. The effect of this is that active traders can generate profits which otherwise would be impossible if scarcity of capital did not limit competition to some degree.

For those who do have capital, the average value of the total stock of goods with which each worker deals is about \$17.00. The range varies from a low of \$0.50 to a high in excess of \$100.00 for two wholesale traders. The median value of \$10.00 per worker is a better approximation of the average scale of operations (see Table 3.15).

The profits or net earnings obtained by this group are lower than the average return from the sale of labor services. The daily earning averages \$0.85 and varies from \$0.10 to \$2.80 (Table 3.13). At the end of a month average earnings accumulate to \$22.00. Excluding the one major wholesaler, whose earnings are significantly above average, typical earnings are more in the order of \$0.60 a day and \$19.00 a month.¹²

The data indicate that (as one finds in most places) as the scale of operation (*i.e.*, the capital intensity) increases, so do the net profits and earnings.¹³ This finding should be interpreted in a broader context, however, because the ability to obtain and accumulate capital depends on a number of factors which cannot be readily quantified, such as credit and business connections, family inheritance, skill and luck.

Manufacturers

Manufacturers are an important group because they are engaged in the "small-scale" industrial activities that many consider to be a prime target for direct policy actions intended to promote income growth and employment generation.

Previously we have seen that traders market a large variety of goods. In Table 3.16 the pattern is repeated. There are 26 different sets of goods which are produced; more, if some of the items are broken down by the materials with which they are made.

As in the case of traders, manufacturers rarely vary the types of goods they produce. Seasonal and temporary demand for goods, such as straw hats for Mardi Gras, are met by workers who produce those goods for a week or so and then return to their regular products. The conservatism of manufacturers is

TABLE 3.15

Distribution of Working Capital
of Traders and Manufacturers

| Size of Capital (\$) | Traders (%) | Manufacturers (%) |
|----------------------|-------------|-------------------|
| less than \$1 | 8 | 2 |
| \$1 - 5 | 27 | 29 |
| \$6 - 10 | 21 | 17 |
| \$11 - 20 | 19 | 18 |
| \$21 - 30 | 8 | 7 |
| \$31 - 40 | 9 | 11 |
| \$41 - 50 | 4 | 3 |
| \$51 or more | 4 | 13 |
| Total | 100 | 100 |

TABLE 3.16

Average Earnings of Manufacturers

| Manufactured Goods | Daily Earnings (\$) | Average Number of Work Days Per Month | Monthly Earnings (\$) |
|---------------------------------------|---------------------|---------------------------------------|-----------------------|
| 1 Baskets | 1.40 | 24 | 33.60 |
| 2 Bead Curtains | .75 | 30 | 22.50 |
| 3 Bead Curtains | .75 | 30 | 22.50 |
| 4 Bed Frames (Wood) | .60 | 25 | 15.00 |
| 5 Baskets (Scrap Sheet Metal) | .50 | 30 | 15.00 |
| 6 Baskets, Stoves (Scrap Sheet Metal) | .80 | 26 | 20.80 |
| 7 Carpets (Sisal) | .15 | 27 | 4.05 |
| 8 Carpets (Sisal) | .15 | 27 | 4.05 |
| 9 Carpets (Sisal) | .45 | 29 | 13.05 |
| 10 Carpets (Sisal) | .45 | 29 | 13.05 |
| 11 Castings—Ornamental (Scrap Lead) | 1.10 | 23 | 25.30 |
| 12 Coffins (Wood) | 3.80 | 26 | 98.80 |
| 13 Decorations for Handbags (Sisal) | 3.50 | 5 | 17.50 |
| 14 Decorations for Handbags (Sisal) | 3.50 | 5 | 17.50 |
| 15 Decorations—Religious (Wool) | 1.40 | 30 | 42.00 |
| 16 Handbags (Coconut Palm Leaf) | .80 | 30 | 24.00 |
| 17 Handbags (Scrap Leather) | 1.70 | 29 | 49.30 |
| 18 Handbags (Sisal and Palm Bark) | .50 | 30 | 15.00 |
| 19 Handbags (Sisal and Palm Bark) | .50 | 30 | 15.00 |
| 20 Handbags (Vinyl) | 1.30 | 30 | 39.00 |
| 21 Handbags (Vinyl) | 1.30 | 30 | 39.00 |
| 22 Furniture (Wood) | .60 | 15 | 9.00 |
| 23 Furniture (Wood) | .60 | 15 | 9.00 |
| 24 Sculptures (Wood) | .70 | 26 | 18.20 |
| 25 Sculptures (Wood) | 2.50 | 15 | 37.50 |
| 26 Salad Spoons & Forks (Wood) | .15 | 27 | 4.05 |
| 27 Salad Spoons & Forks (Wood) | .15 | 27 | 4.05 |
| 28 Salad Spoons & Forks (Wood) | .15 | 27 | 4.05 |
| 29 Strainers (Scrap Metal Screens) | .30 | 30 | 9.00 |
| 30 Strainers (Scrap Metal Screens) | .30 | 30 | 9.00 |
| 31 Paper Bags (Scrap Cement Bags) | .10 | 30 | 3.00 |
| 32 Sugar Wrappers (Paper) | .40 | 15 | 6.00 |
| 33 Sugar Wrappers (Paper) | 1.10 | 25 | 27.50 |
| 34 Sugar Wrappers (Paper) | .40 | 25 | 10.00 |
| 35 Shoes (Wood) | 1.30 | 30 | 39.00 |
| 36 Shoes (Wood) | .70 | 30 | 21.00 |
| 37 Shirts | .80 | 26 | 20.80 |
| 38 Shirts | .80 | 26 | 20.80 |
| 39 Shirts, Vests | .50 | 22 | 11.00 |
| 40 Shirts, Vests | .50 | 26 | 13.00 |
| 41 Shirts, Vests | .50 | 26 | 13.00 |
| 42 Shirts, Pants | 5.00 | 16 | 80.00 |
| 43 Pants, Vests | 2.10 | 27 | 56.70 |
| 44 Dresses | 2.00 | 2 | 4.00 |
| 45 Dresses | 1.00 | 26 | 26.00 |
| 46 Dresses | 1.00 | 27 | 27.00 |
| 47 Peanuts | .30 | 27 | 8.10 |
| 48 Peanuts | .50 | 26 | 13.00 |
| 49 Peanuts, Coffee | .50 | 30 | 15.00 |
| 50 Soup (Corn Base) | .25 | 28 | 7.00 |
| 51 Soup (Fish Base) | 1.40 | 26 | 36.40 |
| 52 Meat (Raw and Fried) | .90 | 26 | 23.40 |
| 53 Meat and Roots (Fried) | .60 | 25 | 15.00 |
| 54 Meat and Roots (Fried) | .40 | 28 | 11.20 |
| 55 Meat and Roots (Fried) | .40 | 28 | 11.20 |
| 56 Bananas and Roots (Fried) | .30 | 23 | 6.90 |
| Average | 0.97 | 25 | 21.00 |

not unlike that of traders; they know the markets for their product lines and avoid risks of shifting to other products about which they know less. In addition, the skills of manufacturing are relatively specialized and the risks of income losses are high during the self-training period when production is wasteful and quality too poor to obtain good prices. For many workers capital is tied up in a particular set of tools which cannot be used in the manufacture of other products and oftentimes are not readily convertible into cash for the purchase of other tools. Therefore, production flexibility is not as great as it would appear at first glance.

The spatial organization of manufacturing activities is very similar to that of trade activities with one exception. As was indicated in Table 3.14, only 2% of traders purchased goods in rural areas and none sold goods in those areas. This is to be contrasted with manufacturing workers, 12% of whom obtain factor inputs directly from rural areas, and 5% of whom sell goods directly in those areas. More importantly, however, 87% of the manufacturers use their dwellings as a physical plant. This again highlights the earlier observation regarding the potential impact of disasters (fires and floods) on individual and family income.

Earnings. All of the workers in Table 3.16 are "self-employed."* About 38% work alone and operate at the smallest scale of manufacturing activity. Another 45% work together with other household members in groups of two and three. The remainder are employers of workers who are not household members. In the last case, the largest operation employs five persons.¹⁴

On the day of the interview roughly 13% of workers were not involved in one aspect or another of the manufacturing activity. Half of these did not have a contract and the remainder who had contracts and/or regular markets for their outputs reportedly were too ill to work. All had worked during the preceding six months.

Unlike some traders, manufacturers were not inactive due to a lack of starting capital. Several reasons may be given for this. One is that many manufacturing workers produce low-risk goods for which market prices and demand are fixed over considerable periods of time. Another reason is that most manufacturers work on contract orders for which they receive advance payments. Most producers also are men, and wives usually are obliged to lend them money for starting income-producing activities. Although part of the obligation results from the unequal social relationship between men and women within the family, another aspect is purely financial, since a woman's investment of capital in her husband is likely to yield the family a higher return than, say, further investment in her own trade activities.

The average replacement value of the total stock of goods, raw materials, cash in hand, tools and equipment which workers had at the time of the interview was about

*The survey provided detailed information on only 56 of the 61 individuals in this category.

\$23.00 and ran from a low of \$0.50 to a high of \$100.00. The median value of about \$11.00 per worker is the more accurate measure of the typical scale of operations.

Table 3.16 shows that earnings of manufacturers are comparable to those obtained by employees in the sector (Table 3.12) and are about \$1.00 per day with a range of \$0.15 to \$5.00. Monthly earnings run from a low of \$3.00 to a high of \$100.00. These variations are found to be due primarily to the manner in which the factors of production are combined; in particular, the amount of working capital used in the manufacturing process. The general pattern found for traders is also present for manufacturers: the larger the scale of operation (and hence the higher the ratio of capital to labor), the higher will be the net earnings.¹⁵ However, this statement is not as applicable to manufacturers as to traders since the factors that affect the earnings of the first group are more complicated than for the latter one. Since the data do not permit a strong generalization about the determinants of earnings for manufacturers, examination of some individual cases may be more revealing.

The basket maker, listed at the top of Table 3.16, arrived from the south of the country six months earlier. He makes baskets out of banana leaves in his house. To make 11 baskets of 24 in. in diameter he requires \$7.60 in leaves, which he picks up at the central market from wholesale banana traders (who sell the leaves after having used them as protective covering for bananas during transport from rural areas). He hires a friend to help and pays him \$0.20 for each unit which they make together, or \$2.20 for a set of 11 units. At a maximum rate of production it takes a total of three days to make 11 baskets, a half-day for purchasing leaves and transporting baskets to customers and two and one-half days for making baskets. The one tool is a large knife.

He sells the baskets wholesale to export houses and tourist shops at a fixed price of \$22.00, or \$2.00 each. His maximum daily profit therefore, can, be \$4.00 each day. However, the market for baskets varies and sometimes, such as the week of the interview, he gets no advance payments and produces no baskets. He does feel that the line is a good one and he can invariably pocket \$5.00 to \$6.00 a week. This is sufficiently high that he is proud to say that no one else in his family has to work.

As a matter of interest the price of the identical basket in tourist shops of the city is \$5.00 and the price in major department stores in the U.S. where the "Made in Haiti" is affixed varies from \$18.00 in Miami to \$24.00 in Los Angeles.

Next in Table 3.16 is a husband and wife team (who have been in the city two years) that makes beaded curtains, composed of alternating strings of beads and chips of wood. They buy their materials around the central market and these consist of beads costing \$0.10 for a quantity sufficient for a dozen strings, lengths of wood at \$0.07 per dozen strings, metal wire at \$0.23 per dozen strings and aniline dyes and water at \$0.10 per dozen strings; so the cost of inputs is \$0.50 per dozen in total. They sell the curtains to an export house near the market at

a fixed price of \$1.00 per dozen; and the customer buys as many as they can make at that price.

For most of the previous year they could produce only two dozen strings a day because they had an old drill bit but no drill. Their net income was then \$1.00 per day or \$.50 each. But they were able to save \$12.00 to buy a drill and some new bits and they now produce six dozen strings a day and each worker nets \$1.50 per day. One of the results of their higher earnings was that they were able to lend a sister in the household \$3.00 so that she could leave her job as a domestic servant and enter trade activities.

This curtain-making operation may be compared to the earnings obtained by a mother and son team who assemble bead collars for a factory (Table 3.10). Here the beads are provided to the workers with holes already in place, but because the string material is thread rather than metal wire the combined rate of assembly of both individuals is two dozen collars a day even though they don't have to drill and although the length of each string is half that of the curtain-maker's. The factory pays \$0.15 per dozen collars which is the daily earning of each worker. So the production of the same kind of good can yield earnings that differ by a factor of 10, depending on the production method which is taking place.

A maker of buckets uses imported galvanized metal sheets as his basic raw material. These sheets are not exactly scrap material but they are "seconds" of U.S. manufacture that have no use except for recycling due to substandard galvanizing processes or because of flaws in the printing of labels for beer or carbonated beverage trademarks. The sheets in the latter category are very thin and are not destined for long-term use. They are nonetheless imported from the U.S. by major firms in the city.

In order to make three dozen buckets the worker buys metal worth \$14.00. He combines this with tools that consist of a workblade, a wood block, a hammer and a pair of shears, and three days of production. He then spends \$2.00 in transport to rural areas in the center of the country where he will stay about six days selling in various markets. At an average price of \$0.55 each the sale of buckets will gross \$20.00 and net a profit of about \$4.00, or an average earning of \$0.40 per day across the nine or ten-day production-and-sale period. To minimize overhead costs while away from home, he stays with friends who live near the rural markets and with whom he maintains good relations by bringing occasional gifts from the city and by carrying messages between city and country.

Another husband and wife team makes carpets out of sisal. To begin the operation the man walks to a major rural market about 12 kilometers outside the city and buys five packets of sisal braids for \$2.00, sufficient to make ten carpets. These sisal braids (used for the outer perimeter of carpets) are made by farmers and he either buys from them or from intermediate traders at the market, depending on the price and the quality. The purchase of braids takes an entire day but the worker indicated that it was better for him to spend a day doing this than to buy in the central market of the city at a much higher price.

Every so often the man will take a bus (\$0.60 return) to a village 30 kilometers away to buy braids that have already been formed into one foot squares at a small factory (for use in the center of carpets). He buys 200 square feet at a time for \$0.13 a square foot and uses two squares per carpet, equivalent to \$0.26 including transport costs. To this he adds the cost of sisal string, \$0.20 per carpet, and the cost of aniline dyes and water to color the braids at about \$0.01 per carpet. The total cost of production works out to \$0.67 for each carpet excluding the value of tools which consist of two dozen large nails, a hammer, and awl, and a metal dyeing pan.

Working together the man and woman can make a maximum of 24 carpets a day. But even at maximum they would necessarily make only about 18 because the man must sell the carpets on the streets of the city every afternoon. The woman does not sell because she is looking after two infant children and because customers prefer to buy carpets from a man. However, if hard pressed for cash and at the same time having a large inventory of carpets, she leaves her children with an aunt in another part of the city and then sells in areas not covered by her husband. Invariably she sells less than he does.

The usual selling price is \$0.80 a carpet, though they will sell for as low as \$0.70 in a pinch. The normal profit is then \$0.13 per carpet. When business is good, they can sell 100 carpets a week and net a profit of \$13.00. When business is off, they may sell only ten and earn \$1.30 a week. On the average they can sell 40 to 45 carpets and so each earn roughly \$0.45 a day.

The workers indicated that what they would really like is to work on a contract basis to an export house. Thus far their efforts haven't been fruitful because exporters tell them that the carpets are not suitable for their purposes. However, the workers figure that eventually they will be able to make suitable products; it will be just a question of time until they find out where to get the particular kinds of braids that exporters want, the particular patterns that they like and the methods necessary to put it all together. In the interim they have to eat and so spend most of their time making those carpets which they know will keep them going.

We can compare these workers to another pair who also make sisal carpets and who earn only \$0.15 a day. They make slightly different rugs, but make them from scratch, that is, they don't use sub-assemblies from rural or urban factories. In so doing, their maximum rate of output is limited to seven carpets a day. Their profit margin, however, is higher and varies from \$0.28 to \$0.50 per rug. The limitation on their earnings is basically the result of trying to sell directly to tourists (which provides the high profit), but limits sales to two or three rugs a week. These workers can afford lower earnings because at least two other family members also earn income.

The man who manufactures lead castings for use as decorations on caskets does not really reside in St. Martin. He sleeps in the house four nights a week and maintains a housekeeper there but his family lives in another part of the city.

He located his workshop in St. Martin because it is close to where he buys materials and where he sells many of his products. Since the rental of the house is \$0.10 a day and he pays the housekeeper the equivalent of \$0.20 a day, he saves \$0.06 daily on commuting costs between home and downtown.

To make the castings he buys scrapped auto and bus batteries at \$0.80 each and from these he can extract enough lead to make 24 dozen, or two gross, of one-inch diameter star-shaped castings. From downtown hardware stores he buys screws for casting the lead for \$1.40. He then melts the lead on a small pot over a charcoal burner, using about \$0.10 of charcoal per gross of castings, and finally pours the metal into plaster molds. He made the molds himself some time back using an imported ornament which he bought at a funeral parlor as a prototype.

Excluding the value of the mold, the pot and the heater and including the rent of the house and services of the housekeeper, the cost of production works out to \$2.00 per gross, which is all he can make in a 12-hour day. He sells the castings to funeral parlors in the city at \$3.00 per gross and to parlors in the city of Jacmel (60 kms. away) at \$4.00 per gross. The transport cost to Jacmel is \$4.00 return and he usually travels with four gross at a time. His city profit is \$1.00 per gross and outside the city it is \$0.90 per gross.

Earnings from the sale of castings are more or less constant from month to month, but the sales transactions themselves are rather few. In December, for example, he sold a month's output to one wholesale buyer in the city. This month he sold six weeks' worth in one transaction. The worker indicated that although the sale price puts some limit on his earnings the most important obstacle was that he had not yet figured out a way to increase his rate of production. He had tried to hire and train others to work for him but invariably ended up losing money because the constant supervision required to maintain quality reduced his own output and earnings.

Another man makes handbags out of bits and pieces of scrapped leather which he purchases from leather goods manufacturing plants in the industrial area north of St. Martin. He learned to make the bags when he worked at such a factory in 1967. Then he worked as a punch press operator cutting figure-eight shaped pieces of leather about four inches in length which were assembled into handbags by women at benches. At that time he could earn \$1.00 a day or about \$24.00 a month.

When the cutting blade on the punch was replaced because of worn edges, he kept it and left the factory, figuring that he could do better on his own than as an employee. Currently he can make three bags a day at a cost of about \$0.33 each, with \$0.13 for leather and \$0.20 for hired labor which he pays on a per-bag basis. When the worker doesn't show up, his wife helps him but doesn't get paid directly; she apparently doesn't work as fast as the hired worker.

In 1970 he could sell bags at \$3.00 each but now because of competition he must settle for \$1.00 and his net profit is \$0.67 a bag. He nets about \$2.00 a day during the peak season and \$1.40 a day during the off-season. The manufacturer says there isn't much he could do to increase off-season earnings but he wishes he could get another blade to increase his rate of cutting. This is the limiting factor on how many purses he can produce during the high season when the market can take everything he makes. He can't build a stock during the off-season either because he has to spend more time than trying to sell each purse.

Over the past nine years he has tried several times to get another blade but no one will make it for him for less than \$30.00, which he doesn't have and which is more than he can afford to borrow. In any case he's not sure that a locally made blade will last as well as the current one. He has also gone back to the factory to see if they have discarded any others, but found that they've discontinued the design and have disposed of their surplus blades.

A different type of handbag is made by a husband and wife team that has been in the city only a few months. This bag is made out of palm bark, cardboard and sisal and finds its way to tourists in Haiti and other islands of the region. The sisal and cardboard are bought at the central market, aniline dyes to tint the sisal are obtained at a pharmacy on the edge of the market, and the palm bark which is not available in the city is bought in two coastal towns 20 kilometers to the north and west respectively.

The manufacture of four bags involves \$0.50 for sisal, \$0.15 in aniline dyes, \$0.12 for cardboard, \$0.50 for palm bark and perhaps two cents for water with which to mix the dyes. In addition, the trip to the other towns comes to a transport cost of \$0.18 for four bags. So the cost of production is about \$0.37 for each bag. The bags are then sold to a commercial establishment in the downtown area for \$0.60 each. The store buys as many as the couple can produce, which is four bags a day (including the time to purchase all the inputs). This provides each worker with an earning between \$0.45 and \$0.50 a day, and requires only the use of a pair of scissors.

The store itself sells the handbags to Haitians at roughly \$2.50 and to tourists at roughly \$5.00. The store also has its own workshop where workers weave the names of other localities such as Nassau, Trinidad, St. Maarten, onto the bags received. They are then shipped in quantity to the other islands for distribution to the tourist trade there.

Faced with my question as to why they did not sell directly to tourists the couple indicated two reasons. First, they said it would take too long and the more time they spend selling the less time they had to make the handbags. Second, to reach tourists they would necessarily have to work the streets near and around their client's store and that would amount to competition. The verbal agreement between them and the store was that the latter would buy every-

thing they produce if they did not sell independently either to tourists or to other tourist and export shops. The workers indicated that the risks involved in alienating a sure customer outweighed any possible increase in earnings.

Towards the bottom of Table 3.10 is the food processing group which usually gets classed as retail trade operations, but in which there are considerably more involved activities than are the bulk-breaking and marketing steps carried out by traders.

An example is the case of a woman who processes peanuts. She buys about \$10.00 worth at an import house near the market on a Monday morning. On Monday afternoon she starts shelling them by hand and continues through Wednesday evening. On Thursday she washes and dries them in the sun adding about \$0.25 in water to her investment. On Friday she roasts them in a large pan with an additional cost of \$0.75 in charcoal. Finally on Saturday she returns to the central market and spends the day selling them. Her average net profit, which seldom varies during the course of the year, is \$2.00 on \$11.00 expended, an average daily earning of \$0.30.

The time span of these activities can sometimes be a single day. A maker of s o u p begins her day at 4:00 a.m. when she leaves home for the central market in order to purchase basic ingredients: roots, crab, pork, goat meat, beef and vegetables. She is back home by 6:00 a.m. after spending about \$9.00. Between 6:00 and 7:00 she uses a wooden bowl and large pestle to crush the roots and then adds them to all the other ingredients which are stewing in water (\$0.40) in a large pot (\$10.00) over a heater (\$3.00) containing charcoal worth \$0.40. She returns to the market by 10:30 with the help of a porter whom she hires in the neighborhood for \$0.20. By 3:00 p.m. she is sold out and will have a profit of \$1.00 in the off-season and \$2.00 during the peak season. The worker indicated that this was the best line of business she had found during the previous five years. She used to do factory embroidery work (on consignment) and rarely could make more than \$3.00 a week.

These individual cases indicate clearly that the determinants of earnings and the obstacles to the growth of earnings vary significantly from one situation to another. Sometimes it is the inadequate and variable demand for a product, as was the case for the basket-maker. In other situations (e.g., carpet makers) it is the difficulty in securing a factor input. When demand is high for a good producers frequently do not respond appropriately because of insufficient information, inadequate resources to hire and train other workers, or to obtain new tools. Occasionally, as with the handbag maker, they face monopolist markets.

Terms, such as "low-productivity" or "informality," have little relevance in bringing about an operational understanding of the kinds of activities just described. As was concluded in the previous sections, manufacturers face the same type of production and revenue problems as their counterpart firms in other parts of the world.

Distribution of Individual Earnings

Daily earnings from all sources for all workers range from \$0.10 to \$10.00. The average is about \$1.30 and this is equal to the official minimum wage for workers covered by social insurance legislation. The average also varies from \$1.45 during the high economic activity season (September to January) to \$1.15 during the off period (February to August), but this is a weighted average which is biased by a few workers who obtain relatively high earnings. As indicated in Table 3.17, 74% of all workers earn \$1.30 or less and roughly 50% earn less than \$0.70 per day.

The monthly figures average \$23.30 through the year and range between \$1.40 for those with low daily earnings and infrequent workdays to \$151.00 for those with high earnings and high numbers of workdays (Table 3.18). The proportion of workers who earn \$25 a month and less is about 67%.

While some explanations for the differences in income have been offered above, it must be emphasized that the data gathered in St. Martin have only limited explanatory capability. Other factors, such as specific age, education and training, language capability, literacy, migration history, entrepreneurial skills, and so forth, have not been included here and are assumed also to have effects on earnings. In spite of this, however, the important conclusion to be drawn is that the production of income is a set of complex processes which must be understood fully before methods are designed to assist in increasing the earnings of workers.

Non-Labor Income

Twenty seven families in the sample obtain regular or irregular income from a variety of non-labor sources. Most received income in the form of cash (62%), others in the form of goods and services, such as rents paid on their behalf (8%), and the remainder in the form of meals and/or reductions in school registration fees.

Rent

Only men who are long-time residents of St. Martin collect rents. They own or lease land upon which rental dwellings were built. The total monthly rent collection for the 12 families involved amounted to approximately \$11.00 each. In two cases the individuals with rental revenues had retired from high-wage government jobs and their wives still worked as traders. Here rents comprised one-half of household income. Eight other men were still working, and were among the highest income earners interviewed. Rents amounted to less than a quarter of their household incomes. The two remaining men earned average incomes and had bought and developed their properties with inheritances. Rents accounted for about a third of their income. Rent is clearly a supplement rather than a substitute for work in St. Martin; if an individual stops working household income may fall substantially.

TABLE 3.17
Annual Average Daily Earnings*
for All Workers

| Earnings (\$) | Proportion of Workers in Each Category (%) |
|---------------|---|
| .10 - .30 | 18 |
| .31 - .50 | 16 |
| .51 - .70 | 12 |
| .71 - .90 | 9 |
| .91 - 1.10 | 7 |
| 1.11 - 1.30 | 12 |
| 1.31 - 1.50 | 5 |
| 1.51 - 1.90 | 2 |
| 1.91 - 2.10 | 3 |
| 2.11 - 2.30 | 2 |
| 2.31 or more | 14 |

*Includes only those workers who worked during previous six months and from whom sufficient data were obtained.

TABLE 3.18

Annual Average Monthly Earnings
for All Workers

| Earnings (\$)* | Proportion of Workers in Each Category (%) |
|----------------|---|
| 5 or less | 13 |
| 6 - 10 | 17 |
| 11 - 15 | 18 |
| 16 - 20 | 7 |
| 21 - 25 | 12 |
| 26 - 30 | 9 |
| 31 - 40 | 9 |
| 41 or more | 15 |
| Total | 100 |

*Excludes earnings from secondary occupations.

Intra-Family Transfers

Seven women received income from the fathers (divorced or polygamous husbands and boyfriends) of their children. The men do not reside with them for most of the week, but visit regularly. Total income received from these transactions amounts to approximately \$18.00 a month for each woman and her household.

Three of the women were not working and the transfers constituted 100% of their incomes. The four other women still were working. For one the transfer amounted to one-half of her total income; for the rest it was about one-fifth. Transfers to women obviously are not sufficient substitutes for work activities.

Other individuals receive money and gifts sent by relatives from other parts of the city, from the countryside and from abroad. The total transfer here is about \$7.00 for each recipient. These transfers account for 10% to 20% of total income in each household.

In total, then, fifteen percent (15%) of households benefit from intra-family income transfer arrangements. For those who receive them the transfers are important. However, as in the case of rents, these non-labor incomes are supplements rather than substitutes for work earnings. In only one or two cases were transfers sufficient to keep able-bodied persons from working.

Public and Charitable Transfers

One individual is a retired government administrator and receives a pension of \$50.00 a month. The money is actually his regular salary which he continues to receive even though he has not worked for two years.¹⁶ His is the only government payment in the St. Martin sample.

The Salvation Army operates a community center on the edge of St. Martin and offers school-related subsidies to eleven children in three households. This charity averages almost \$2.00 per child or \$7.00 per family per month. These transfers represent between 5% and 12% of the income of the three families. Depending on the program in which the family participates, payments cover either school fees, meals, or if the child has been "adopted" by a family outside Haiti, both fees and meals.

The non-labor revenue sources identified probably underestimate the actual flow of income. Other types of intra-family transfers, particularly within the extended family, included cases of women (outside the sample) who sometimes sent food for children or grandchildren, or who cared for grandchildren during the day when their mothers or fathers were working. These transfers, however, appeared to be far less than the total of those recorded. In any case, in the aggregate it is evident that the earnings of individuals are the most important component of household income.

Household Income

It might seem that a straightforward method of calculating family income would be to add the earnings and non-labor revenues of each household member. However, while this would tell us the gross income of a particular household, it would not tell us the net income available for use by the household as a unit. Many individuals contribute only a portion of their incomes to the households in which they live; therefore, the process of income reallocation needs to be taken into consideration.

Income Reallocation

Fifty-three workers (about one-third of the total) contributed less than all of their earnings to their own households. As shown in Table 3.19 eight of these were women and forty-five were men.

The two men who provided nothing were both relatively young, did not earn much and were not expected to contribute at this stage of their careers. The woman in the same category was a temporary resident in the household who had been offered hospitality so that her earnings could be used to support a husband committed to a tuberculosis sanatorium.

Among the seven other women contributing less than 100%, two were temporary household residents who recently arrived in the city and were trying to save money, in order to lease their own homes. Five were sending money to their families in other parts of the city and to children outside of Port-au-Prince.

Seven of the men also were sending money to extensions of their respective families. Four other men were providing support to ex-wives from whom they had been divorced or separated. For the remaining 32 men it is not possible to document fully the purposes to which they put their non-contributed earnings. One can assume that some is spent on personal goods, gambling and the lottery, repayment of debts, the purchase of property, issuance of loans, support of previous wives, families and girlfriends, and so forth.

Whatever the reasons, the various levels of individual contribution to family welfare have a significant impact on the size and distribution of net household income.

Effective Household Income

The average gross household income (i.e., the sum of earnings and non-labor revenues) is \$49.00 per month. It ranges from a low of \$10.00 to a high of \$179.00 (See Table 3.20). Discounting the bias in the average caused by highest income families and instability created by seasonal fluctuations, the median income of \$38.00 a month provides a better picture of the typical case. Even median income is less than desirable as an indicator of welfare since house-

TABLE 3.19

Contribution of Workers
to Household Income, by Sex

| Contribution Level (% of Earnings) | Number of Workers | | |
|---------------------------------------|-------------------|-------|-------|
| | Men | Women | Total |
| 0 | 2 | 1 | 3 |
| 25 | 5 | 2 | 7 |
| 50 | 21 | 2 | 23 |
| 75 | 17 | 3 | 20 |
| 100 | 49 | 82 | 131 |
| Total number | 94 | 90 | 184 |

holds vary in size and age composition. A better statistic is per capita household income, where family size is measured in terms of "adult equivalent units."¹⁷ After this adjustment both the average and median per capita gross income for each household is increased to \$12.50 a month (\$54.00 per family) and \$11.00 (\$47.00 per family), respectively. The distribution of this per capita gross income is given in Table 3.21.

The average net household income (after deducting non-contributions) is \$9.85 a month per capita (\$42.00 per family). This is 22% less than the gross figure. The reduction, however, is not the same for each income class and there appears to be an inverse relationship between an individual's household contribution and his work earnings. The higher the monthly earnings of a man, the less his contribution. Contributions of 100%, 75%, 50% and 25% in Table 3.19 correspond with average earnings of \$16.00, \$29.00, \$45.00, and \$60.00 a month respectively.¹⁸ It is as if men decide that immediate household support requires \$20.00 a month and any earnings above this can be used for other things. The significance of this is that many families with high gross incomes have considerably lower net incomes, and that the distribution of households across net income classes is more concentrated and more equitable than across gross income classes, as is indicated in Table 3.21.

In situations where money is transferred out of the immediate household for sharing or for other purposes, the effect is to bring about a more equitable distribution of income; however, no judgements can be made regarding the relative merits of a smaller number of people having higher per capita income as opposed to more people having lower per capita income.

The implication of these observations is that it is difficult to predict accurately and to trace the effects of earnings increases upon family welfare. It is certain, however, that direct effects of income increases would be felt not only by a target group, but also by a number of others.¹⁸

Conclusions

The singular characteristic shared by workers interviewed in St. Martin is that earnings are low. These earnings can be explained by basic concepts of economics, and it follows that incomes can be increased if policies are directed toward the underlying factors identified. In other words, a useful viewpoint to adopt for planning is one which treats workers and their activities as ordinary.

Therefore, a general approach to increasing earnings should aim at increasing "productivity" and increasing the demand for goods and services produced by the workers (Sousa and Tokman: 1976).

In the case of persons who sell labor services, earnings depend on the wages paid for the use of skills and the frequency with which those skills are

TABLE 3.20

Distribution of Monthly Household Income

| Income Class (\$) | Households in Each Class (%) | |
|-------------------|------------------------------|-----|
| | Gross | Net |
| 10 or less | 2 | 2 |
| 11 - 20 | 18 | 20 |
| 21 - 30 | 15 | 19 |
| 31 - 40 | 17 | 20 |
| 41 - 50 | 11 | 15 |
| 51 - 60 | 8 | 13 |
| 61 - 70 | 6 | 5 |
| 71 - 80 | 7 | 2 |
| 81 - 90 | 4 | - |
| 91 - 100 | 5 | 4 |
| 101 - 125 | 6 | - |
| more than 125 | 1 | - |
| Total % | 100 | 100 |

TABLE 3.21

Distribution of Per Capita Monthly Household Income*

| Income Class(\$) | Households in each class (%) | |
|------------------|------------------------------|-----|
| | Gross | Net |
| 4 or less | 10 | 12 |
| 5 - 6 | 20 | 20 |
| 7 - 8 | 8 | 14 |
| 9 - 10 | 11 | 16 |
| 11 - 12 | 10 | 11 |
| 13 - 14 | 2 | 5 |
| 15 - 16 | 6 | 9 |
| 17 - 18 | 10 | 6 |
| 19 - 20 | 10 | 5 |
| 21 - 22 | 2 | - |
| More than 23 | 11 | 2 |
| Total % | 100 | 100 |

*Measured in \$ per adult equivalent unit.

employed. Actions to increase their earnings must focus on two types of programs: (1) those which promote occupational mobility and (2) those which increase the frequency of sectoral employment by stimulating demand for the use of given skills.

Manufacturers are also traders when they buy and sell and, therefore, much of the previous argument applies to them as well. However, given the variety of activities that are associated with manufacturing, nothing less than a full range of business development services is required. These include: new and less costly information about markets, products, methods of transportation; loans to increase their scale of operation or finance re-tooling; creation of cooperative purchasing and marketing organizations; stimulation of increases in demand for their product lines (particularly in the off-season); and reductions in the costs of factory inputs, among others.

In general, the analysis of income generation in St. Martin points to several preliminary ideas about ways to improve individual earnings and family income. These can be grouped into specific areas of public policy orientation.

Wage Legislation

There is little point in enforcing existing minimum wage legislation in Port-au-Prince. The "put-out" system, the "half-day" wages and other techniques of "modern" enterprise are repulsive to workers and to outside observers. However, given the economic realities of Haiti, such "informality" among large firms does provide a greater number of direct income opportunities than otherwise would be possible. It can be argued that higher wages would provide large indirect income opportunities. While this might be the case, it must be remembered that high wages would likely produce a less equitable distribution of income, and force significant government enforcement outlays. Similarly "high" wages that force even minimal capital substitution is counter-productive in a place where labor is in large supply and able to work for a low return.

Government Purchasing

In Haiti the government is a major purchaser of local labor services and can have a sizeable impact on income. Opportunities also exist for the government to purchase goods produced by small-scale manufacturers rather than by large-scale firms and importers. In many instances there may be no local producer of certain commodities or the costs may be prohibitive. In these cases efforts might be made to develop the capability for cost-effective local production.

Public Infrastructure Services

As was shown in Table 3.14 most traders and manufacturers store their goods in and around the St. Martin area. Therefore, certain kinds of public infrastructure

may have a positive effect on income production. Foremost among these are services which could help avert disasters of various kinds. The provision of fire-breaks, hydrants, water fountains, functioning water mains and adequately trained proximate fire-fighting personnel are basic necessities. Residential storm drainage works, garbage collection and sewage removal services are first steps in reducing the risks of flooding damage and related disease. Improved potable water supply and rodent and vector eradication and control are additional elements which can prevent income losses resulting from illness and medical costs. Finally, nearby preventive and curative low-cost health services are needed.

These kinds of services can be located in St. Martin or in other similar areas. Given the near-total absence of public services in St. Martin, the kinds of services mentioned would prove sound investments. It is unnecessary to speak in terms of "basic human needs" only on moral grounds to justify various forms of public infrastructure. They are necessary on basic economic grounds if it is the intent of government to maximize the productive capacity of human and non-human resources.

Marketing Services

Marketing services to facilitate the flow of goods and information between buyers and sellers are an important means of increasing both productivity and the demand for worker output. These services include: information regarding supply and storage of factor inputs, purchasing and storage of outputs, and marketing and promotion of existing products and production techniques for new products, among others. The purpose of such services would be to assure that local producers and outside buyers have access to information about the greater economic environment in which both of them operate.*

Given the small size of manufacturing activities and the large number of them, it is evident that the public and private institutional mechanisms required to integrate St. Martin workers more fully into the broader economic environment would be experimental, and probably would involve high initial costs. Cooperative purchasing and marketing systems and urban industrial extension services which are implied have little or no precedent in Haiti. Development of appropriate institutional mechanisms would be a necessary prerequisite.

In terms of a more immediate possibility, it may be noted the government currently does have direct control over certain kinds of internal commodity flows which affect the livelihood of a number of small traders. For example,

*As an example of how the existence of a marketing assistance program can be of use in promoting increases in earnings and employment, see Appendix C, "A Sisal Cooperative." It describes the evolution of a project in Haiti which could have benefitted from such a program.

large commercial establishments serve as secondary outlets for the distribution of government-controlled products, such as sugar, coffee, flour, cigarettes and matches. The state sets prices for fixed quantities sold at the wholesale and retail levels. Since traders who buy the products from larger firms do so in quantities smaller than those covered by law, they pay higher unit prices. Changes in government marketing policy, which would set prices for smaller purchase sizes, could serve to protect employment in these activities.¹⁹

Training

There is clearly a need for training services which would serve to promote occupational mobility. However, it is important to remember that in St. Martin and in similar places, the opportunity cost of participating in training rather than production or sales is high. Most individuals cannot afford full-time absence from work for extended periods. Therefore, the effectiveness of training will depend not only on its content but also on the form of its delivery. Nearby community centers, mobile centers, self-help organizations, on-the-job extension services, educational radio and off-season program scheduling are mechanisms which might be considered.

The contribution which training might make to improving the welfare of the people of St. Martin should not be overstated, however. Workers probably know the market in which they operate much better than teachers and other training personnel. Thus, there is a limit to how much training can complement personal knowledge. Experience gained during this research suggests that teachers could be much more effective if recruited from the ranks of workers than if recruited elsewhere.

Financial Services

Notwithstanding earlier reservations about possible negative employment and income effects of increasing the general availability of capital, there are instances when credit availability is desirable. One such instance occurs when successful wholesale and retail traders have been financially bankrupted by medical debts. Another is when talented manufacturers are constrained in expanding production because of the high cost of borrowing.

The selective nature of financial assistance needs to be stressed because lack of capital is only one of many obstacles to increased earnings. Environmental risks, lack of skill, inadequate marketing mechanisms, and so forth are major obstacles that also affect income. It is important to know the possible effects of using other methods to increase income; direct loan administration could involve such high administrative costs that, if passed along to the borrower, it might require interest rates no different from existing ones. Therefore, unless there are institutional mechanisms, such as extension services, cooperative associations and community savings and loan associations, through which

credit could be provided, blanket extension of institutionalized or "formal" financial services to small-scale entrepreneurs is not advisable. Putting this suggestion another way, it is better to combine financial services with other services which require the same kinds of institutional delivery systems.

The six areas of public policy orientation outlined above represent just a very few of the many possibilities that come to mind after having derived some understanding of the income generation process in St. Martin. Had an analysis been undertaken of the linkages between families and the greater urban and national economy of which they are a part, it might also have been possible to put forward a number of broader policy suggestions which might affect positively the work earnings of people in St. Martin.

However, as was discussed in Chapter II, work and the earnings it generates cannot be taken for granted; it has to be "produced." The cost of producing work is the "cost of living," and in St. Martin, as in much of Haiti, it is literally the cost of survival.

Applying this model to families, it is evident that the concept of "productivity" can take on a broader meaning. Reductions in required expenditures for eating and housing, for example, which are basic inputs to the production of life and work, can be interpreted as being methods of increasing household "productivity" equivalent in nature to any of the suggestions put forward in the foregoing.

Notes

¹The subject of income production or employment has had a revived international interest during the past years and has increasingly become a prime focus of the development strategies of many countries (Friedmann and Sullivan: 1972; Edwards: 1972; Chenery: 1974; ILO: 1976b, 1976c). Within this new-found interest much has come to be written about the urban "informal" or "traditional" sector of economic activities (ILO: 1972). Although the analytical usefulness of the term "informal" remains in serious doubt (Bienefeld: 1975; van Dijk: 1976), a number of studies of the characteristics of this little-known part of urban economies has underlined the need to learn more about them, irrespective of the name or temporary classification ascribed to them. These studies, both general and highly detailed, have covered urban areas all over the world: Africa (Hart: 1970, 1973; Norwood: 1975; Kennedy: 1976), Asia (Dasgupta: 1973; McGee: 1974; Marsden: 1975; Papanek: 1975), Latin America (Diegues: 1966; IBRD: 1976b; Dewit: 1976), and have led to experimental programs within the subject activities (Nihan: 1976).

Unfortunately, many of these recent studies are descriptive rather than operational, and ultimately offer only general policy suggestions which lack the substance required for implementation of specific public programs of intervention.

Fortunately, there is a body of relevant analytical literature which pre-dates that of the "informal" sector and which offers insights of the kind necessary for depth of understanding and preparation of specific types of actions. While these studies cover a smaller range of activities than those usually understood to fall into the "informal" category, their detailed presentations are extremely valuable.

This literature contains works which delve into the detailed operational characteristics of homework and small-scale activities in Europe (ILO: 1948), in Africa (ILO: 1962), in the Middle East (ILO: 1952), in China (SRI: 1958), and most importantly in India (United Nations: 1955; India: 1956, 1958, 1960; Singh: 1961; Shetty: 1963). They discuss the roles which these activities play in the wider development of regional and national economies (Herman: 1956; BND 1958; Hoselitz: 1968) and in the export sector (Smity: 1952; Willis: 1955; Ho and Huddle: 1973). Finally, they propose various concrete policies and assistance programs based on detailed background analyses (Elkan: 1959; Ligget: 1959; Stepanek: 1960; Weddell: 1960; USAID: 1962; Schumacher: 1965). One such work (Staley and Morse: 1965), even though concerned exclusively with modernization and industrialization which were in vogue several years ago, is a "classic."

The examination of income activities in St. Martin can be classed as an investigation of "informal" activities if one wishes to place it into a broader immediate context, but it finds its methodological roots in the earlier and more rigorous tradition of activity analysis identified above.

²The category of "earning money income" included all persons who currently were working or, if not working currently, expected to return to work whenever circumstances would permit.

"Household management responsibilities" included all persons who were engaged in one or more of the following sub-activities: cooking and/or preparing food, buying food and/or other purchases, obtaining water, washing clothes, caring for infants, and protecting the house.

Persons who were under five years of age, those who were retired and/or permanently handicapped and who did not or could not take on household management activities, and all other persons who could not or did not participate in any of the above-mentioned activities for whatever reasons were classified as "other."

³The 198 individuals included those 14 years and over who fell into the three earnings categories, and three of the five apprentices who were earning money income at the time of the interview.

⁴Actually most of the individuals in the three groups are employers of others. In the first two categories the purchase of outside labor services takes the form of irregular short-term purchases for such things as goods transport (e.g., porters) or sub-component preparation (e.g., cutting forms for shoes). The third category includes persons who provide regular employment to outside laborers. So, although only a fraction of the workers could be classified as regular employers, we should understand that a substantially larger amount of employment and earnings associated with the group than is implied by the 6.6% figure in Table 3.3.

⁵The conceptual framework for looking at the household presented in Chapter II indicates that work essentially means the sale of services and/or goods in the market. The implicit idea in this framework is that every worker is self-employed. This attribute is very useful in reconciling observations with the standard vocabulary of labor market analysis.

Irrespective of any other problems of definition or applicability, the question of who is employed, who is unemployed, and who might have any intermediate attribute, such as underemployment, depends on the ability to separate out the self-employed and the employed. We are accustomed in affluent countries to asking persons who have steady jobs with steady salaries whether or not they have worked in the past week, month or year. All that is necessary to define unemployment is to select a period of observation for which comparisons can be made. This is not a serious obstacle.

We are, however, not at all accustomed to asking entrepreneurs whether or not they are employed. It is an inapplicable question until their business fails and they look for regular jobs, at which time they no longer are entrepreneurs.

The problem gets even more involved if there is considerable movement between (wage) employment and self-employment. But the dilemma exists only insofar as we wish to make a distinction between wage employment and self-employment. In Haiti, this distinction is not really all that useful and it is best to assume that each individual is an enterprise - i.e., self-employed.

What happens to the question of who are the unemployed? I suggest that the question usually is inappropriate. This is so not only because of the difficulties of definition of employment, but also because unemployment as we usually understand it can only be a short-lived phenomenon in an environment where income sources other than work are absent (Herrick: 1974). As long as an individual remains in the labor force we can assume that he oscillates between work and searching for work. What we are really interested in is the pattern of oscillation through an extended reference period and the total income obtained during that period.

⁶ There is a similarity between this kind of breakdown and the sector classification. The sectoral classification imposes an industrial market model upon the worker while the output classification imposes a household model. Nevertheless, the similarity is particularly useful because we are led logically to ask questions which are usually posed in connection with firms and industries, but rarely in connection with individuals or households. It is of interest to know, for example, who the immediate purchasers of outputs and suppliers of inputs are, what the national-international economic role of worker production is, and so forth. Of more immediate interest is the question of the general origin of "final" derived demand for the goods and services. Results of this survey indicate that most demand for worker output is concentrated in the city, and most of that is located within lower income groups which call especially upon the output of women traders. However, notwithstanding this relative concentration, it is evident that workers are integrated into all parts of the urban economy.

⁷ On the day of the interview one-half of the sellers of labor services were not working. Though some were temporarily ill (14%), the vast majority (70%) simply stated that they could not find work, either in the form of job offers or in the form of service contracts. More than one-third of these workers had worked during the previous week, one-half during the previous month, and four-fifths during the previous six months. If obliged to state a rate of "unemployment", it was 20%. This is higher than the average 7% figure established for all workers.

⁸ The daily and monthly earnings of domestic servants are only their cash earnings. In addition, most receive food in the homes where they work, and the value of food income is estimated to be between \$0.15 and \$0.20 per day. The addition of this amount to their incomes would not substantially alter their relative earnings position.

⁹One of the immediate observations that comes to mind is that official private and public employment data for "modern" activities underestimate the size of the labor force directly engaged in production; hence, employment growth estimates for "modern" jobs would necessarily be considerably out of line with reality. This is especially so in cases where enterprises are engaged in extensive extra-legal employment and payment practices.

¹⁰There are several reasons why women would set up at home rather than at other places. The characteristic of home sales is that goods are not perishable, purchase prices and sales prices are fixed, and bargaining does not occur. The risks of loss of capital and earnings associated with perishable goods and price speculation are not present. Given the smaller amounts of capital used, we could surmise that these women prefer to obtain relatively stable earnings and would forego relatively higher and more unstable earnings. Another possible reason is that many women perhaps could not stray far from home because of obligations to children and/or to the protection of their dwelling unit from theft.

Whatever the reasons, sales at home represent an important part of the trade system and this ought to be explicitly taken into consideration in the planning of housing and residential programs, both new projects and upgrading projects. The elements of physical planning that are important here are location, residential density, layout of roads and pedestrian paths and pricing policy for frontage and non-frontage locations.

¹¹I cannot say whether ultimately it is better for traders to store at home or at the places where they sell, such as the central market. That would depend on a careful analysis of the goods, distances, transport costs, storage prices, and so forth. Sometimes increases in the scale of operations and in earnings can be dampened by high storage fees in the central area. In the aggregate one cannot say what the total effect of "at home" storage might be on earnings, prices and employment, but it does seem a worthwhile avenue of inquiry. A start in this area has been made by Murray and Alvarez (1973) and by Locher (1975). They provide some careful insights into the current structure of storage and warehousing operations in the central market and their relationships within the urban-wide marketing system.

¹²It should be noted also that the "real" earnings of traders who engage in distribution of food products are underestimated. They do not include a portion of produce which is used as food by the workers and their families. One of the "productive" advantages of having capital to engage in food trade is that it permits families to eat at a unit price which is considerably less than the unit price they would normally pay for small-scale purchases of food for own-use alone.

¹³The statistical measures of association and significance between earnings and capital, after holding constant for other variables, were: $R=.78$, $R^2=.61$, $F=9.60$.

¹⁴During the interviews the majority of manufacturers expressed a satisfaction with the type of work which they were doing. They would indicate that things could be better for them if demand for their output was stronger, if competition was reduced to allow higher prices, if the cost of inputs was lower, if money to buy tools was made cheaper, if information was readily available on new product lines, and so forth. Even if given a choice, few workers could think of satisfactory alternatives to independent manufacturing. They would clearly like to have higher earnings, but they tended to discount the higher wages of factory work because in the long run they felt that earnings would not reflect a fair return to their effort, in much the same manner that traders shunned domestic service.

However, most of the workers who obtained low earnings would take factory work at the minimum wage for a short while in order to build up a stock of money, skills and information that could later be used in independent enterprise. Many indicated also that they would stick with factory work if promoted to supervisory levels which permitted wages much higher than the minimum, and which represented positions of prestige and authority equivalent to independent operations. Of course it is impossible to say whether the statements of workers reflected a true picture of what they would do if confronted with higher-wage and stable employment, or a rationalization of their condition based on the fact that such employment opportunities are extremely rare.

¹⁵The statistical measures of association and significance between earnings and capital, after holding constant for other factors, were: $R=.20$, $F=9.18$.

¹⁶This is a common practice in Port-au-Prince, as is the continued payment of salaries to widows of deceased workers. Many workers also receive salaries for a number of positions simultaneously, though they are present at only one (if any). Since all these salaried positions are identified on the payroll of government agencies, the net effect is that the official estimate of public employment overstates the actual number of active public workers.

¹⁷Since households vary in both size and age group composition, it is useful to standardize them by some weighting factor so that different indices measured for different families are comparable. In the case of income, families of a given size composed mostly of adults will tend to have a higher proportion of earners than families of the same size composed mainly of young children. The differences in household income would tend to be exaggerated unless the presence of inactive persons were accounted for.

To accomplish this, household size measured in numbers of persons was converted into size measured in adult equivalent units. The conversion was made using the following weights: age group five years or less = 0.5 units; 6 to 11 years = 0.7 units; 12 to 16 years = 0.9 units; 17 years or more = 1.0 unit. Discussions on the method of conversion can be found in Friedmann (1952) and Keliman (1966). After adjustment to adult equivalent units, average household size becomes 4.3 rather than 5.3.

18

The F-statistic for the association of contribution classes with earnings is 14.20.

19

The logical extension of this would imply that everybody have access to state outlets or indirect outlets; while this would reduce the cost of goods to everyone, it might substantially reduce employment opportunities in small-scale trade. The trade-off between employment and the price of goods to the general public becomes clear in this simplification and underlines the need for careful examination of the relative social merits of large-scale as opposed to small-scale marketing systems.

IV

EXPENDITURE

The low income generated by most families in Port-au-Prince limits the kinds of expenditures which can be made.¹ A survey carried out in 1970 by the Haitian Institute of Statistics suggested that about 80% of family expenditures were for food and other basic necessities, such as shelter, medical care, energy, toiletries, clothing and schooling.

As is shown in Table 4.1 the proportion of income spent on food, energy and clothing remains more or less constant as income increases. This suggests that demand for these things is strong at all income levels. Alternatively expenditures for housing and laundry decline rapidly as income increases, suggesting a decline in the relative priority given to these things. Finally there is a large increase in proportional spending for medical services and education as income increases.

If these expenditures are treated as investments, we can assume that families with lowest incomes obtain highest returns from housing, food and energy (i.e., charcoal to cook food). Obviously such families would also profit from medical care and schooling, but the opportunity costs of shifting money away from food and housing at low-income levels are high and families are obliged to limit purchases of health and education services. Families with higher incomes do not live under such severe constraints. For them, the opportunity cost of not investing in health and education is high.

Even though the range of incomes is limited, expenditure priorities do change significantly across the table. In general, it can be said that families with lowest incomes are basically concerned with survival and the period over which they evaluate outlays tends to be short; perhaps only a day, a week, or a month. Their main priority is earning as much income as quickly as possible. Food and shelter for themselves and shelter for their goods are immediate necessities.

On the other hand, families with higher incomes plan over a longer time horizon and expenditures for schooling and medical care will not starve them. Even among those with higher incomes, however, spending reflects an interest in tangible returns. Incomes must increase significantly beyond seventy dollars per month before outlays that yield less tangible (sometimes referred to as non-productive investments or conspicuous-consumption) results are found.

These arguments point to the fact that, while all families with incomes lower than \$60.00 a month may fall under the blanket designation of "poor," they

TABLE 4.1

Family Expenditure Priorities by Income Class, Port-au-Prince, 1970

| Type of Expenditure | Percent of Monthly Income Level | | | | | | | Average |
|----------------------|---------------------------------|-------|-------|-------|-------|-------|-------|---------|
| | \$10 or Less | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | |
| Food | 46 | 48 | 51 | 48 | 52 | 46 | 43 | 46 |
| Shelter | 31 | 18 | 13 | 12 | 12 | 12 | 11 | 12 |
| Medical Care | 0 | 1 | 3 | 5 | 3 | 5 | 10 | 7 |
| Energy (Charcoal) | 5 | 7 | 7 | 6 | 7 | 6 | 5 | 6 |
| Toiletry and Laundry | 2 | 6 | 2 | 2 | 1 | 1 | 1 | 2 |
| Clothing | 1 | 5 | 4 | 5 | 4 | 4 | 4 | 4 |
| Schooling | 0 | 0.2 | 0.5 | 0.5 | 3 | 4 | 5 | 3 |

Adopted from: Enquete Socio-Economique (April 1970), Premier Resultats, Institut Haitien de Statistique, Mai 1975, Port-au-Prince.

are not a homogeneous group. There are significant differences among them and it follows that they have significantly different expenditure priorities. From a knowledge and policy perspective it is essential to determine which income uses are important, for whom they are important, and why. The research in St. Martin provides some answers with respect to expenditures for shelter, water, food and schooling, and also with respect to the uses of credit to finance such investments.

Shelter

There are five means of obtaining a place to live in St. Martin. There is outright land ownership, long-term land lease, long-term house rental, monthly house rental and weekly house rental. Table 4.2 classifies these five occupancy arrangements by price and income.

The families who own land or lease it on an annual basis have lived in their respective homes a longer time than other families. Though their per person² incomes tend to be lower, their prior investment in land and/or buildings now provides them with a secondary income source (described in Chapter III) and reduced current housing costs. Their household incomes range from 25% to almost 50% higher than all other groups. They were only 9% of the entire sample. Since the costs of purchasing land and building a house in St. Martin are about \$450.00* and annual family incomes average only \$500, most people are obliged to rent.

A family that rents a dwelling unit by the week pays a higher total and unit rent than those who rent for longer periods of time. The weekly renters also have a lower household and per capita income than do other families; related to this, they have a lower amount of working capital per household member in income-producing activities. These families spend 20% of their income on housing which is usually of poor quality.

When expenditures are viewed as investments, the choice to expend such a high proportion of income for short-term, small and inferior housing is easily understood. Consider a family which, at a given point in time, has only \$6.00 cash for all purposes. It simply cannot commit all of it for one month of housing. There would be nothing left for food, water or purchases of inputs necessary for trade and manufacturing activities. The opportunity cost of not purchasing food and water for even a few days is quite high. Costly as it is,

*In 1975 the price of land in St. Martin was about \$20.00 per square meter or \$200.00 for a ten-meter parcel sufficient for one dwelling unit. The cost of building even a makeshift shelter was \$25.00 per square meter or \$250.00 for a ten-meter house.

TABLE 4.2

Relationship of Housing Occupancy Arrangements, Price and Income^{a)}

| ITEM | DWELLING UNIT RENTAL | | | LAND RENT 6 TO 12 MONTHS | PROPERTY OWNERS |
|---------------------------------|----------------------|-------------------|-------------------|--------------------------------|--------------------|
| | BY THE WEEK | BY THE MONTH | 6 TO 12 MONTHS | | |
| % of Households | 8 | 36 | 30 | 17 | 9 |
| Monthly Rent* | \$ 5.90 | \$ 6.20 | \$ 3.30 | \$ 1.60 | NA |
| Income per Household** | \$29.00 | \$37.00 | \$36.00 | \$43.00 | \$53.00 |
| Income per Person** | \$ 8.80 | \$ 9.30 | \$ 9.70 | \$ 9.00 | \$ 7.00 |
| Working Capital per Household* | \$18.60 | \$28.00 | \$34.00 | \$41.00 | \$36.00 |
| Working Capital per Person* | \$ 5.60 | \$ 7.00 | \$ 9.10 | \$ 8.50 | \$ 4.80 |
| Monthly Rent per Person* | \$ 1.80 | \$ 1.60 | \$ 0.90 | \$ 0.30 | NA |
| Rent as % of Household Income * | 20 | 16 | 9 | 1 | NA |
| Size of Area Occupied * | 4.0m ² | 7.6m ² | 6.3m ² | 27.4m ² | 28.5m ² |
| Space per Person* | 1.2m ² | 1.9m ² | 1.7m ² | NA | NA |
| Rent per Square Meter* | \$ 2.00 | \$ 1.30 | \$ 0.70 | \$ 0.20 | NA |

a) Averages in some rows may not coincide because of different distributions of sub-samples.

* F statistic is significant at the .05 level. See footnote, Table 3.12.

** F statistic is significant at the .10 level. See footnote, Table 3.12.

N = 88

however, short-term rental reduces the need for families to forego housing altogether or to incur high commuting costs.*

At the same time, it is helpful to remember that in addition to shelter for the family, housing is very often necessary to sustain specific trade and manufacturing activities.³ For the lowest income families, given the choice of being housed or non-housed, they most often choose to be housed and are willing to spend a great deal for a very small and relative "primitive" shelter.

Higher-income families are in a position to spend more (though proportionately less) on housing and at the same time obtain more space and lower unit prices. Interestingly however, they do not obtain additional space. In fact, formal analysis did not indicate a strong relationship between income and housing space.

House size averages 6.4 square meters per family and 1.7 square meters per person. Three-quarters of all sampled households live in areas smaller than the average. It seems that when families are minimally sheltered and have found the occupancy arrangement which minimizes their costs, the importance which they attach to housing declines.⁴ In fact, in several cases the dwelling unit size was so small some members had to sleep outside in rotating shifts.

One aspect of housing which does appear to retain importance as income increases is the protection and security it offers to occupants and their assets. The characteristics of importance are the number of holes in the roof, the number and size of unfilled spaces in the outside walls, the material of the outside walls (e.g., planks, crate-boards, metal, flattened cans, cardboard, etc.), the kind of inter-family partition material within the structure, the kind or presence of locks on the entry door, and so on. Using a combination of these characteristics, each dwelling unit was rated according to whether it was of below-average, average, or above-average quality. Results indicated 29%, 48% and 23% of dwelling units in each of the respective categories.

In spite of its subjectivity, the measure does suggest the relationship which exists between housing quality and income. Table 4.3 suggests that there is a positive relationship between incomes and working capital on the one hand and quality of housing on the other.

Although the proportion of income spent on housing is inversely related to income in general,⁵ it should be made clear that the direct relationship is

*Even non-housed individuals in Port-au-Prince make partial shelter expenditures which take the form of cardboard sheets which are used as mattresses on the street, cardboard boxes or straw bags which are used to carry and protect personal possessions, etc. The arcades of downtown streets provide the necessary roofs.

TABLE 4.3

Relationship of Housing Quality, Price and Income

| Item (Percentage of Housing) | Condition of Dwelling Unit | | |
|---------------------------------|----------------------------|------------------|---------------------------|
| | Below Average (29%) | Average (48%) | Above Average (23%) |
| Monthly Rent* | \$ 3.60 | \$ 4.30 | \$ 5.70 |
| Income per Household* | \$30.00 | \$38.00 | \$52.00 |
| Income per Person* | \$ 8.00 | \$10.00 | \$12.00 |
| Working Capital per Household* | \$17.00 | \$36.00 | \$43.00 |
| Household Size* | 3.75 | 3.80 | 4.30 |
| Monthly Rent per Person* | \$ 0.96 | \$ 1.13 | \$ 1.32 |
| Rent as % of Household Income* | 12.5 | 11.3 | 10.7 |

N = 80 (Property Owners are excluded)

* F statistic is significant at the .05 level. See footnote Table 3.12.

tempered by such factors as length of residence in the house, occupancy arrangements, size of unit, unit price and so on. Allowing for these factors, the data permitted an estimate of an income elasticity of demand for rental housing of 0.28.⁶ Despite the fact that this estimate is from a very small sample, nevertheless, it supports the suggestion that interest in housing (or at least in rents) decreases with higher incomes.* This is consistent with findings in other countries (e.g., Burns and Grebler: 1977).

The patterns of demand for housing correspond to the existing supply price. One key factor in this supply price is the high cost of land which results from the market behavior of a relatively small number of urban landowners who speculate on land values. A second factor is the cost of construction which results from a high demand for scarce building materials and from relatively high wages paid to construction workers. The notion that "anyone" can build a house that will not fall down is an exaggeration in Haiti. A certain degree of skill is required and that skill is relatively scarce. Earnings of construction workers range from \$1.00 to \$5.00 a day.

In short, shelter is of vital importance to the families of St. Martin. They demand it for the living accommodation it provides and more importantly because it is one of the key factors affecting income production and growth. Variations in the size, price, quality and occupancy arrangements provide a degree of flexibility which permit the needs of residents at all income levels to be met. Nevertheless, several limiting factors, such as the aggregate supply of land, building materials and construction workers, create high prices relative to income.

Water

The average purchase of water in St. Martin, obtained by bucketfuls, amounts to about 12 liters per capita per day.⁷ The lowest quantity was 4.5 liters, and the highest was 36 liters in the survey. One-half of the families purchase amounts less than the average.**

The typical family spends about 13.5% of its income to obtain water; some families will spend as little as 1% and others as much as 50% on a given day. During the survey period the price for each bucket ranged from \$0.02 to \$0.10, or from \$4.20 to \$21.00 per one thousand gallons. For relative scale, these prices can be compared to the \$0.40 per one thousand gallons paid by the highest income families of the city whose homes have private water connections.

*That is, relative to other things.

**To give some scale to these figures, we can note that a single flush of a "modern" toilet facility requires 20 liters.

The variation in price in St. Martin results primarily from fluctuations in supply. Seasonal variations in rainfall, for example, limit the amount of water that can be sent through the pipes of the city, thus affecting the supply price across the year.*

Fluctuation in water supply results also from inefficient operation of the distribution system. For any number of reasons parts of the city may be unable to obtain water for several days at a time.** This causes the price to escalate quickly as water must be transported from greater distances. The price of water and its variation are related to particular characteristics of the water supply system in the city.

Port-au-Prince has a water network which is similar to that in most cities; it links about 30,000 residential, commercial, and industrial users to the major water sources. Although there are 35 public water fountains, the vast majority of the population obtains water either by purchasing it directly from families who have connections or from vendors who also buy from connected households (Haiti: 1976a). At the time of the survey about 63% of sample households bought water from some 1200 mobile vendors active in the neighborhood.

The average price paid to families with water connections by consumers and vendors was 4.2 cents per bucket, or 0.23 cents per liter. This works out to a per capita expenditure of 2.8 cents each day. For the whole of the St. Martin population this would mean that about \$1,100.00 is paid each day and \$400,000.00 is paid each year to the 80 or so families that have connections around St. Martin. The income derived from the sale of water amounts to \$5,000.00 per year for each connected family.

Given its profitability, the reasons that more families do not quickly enter this market, increase competition and drive prices down become important. One possible reason is the lack of information and knowledge about the scale of this activity. Another possibility is the lack of sufficient funds to invest in connections and reservoirs.

The more salient reason, however, has to do with the politics of water. Families with incomes of \$5,000 a year are among the wealthiest in the city. There is power associated with such wealth and a concomitant interest in

* During the droughts of mid-1975 and early 1977 prices in St. Martin averaged \$40.00 and \$100.00 per one thousand gallons. The St. Martin surveys were carried out when there was a relative abundance of water.

**A valve operator may be ill for several days or he may forget one of his stations or he may be paid privately not to open one valve in favor of another, and so forth.

perpetuating both the power and the wealth. These families make private payments to valve operators in order that water be reallocated and, hence, change the price structure for a period. Similar sorts of payments are made in order to obtain a connection and to cut off that of someone else.

On the demand side, the decision to buy from a mobile vendor or from a connected seller is one that seems based on income more than anything else. The 63% who buy from mobile vendors earn an average of \$40.00 per month and \$11.00 per capita, whereas the remaining 37% earn \$34.00 per month and \$8.00 per capita.

During the interview period the price of water would vary each day according to the method of purchase and to the distance the mobile vendors would have to travel. Needless to say, expenditures would also vary.⁸ However, after standardizing for the price fluctuations and family size, the income-elasticity of demand for water was estimated to be 0.13.⁹

Although it is not supported by the data as strongly as the housing figure, the elasticity does suggest that water is very important to the poorest families. In fact, when money in hand is close to zero, water appears to have a higher priority than housing. In other words, if families have to choose between housing and water with no combination of the two possible, families will purchase water first. There are several reasons for this. First, of course, water is a necessity for drinking, cleanliness and production of goods. More importantly in a society where the basic food staples are grains, such as corn, millet, rice and beans, water is needed to transform produce into consumable food. Therefore, the higher the cost of water, the higher the cost of eating and there is clearly a point where eating is more important to a family than housing.

There is yet another reason why water is deemed important and it results from the relationship between good health and the quality of water. Good health may be regarded as an investment in productive labor resources; clean water is a vital part of that investment since illnesses resulting from use of impure water can remove a large part of a family's productive time from work activities for an extended period. Most families living on the margin cannot afford to be away from work for very long, and there is little room in their family budgets for curative health services. Therefore, the benefits resulting from safe water are very high.

Food¹⁰

The most recent studies of commodity flows into Port-au-Prince indicate an aggregate consumption and expenditure pattern for food such as that presented in Table 4.4. It should be noted that this pattern of consumption is theoretical in that it does not reflect the qualitative and quantitative differences related to various household income levels.

TABLE 4.4

Patterns of Food Consumption and Expenditure, Port-au-Prince, 1975

| Commodity | Per Capita Consumption (Kg./day) | Unit Price (\$/kg.) | Per Capita Expenditure (\$/day) |
|------------------------------|--|------------------------|---------------------------------------|
| Corn | .14 | 0.23 | 0.03 |
| Millet | .10 | 0.20 | 0.02 |
| Rice | .02 | 0.56 | 0.01 |
| Beans | .07 | 0.48 | 0.04 |
| Bananas (plantain) | .11 | 0.12 | 0.01 |
| Vegetables | .08 | 0.10 | 0.01 |
| Fruit | .14 | 0.10 | 0.01 |
| Potatoes, yams, manioc, etc. | .11 | 0.07 | 0.01 |
| Total (average) | .77 | (0.18) | 0.14 |

Sources: Duplan and Lagra: 1975; Girault and Lagra: 1975; IHS: 1976(a); Lagra, Charleston and Fanfan: 1975.

In spite of this, however, the pattern of consumption described in the table required a daily average outlay of \$0.14 per adult individual in 1975. This works out to an average of \$4.20 a month per person, \$18.00 per month per family, and is equivalent to 43% of the average income of families in St. Martin.

A 1956 study of several hundred families in Port-au-Prince, where patterns of food intake resemble those indicated in Table 4.4, revealed the per capita daily nutritional components to be: 1580 calories, 40 grams of protein, 9.7 grams of animal protein (reflecting a high income component in the sample) and 44 grams of carbohydrates (Haiti: 1975b; King: 1975). Directly associated with this only 20% of children grow normally, 50% suffer from first-degree malnutrition, and 30% suffer from second-degree malnutrition. This is important because it suggests that statements referring to abundant supplies of labor should be regarded with caution since the majority suffer from some form of malnutrition which limits the physical and mental resource contained in each laborer. (Latortue: 1972; Berg: 1973.) Although data cannot provide proof, it seems reasonable to hypothesize from the preceding observation that lower income families try to purchase a constant quantity of food that will maximize nutritional values. As income falls the desire to maintain quantity results in substitution for lower quality and corresponding lower unit prices.

Table 4.5 indicates the relationship between the type of cereal used as the basic family staple and family income. The attributes of "superior," "intermediate," and "inferior" corn refer to the fineness of the grind and to the amount of non-edible material found in it. "Superior" corn is fine-ground and has been carefully cleaned. Buyers do not have to spend extra time separating edible from non-edible components. They also can save a bit of water and charcoal since the grind reduces cooking time. "Intermediate" corn requires some cleaning, but its basic disadvantage is that it is coarsely ground. "Inferior" corn has the same grind as the intermediate, but it is so full of alien particles that considerable time must be spent cleaning it. As can be seen, the lower the income the more likely the tendency to save money by expending more time and effort.

Table 4.6 shows for the St. Martin and central markets the types of grain commonly bought, their prices and the income group purchasing them. One thing that is important here is that the prices of each commodity are lower by between 1% and 7% in St. Martin than in the central market. This can be explained in part by the geographical location of women's work activities.

Among traders, for example, almost all of whom are the food-buyers for their respective families, only about 30% work in St. Martin. If we consider that a woman's work day usually includes the purchase of food, then it becomes evident that women do not usually stray too far from their place of work to purchase food unless the farther location offers a distinct price advantage. In the case of this sample, most work-places are located closer to the central market than to

TABLE 4.5

Relationship of Type of Food, Price and Income

| Commodity | % of Families* | Price per Unit** (\$/lb.) | Income per Capita*** (\$) |
|-----------------------------------|----------------|------------------------------|------------------------------|
| Imported Rice | 13 | 0.27 | 11.70 |
| Ground Corn, Superior Quality | 30 | 0.16 | 10.50 |
| Unground Corn | 15 | 0.15 | 10.40 |
| Ground Corn, Intermediate Quality | 22 | 0.13 | 9.50 |
| Ground Corn, Inferior Quality | 16 | 0.11 | 7.40 |

* Excludes 4% of families who buy either local rice or millet; N= 84.

** F statistic is significant at the .05 level. See footnote, Table 3.12.

*** F Statistic is significant at the .10 level. See footnote, Table 3.12.

TABLE 4.6

Relationship of Type of Food, Price, Income and Place of Purchase

| Commodity | St. Martin Market | | | Central Market | | |
|-----------------------------------|-------------------|-----------------------------|----------------------------|----------------|-----------------------------|----------------------------|
| | % of Families | Price per Unit* (\$/lb.) | Income per Capita* (\$) | % of Families | Price per Unit* (\$/lb.) | Income per Capita* (\$) |
| Imported Rice | 9 | 0.269 | 11.00 | 4 | 0.277 | 13.60 |
| Ground Corn, Superior Quality | 18 | 0.162 | 10.70 | 12 | 0.166 | 9.90 |
| Unground Corn | 9 | 0.148 | 9.50 | 6 | 0.150 | 12.10 |
| Ground Corn, Intermediate Quality | 16 | 0.131 | 10.10 | 6 | 0.140 | 9.40 |
| Ground Corn, Inferior Quality | 8 | 0.113 | 7.60 | 8 | 0.114 | 7.10 |

* F statistic is significant at the .05 level; N = 84. See footnote, Table 3.12.

the St. Martin market, and sellers in the latter must offer lower prices to compete with the downtown area. Although local markets may appear to be closer to all buyers, in fact they may be farther away during the period when distance is relevant (i.e., during the daytime marketing hours).

Because some lower income families choose to make purchases at the central market rather than in St. Martin, they pay higher unit prices. This suggests that the price differences were insufficient to draw women away from downtown places of work and back to their neighborhood. Thus time is a scarce resource in much the same manner as it is for many manufacturers who had to allocate different portions of the day to purchasing, transformation and sales.¹¹

That this is the case is confirmed by individual examination of low-income women in the sample who worked in and around the central market during most of the day,* and for whom the opportunity costs of spending too much time buying goods are high. This is especially so when one member of a family must manage this operation plus a number of other crucial investment processes. Effort is made to save both money and time, and an optimum is found between the price (and presumably the quantity) of a good, the time required for purchasing it, the time required for transforming it into food, and the opportunity cost of not using that time for work (Becker: 1965).

Food is obviously an important concern. Although there is room for maneuvering, in terms of quantity and quality as income falls, there is less and less room for substitution of time for money. The unit costs of food, as with housing and water, increase as income decreases. For a good number of families the most expedient method of increasing the productivity of the household has less to do with training, technology, and organization than with the complicated challenge of obtaining food.

Unlike the supply mechanisms for housing and water, the internal food marketing system in the city works relatively well. There does not seem to be too much room for improvement without a corresponding loss of income and employment opportunities for market sellers; at least, among the local products destined for local use.

The key determinant of the price of food, as implied in the first chapter, has to do with the rate of increase of agricultural output. Unless changes occur in this sector, there is a danger that actions to increase income in the city will be only temporary. If the supply of food is not increased, demand increases

*The most relevant thing was that although the women were in lower-income families, both their total work earnings and the proportion of their earnings in total family income were higher than the averages of those who purchased in St. Martin.

may push food prices up even more. Urban and rural welfare are tied intimately, as is shown here, and efforts to deal with the income issue in the city clearly requires intervention in rural areas as well (Streeten: 1963).

Schooling

Seventy-one children between the ages of six and sixteen (almost evenly split between boys and girls) were attending school at the time of the survey. This represents about 55% of all children in the age group. Sixty-five percent (65%) between the ages of six and eleven and 45% between 12 and 16 were attending school. The students were concentrated in 30 of the 88 households covered by the survey.

The proportion of children attending school is not stable. A month before the survey seven children in one family had dropped out of school because their father had lost his government job and could no longer pay the monthly fees. Another five were destined to drop out several weeks after the survey unless their father found some work. Schooling, therefore, is a luxury which ceases whenever income suffers a major setback. The frequency of major income fluctuations makes school attendance irregular.

Eleven children receive subsidies worth about \$2.00 each a month in the form of registration fees, meals, or both at schools run by private voluntary organizations. As important as they are for the families that receive them, these transfers are not a significant incentive for sending children to school.

Excluding the cost of school uniforms, shoes and books, for which the annual purchase requirement ranges from \$5.00 to \$12.00, the monthly fees for each child averages \$1.50. The range starts at a low of \$0.20 a month and rises to a high of \$5.00 a month. The differences are not related to the age or academic level but rather to the type of school attended: public schools (37% of students), private schools (55% of students), and private lessons taken at home (8% of students). The average monthly fees for each of these educational institutions is \$0.40, \$2.20 and \$1.30, respectively.

Public institutions are the preferred place to send children. Although the lower cost is an important factor, the basic feeling among interviewed parents is that the public facilities offer a better quality education.*

*In spite of their being "public," extensive personal contacts with important individuals and/or payment of bribes (quid pro quo) is required before parents in St. Martin can place their children in public schools. Without sufficient leverage to gain access to state institutions, the unsatisfied demands for education have generated a large number of private facilities. Though some of these supposedly offer education equivalent or superior in quality to that of public schools, most do not. They employ teachers whose basic qualifications are that they have elementary school diplomas and are willing to teach for salaries of between \$20 and \$40 a month. Although the state is supposed to supervise and assure education quality, administration of this task is weak (Haiti: 1976a).

With the heavy demand for their services and a limited supply of public schools and teachers, private facilities can charge an average of \$2.20 per student per month and obtain a gross revenue of about \$260.00 per month for each filled classroom (in two daily shifts). Teacher salaries require about 12% of this revenue.

The average monthly income of families who educate their children is about \$44.00. This is significantly higher than the \$36.00 income of families who do not. The average amount each family spends is \$3.70 a month, ranging from \$0.20 to \$13.00. Investments in schooling can range anywhere from 1% to 40% of monthly income; the average, however, is 8%. Within the sample, the proportion of income spent on education has a tendency to increase with income, suggesting that families regard education to be of high importance.¹² Empirical evidence supports this notion.

It is not possible to determine whether investment in education in fact provides a justifiable return when compared with other investments. Certainly families with low incomes experience diminishing returns with each additional year of schooling; therefore, it is not surprising that each progressive year of schooling in Port-au-Prince is subject to a higher attrition rate.*

The vast majority of parents interviewed are basically illiterate and speak Creole rather than French. At the lower limit, literacy and capability in the official language opens doors -- such as access to higher-wage employment, public institutions, vocational training, credit institutions and most importantly, emigration -- to offspring that in the long run might remain closed otherwise. However, unless there are convincing counter-arguments, families on the margin do not keep a child in school beyond the age when his or her resources could be utilized in productive activities that would yield an immediate income.

Credit

In St. Martin there are two basic reasons for saving money. The first is to protect against unknown adversities, such as medical expenses and theft, fire, flood and speculative price losses. The second is to invest in attractive and "productivity"-increasing opportunities. However, significant savings are virtually impossible at low-income levels. Given the potential frequency of adversity and the high degree of ingenuity necessary to produce income in St. Martin, there is a high demand for credit and the institutions to supply it. Furthermore, it can be assumed that families have a distinct preference for immediate borrowing; therefore, there is a willingness to pay a high interest premium if loans are hard to find.

The survey of families in St. Martin did reveal a high demand for credit, a variety of supply mechanisms, and a high interest rate. Seventy-one of the 88 families interviewed had a credit history during the previous six months. They borrowed an average of \$7.00 and the average interest rate which they paid was about 29% per month.¹³

*This was evidenced by earlier reference to a 65% attendance rate in lower age groups and a 45% rate in higher age groups.

While the average loan was \$7.00, a quarter of borrowing transactions involved amounts of \$1.00 each, 63% less than \$5.00, and 84% less than \$10.00. Loans of between \$15.00 and \$40.00 were obtained by only eleven families. The range of monthly interest rates charged for these loans went from a low of 13% to a high of 95%.

Some of the possible reasons for these high interest rates have already been noted from the demand side. There are also a number of possible factors on the supply side which contribute to the high rates. They include: the overall scarcity of capital as measured by its opportunity cost; the transaction and administrative costs of lending; monopolistic or oligopolistic control of the capital market; and risks associated with defaults.

One analysis of money lending practices in rural Haiti suggests that scarcity of capital is not the reason for high interest rates. The general opportunity cost of capital in Haiti, it is argued, lies close to 10% a year (Lundahl: 1979). It is argued also that transaction costs are unlikely to be the major cause of the high interest rates. In most instances, lenders finance operations out of their own savings and there is usually a personal relationship between lender and borrower. Furthermore, the lender has been in the credit business for a long time, knows the economic situation and capabilities of the few persons who borrow from him and, therefore, does not have to maintain close supervision to reduce risks once a loan is made.

Likewise, the possibility that monopolistic practices force interest rates upwards is remote. However, there might be a tendency for an oligopolistic market to exist because the personal nature of lending (mentioned above) forces new entrants to request either security or higher interest rates as a result of ignorance of the credit-worthiness of the borrower.

The major explanation for the high interest rates, by elimination, must be found in the risks of default. To understand this factor one must distinguish between loans which are secured against default and those which are not.

Unsecured loans carry either a high risk premium or lead to high administrative costs. Since lenders must have good knowledge of the character and solvency of borrowers, there usually is little risk of lending to someone who is unable to pay. However, the lender must charge a sufficiently high interest rate to all borrowers, in order to cover the losses of principal and interest caused by those few who do default. For example, if the normal interest rate in the absence of defaults is 1% a month (more or less equivalent to the opportunity cost of capital identified earlier) and if there is a regular default rate on 25% of total outstanding loans, then the necessary interest rate will be about 35% a month (Tun Wai: 1957). It is not possible to say if the default rate in Port-au-Prince is as high as 25%, but the precarious nature of household finances suggests that defaults would not be uncommon.

When loans are secured by collateral which is marketable at a relatively stable market price, lending risks are lowered.* Defaults of secured loans, however, increase the transaction costs since they require conversion of collateral into cash. These default and transaction costs are likely to be included in the interest rate.

If, indeed, high interest rates result from risk of default then we should find that as income decreases, the risk of default (and thus the price of credit) increases. We should expect also that the size of loan would get smaller as income decreases. This, in fact, is the case in St. Martin. Table 4.7 indicates a lower interest rate for secured loans than for unsecured ones, and also a lower rate for those which are based on personal contact. Another important aspect is that the size of the loan gets correspondingly larger for unsecured loans than for secured ones. At the same time there is a significant income difference associated with the two types of loans, and a difference in the size of the household working capital associated with each of the three types of lenders.

The average value of security provided, in order to obtain credit at a pawnshop, is \$12.00 and takes the form of cloth, cooking utensils, watches, radios, clocks, and so forth. The ratio of security to loan is 3:1 and this ratio remains more or less constant whatever the size of the loan. We see in the table that the average household working capital of \$34.00 is a substantial figure, and it is a good indicator of the assets which are available for purposes of loan security.¹⁴

In order to explain why families would commit so much in-kind capital for relatively small loans, it is necessary to determine why families do business with pawnbrokers. The most obvious reason is to borrow money, and families which are secure in the belief that they will be able to repay loans at the end of 30 days have no qualms about borrowing from a pawnshop since it offers relatively lower interest rates and quick service. However, another reason may be simply to convert goods into cash. Although it clearly would be better to sell the goods directly in the market, this takes time and many families are "time-poor." In such situations families have to use pawnshops as a means of converting goods into cash rapidly. The price they pay for this service, which passes the costs of "goods-to-cash conversion" to the lender, is not the interest rate (for it will not apply to them) but the foregone value of the goods. The lender does not know whether repayment will be made and is tied down with idle assets for 30 days which ultimately will cost something to convert again to cash. To cover himself, he demands high security.

*Some risks do remain if the value and marketability of security are overestimated.

TABLE 4.7

Relationship of Loans, Lenders, Interest Rates and Household Income

| Item | Type of Loan and Lender | | |
|-------------------------------|-------------------------|-----------|----------|
| | Secured | Unsecured | |
| | (Pawnshop) | "Friend" | "Usurer" |
| % of Households ^{a/} | 56 | 34 | 7 |
| Income Per Person** | \$10.20 | \$ 8.40 | \$ 8.40 |
| Household Working Capital** | \$34.00 | \$27.00 | \$41.00 |
| Size of Loan* | \$ 4.00 | \$11.00 | \$15.00 |
| Monthly Interest Rate* | 25% | 31% | 60% |

^{a/} N = 69. Two cases of intra-family borrowing are excluded.

* F statistic is significant at the .01 level. See footnote, Table 3.12.

** F statistic is significant at the .05 level. See footnote, Table 3.12.

Families with lower incomes and fewer assets who want relatively large loans cannot use pawnshops; they must rely on unsecured loans. An unsecured loan from a "friend" requires mutually satisfactory prior experience. Knowing that a similar need for borrowing may arise again reduces the risks of non-repayment. This keeps the interest rate far less than that required in unsecured and anonymous transactions. Personal knowledge also permits relatively large loans.

Though the survey did not examine closely the purpose of pawnshop loans, in the six cases where loans were obtained from "usurers," they were used for very specific investments in trade and manufacturing activities. These families were engaged in larger-scale trade and industrial work, as suggested by the relatively large size of household working capital, \$41.00. Usurers, like "modern" credit institutions, seem to be very interested in a family's specific income-production project.

The poorest families with no durable assets, no personal contacts, and often a history of default, simply do not have access to credit. Their low income and capital assets are consistent with a history of commercial failure in both the work market and the credit market. Loans accorded to these families have been and would currently be more like transfer payments than like commercial credit.

It is possible to draw two broad observations concerning this examination of credit mechanisms. First, given the overall economic limitations in Haiti the capital marketing system, like the food marketing system, seems to work fairly well by addressing the needs of a wide variety of income levels and intended loan uses. Second, the question of credit for the majority might be addressed better if the focus were shifted away from trying to increase the availability of loans and towards reducing the demand for them. Various kinds of intervention in the areas of work, education, housing, water supply, agriculture, and so forth may reduce certain credit requirements and ultimately shift demand for credit away from short-run survival necessities towards long-range productive purposes.

Conclusions

This chapter has looked at some of the ways in which a few households use the money which they obtain from work, and other sources, and has tried to explain the reasons why they spend as they do. It has been argued that the allocation of income for the purchase of various goods and services is carried out with concern for the tangible return from each investment. For the purposes of planning, the observations made regarding the characteristics of demand and supply are crucial. They suggest what is and is not important. This knowledge is essential in formulating effective public action.

We have seen that the demand for shelter arises because it yields a set of benefits related to income production and productivity; it permits a place for storage and/or transformation of goods destined for the market. It also permits the accumulation of goods, such as water containers, pots and pans, charcoal heaters, charcoal and food staples, which in combination yield increased productivity in health, nutrition and work. The accumulation of such goods provides access to credit which makes possible further productivity increases and also provides insurance against adversity.

Supply mechanisms for housing, such as they are, work relatively well within St. Martin. Housing is offered with varied physical characteristics and several modes of rental, responding to the heterogeneous demand. The price of housing is not likely to be changed by intervention in the community alone, **but rather by intervention in the overall land and housing market of the city.** The thrust of intervention necessarily would have to deal with the spatial organization and the aggregate volumes of supply and demand for land, the availability of housing finance and the cost of construction, materials, methods and labor.

The demand for water is strong because it also yields productive benefits to family labor in the form of health and nutrition. We have seen that a basic use of water is to transform agricultural commodities into food. While reductions in the price of water will not significantly alter the situation of high income families, it will contribute in an important way to increased productivity among the very poor.

On the supply side the price of water is affected by a number of factors. The unpredictability of climate causes fluctuations in supply and price. The "inefficient" operation of the "modern" part of the water distribution system is another factor. Intervention to reduce the price of water clearly must do nothing to reduce demand. Actions must aim at supply and must address the management of the municipal water authority and the technological characteristics of the current distribution system.

The demand for food, like water, is obvious. But food, unlike water, is not a homogeneous commodity. However, we can expect that more food will be purchased if prices are reduced, in order to increase nutritional inputs and household labor productivity. There also may be a shift to less time-intensive food which would increase unit costs but would make more time available for other purposes, such as work. It is not possible to suggest what the final outcome may be, but it is clear that lower costs can lead to a number of positive changes.

With respect to supply, one fundamental determinant of the price of food is the level of agricultural production. Major effects on the price of food will require long-term efforts in rural areas and/or short-run imports to compensate for low output.

While the demand for schooling is limited to the upper third of the families in St. Martin, it is nonetheless sufficient in the aggregate to generate a private schooling market, a public schooling brokerage service and relatively high prices in both public and private institutions.

The analysis carried out seems to suggest that; while fees and private payments may prohibit some families from sending children to school, a substantial number of residents in St. Martin are prohibited by the opportunity costs of not having a school-age child participate in more immediate income-generating activities. This observation does not preclude intervention aimed at reducing the financial cost of education or improving the quality and relevance of schooling, but it does tell us that ameliorative actions in education will benefit higher income families rather than lower income ones in the short run.

The discussion of credit mechanisms in St. Martin has shown that, although there is a demand for loans of a commercial nature to enlarge or initiate trade and manufacturing activities, much of the demand is oriented to non-market household production investments and insurance. The system of credit seems to work well in an environment where the risks of default are high. Intervention to reduce the price of borrowing is more likely to be effective if oriented toward reducing demand for adversity-related credit. In this last regard, there are a number of policy and program ideas which can be suggested.

Transportation Policy

The price of land in St. Martin is determined by the overall demand for residential space in the city. Reductions in the price of land and corresponding rents may be achieved by actions which reduce the costs of commuting between downtown and peripheral areas where land is less expensive. This would reduce the concentration of demand in and around St. Martin.

Rates charged by operators of the public transport system are strictly enforced by the government and are kept at a low level (Haiti: 1976a). Further reductions in rates may have an adverse effect on welfare by reducing possibilities for fleet expansion or increasing the time spent waiting. Affecting the price of land by reducing transport costs is possible, but it needs to be evaluated carefully.

Markets Planning

Another way of reducing the demand for land in St. Martin is through decentralization of downtown activity. Public actions which would prohibit unloading at the central market in favor of more adequately planned and serviced peripheral locations could also shift the spatial demand for residences. Additional incentives, such as reduced charges for commercial and manufacturing sites, storage facilities and parking charges in outlying areas, could prove useful as well.

Large-scale intervention such as suggested may, however, disrupt the existing spatial system. This in turn may bring about financial losses and increased costs of trade which will increase commodity prices. Care would have to be taken in the selection of new sites and also in the staging of the transformation.

In addition, one could envisage also the construction of covered spaces in and around produce markets which would protect people and goods. This may reduce the demand for housing by individuals (e.g., wholesale traders) who cannot find adequate shelter, but it also might provide a temporary shelter for other individuals and families who, for whatever reasons, cannot obtain a dwelling unit. This is not the usual method of focussing on the housing issue; nevertheless it could represent a marked improvement over existing conditions.

Land Management Services

The success of actions in transportation and market planning to redistribute the spatial demand for housing presupposes the availability of land in the peripheral areas. Land management services are necessary in order to assure that an adequate supply of land is available at specific locations, as well as in the aggregate.

Land management services containing active programs of land tenure control, land development incentives and land taxation structures would serve the purposes of regulating the supply of land for all uses (Grimes: 1976).

Land and Housing Financial Services

One factor contributing to the high price of housing is the high cost of borrowing. Even if formal lending institutions do not wish to provide loans to the poor, reduced borrowing costs for higher income families may have an indirect beneficial effect on the majority (e.g., more work in construction sector). The degree to which low-income private savings are directed to housing, however, must be tempered by consideration of the foregone opportunities of low-income investment in other sectors.

Construction Materials Industry

In order to reduce the cost of building materials for housing, the government could import directly or could grant licenses for import of scrap materials. At present Haiti does not produce enough recyclable waste to provide low-cost building materials, nor does she have much in the way of timber resources. If the cost of importing scrap is low then the cost of building houses could be reduced through imports.

Efforts could be directed also at developing low-cost local building materials. The beneficial effects of such efforts could be felt throughout the entire economy.

Housing Projects

If indirect methods to lower the cost of housing, such as those noted above, do not work, then direct public intervention may be necessary. This would combine land management and financial services into specific programs ranging from basic "site and service" schemes to construction of middle-income housing units (Grimes: 1976). The latter projects benefit lower-income families indirectly by providing employment. The former projects benefit the lower-income families directly if they are properly located and if attention is given to appropriate lot sizes, prices, tenancy arrangements, final densities and other characteristics. One should keep in mind, however, that even such apparently simple projects as "sites and services" involve high administrative and management costs. If such costs must be recovered, there is no guarantee that a low-income person in the project in fact would spend less than in a non-project area with comparable locational advantages.

Water Distribution Management

Public investments in the past seemed to have assured an ample supply of water for the medium-term future demand at per capita levels of use three to six times higher than today. Since major distribution lines penetrate almost every area of the city, increases in consumption will not require major new capital investment (Haiti: 1976a), but it will require a series of actions to improve the final distribution characteristics of the existing system.

A first step to improvement involves upgrading the management efficiency of the municipal water authority. This ultimately would serve to reduce and stabilize the price of water to unconnected families and to mobile vendors.

A second step might envisage the construction of a number of state-run selling points in lower-income areas which could offer water at lower prices than those which are charged privately. If the management and operating costs of these direct selling points are covered by sales revenues, then the cost-effectiveness of the overall water distribution system will not change.

The construction of a number of well-managed public water fountains is a third step. Such a water facility costs about \$700.00 in 1975; therefore, the number of households to be served by each facility has to be evaluated carefully. The evaluation has to take into particular consideration the trade-off between loss of income by mobile vendors and the gain in income and other employment opportunities which will result from higher expenditures by the poor for other goods and services.

Food Price Control*

Corrective actions of admittedly limited scope may be very important for large numbers of lowest-income families. One such action is the import of specific staple grains whenever drought or other disasters seriously reduce local supply and force price increases. There are a number of ways in which such importation can occur -- e.g., public agency purchases and sales at non-subsidized prices, requests for international donations to be distributed through "food for work" programs, and sales through state outlets. These options may have various foreign exchange and productive disincentive effects which must be evaluated seriously (Iserman and Singer: 1977).

Another possibility is the price of bread. At present the government produces and sells flour in Haiti directly at highest unit prices in the region.¹⁵ Bread is consumed by all income groups and it becomes especially important for lowest-income families when they no longer can afford to prepare food themselves. Lower unit prices for flour, while reducing government revenues and causing certain kinds of consumer substitution effects, is worthy of consideration.

Nutrition and Health Services

Given that traditional home education may not provide sufficient knowledge of the most efficient combinations of food items and methods of preparation, nutritional education may be a useful way to maximize the benefits from existing quantities of food and household incomes. This type of education may be geared to adults or it may be geared to children and adolescents. The latter option is especially important if adult women are workers and cannot afford the time required for educational programs and if there is a desire to maximize the immediate benefits of child education in the regular public and private school system.

This approach also could contain elements of a marketing service. Demonstration, for example, of low-cost charcoal heaters which save on energy requirements and which can be produced locally by independent artisans would not only increase the productivity of the household through diffusion of a more productive technology, but also increase the aggregate demand for a new commodity (and, hence, additional income opportunities) (Khan: 1974).

*The key factor in reducing the price of food lies in program effectiveness for agriculture. Other than suggesting that such intervention is necessary, specific recommendations concerning actions in rural areas lie outside the scope of this paper.

Another determinant of price is the urban small-scale marketing system with its implicit high transaction costs.

Intervention in this area was outlined under the heading of "marketing services" at the end of Chapter Three. Beyond these two factors there is relatively little more which can be done except corrective actions of limited scope.

If public infrastructure programs and increases in income do not produce improved health outcomes due to poor sanitary habits, techniques of personal hygiene also may be taught.

Savings Institutions

Interest rates are not going to be affected significantly by simply pumping more money into public and private large-scale financial institutions. The credit available to the majority of the population does not come from these institutions. But even supposing that it did, more money in circulation does little to reduce the current interest rate. While extension of financial services may help higher income families with larger scales of market activity, the immediate benefits to most families however, will occur as a result of decreasing the need for adversity-related credit, as was discussed earlier.

Another way of decreasing the demand for credit is establishment of additional methods of savings. We have seen that most families in the sample are able to put some income away for future use - if not in the form of cash, then in the form of durable assets. There is a propensity for multipurpose saving and, however small, this interest in accumulation might be served well by creating savings mechanisms which offer ready access to cash and which involve smaller transaction and administration costs. The idea of paying interest to savers seems remote, though it may still be possible if viable joint savings and loans mechanisms and institutions, such as cooperatives, can be created. In any case, lower service charges are a positive step in reducing the cost of saving and households may find advantage in this.

The ideas presented above are suggested programs which should not be considered an exhaustive list of all things potentially useful (for an exhaustive list see PADCO: 1976). One distinguishing feature they share has to do with the speed with which they can be implemented. Unlike the recommendations given in Chapter Three, which would take a long time to set in motion and a longer time to obtain results, programs like food price control and improved water supply can be implemented and obtain effects within a matter of weeks. For example, a public investment of possibly \$20,000 for 20 public fountains in St. Martin would result in an immediate saving of over \$300,000 a year to the low-income community. Since it has been suggested that the preference of most families is for income now rather than later, it seems reasonable to argue that programs which provide positive results immediately are better than those which provide results later.

However, the non-exhaustive list of ideas presented here and in Chapter Three implicitly assumes the existence of an almost perfect world in which there are few impediments to undertaking public actions. As was suggested in Chapter One, Haiti's history and social structure do not suggest that such perfection should be assumed today. A fundamental problem in planning actions to assist the poor is not a lack of technical ideas, but rather the ability to implement them.

Notes

¹It is essential to point out that use of the income indicator will be made throughout this discussion. This is a convenient method of drawing equal-base comparisons between families with different material resources. However, it is important to keep in mind that "income" homogenizes fundamental differences that may exist between households. At the same level of income households may be composed of different combinations of adults, dependents, educational levels, sexes, ages, life-cycles stages, etc. Perhaps more pertinent than these characteristics are the differences in the ways in which income is obtained in the first place. Households composed of various combinations of workers and scales of operation in wage employment, trade and manufacturing are likely to regard certain commodities (such as housing) with quite different perspectives, which in turn will lead to different expenditure patterns (Muth: 1966, Ghez and Becker: 1972).

Unfortunately the 88 families interviewed in St. Martin cover a wide range of social attributes and income-production combinations. Although some recourse to these life-process determinants are made where possible, use of the homogenizing income indicator has been found unavoidable for the purpose of gleaning empirically relevant insights.

²Here, and in all further references to "per person" figures, household size is measured in terms of adult-equivalent units rather than in terms of individuals. The average household size in the sample is 5.3 individuals or 4.3 adult-equivalent units.

³About 30,000 people in Port-au-Prince, or about 5% of the population, sleep in the streets of the city and expend nothing on "housing" per se. In certain cases these people are so poor that housing is not yet a valid form of expenditure. In other cases it is the result of overcrowding that sends some family members to sleep outside their dwellings. In many cases, however, the people who sleep outside are tradeswomen who have sufficient funds to pay for housing in the city, but who are reluctant to tie up cash or "capital" in a non-productive fashion. They do pay extremely high storage fees for their produce in warehouses that protect their goods from theft, the weather, rodents and insects: usually between \$0.20 and \$0.40 per day per square meter. "Housing" goods is more productive an investment than housing people, so these tradeswomen appear to be saying.

⁴It is necessary to stress that this discussion refers only to families of the sample and only to the universe of families who move and live in and around St. Martin. It does not take into consideration the families who might have similar incomes and who, perhaps because they are not tied so closely to the downtown area for income-production purposes, would move to larger and better quality housing at more distant locations.

⁵The r^2 statistic for the inverse linear correlation of per capita income and per capita expenditure is 0.40,

⁶The income-elasticity calculation was made using the following equation:

$$\log I = a + b \log Y + Z$$

where: I is the per capita expenditures for housing,
a is the regression constant,
b is the income elasticity of demand
Y is the per capita income, and
Z is a series of functions containing continuous and dummy variable controls for unit price, unit size, coordinate location of housing unit in St. Martin, months of family residence in the dwelling unit, occupancy arrangement and index of housing quality.

The solution was:

$$\log I = -0.16 + .28 \log Y + Z.$$
$$(r^2 = .26, r = .51, \text{ and } f = 22.05).$$

⁷The method for calculating water consumption was based on previous observations in 1974 and 1975 where it was found that families launder clothes two times a week in St. Martin. During the interviews I asked how much water is bought, in terms of number of buckets, during days when laundry is done and when it is not done. Then the total monthly volume of water bought by the family was calculated, based on an assumption regarding the frequency of laundry days.

⁸The r^2 statistic for the inverse linear correlation of per capita expenditure and unit price is 0.29.

⁹The income-elasticity calculation was made using the same format as described in footnote 6 above. In this instance the series of functions contained in Z controlled for unit price, family size, location of housing unit, day of interview and method of purchase. The solution was:

$$\log I = -.14 + .13 \log Y + Z$$
$$(r^2 = .11, r = .33, \text{ and } f = 7.7).$$

The 11% variance explained by income alone is low, but not surprising given the effect of large day-to-day price fluctuation.

¹⁰The survey did not provide adequate data on which to estimate the proportion of household income spent on food. However, some useful partial information was gathered, as well as some secondary information, which provides a context for the survey material, especially regarding overall consumption and expenditure on food in the city and the corresponding nutrition levels.

¹¹Although prepared for a fundamentally different context and purpose, a recent article by Clair Vickery (1977) identified a group called the "time-poor" and pursues a number of interesting applications of the constraints that limited time-resources may place upon lower-income people.

¹²An income elasticity calculation was made using the same format as described in notes 6 and 9 above. In this instance the series of functions contained in Z controlled for school fees, family size, child composition (*i.e.*, the number of school-eligible children) and the type of school involved. The solution was:

$$\log I = -1.46 + 1.15 \log Y + Z$$
$$(r^2 = .22, r = .47, f = 6.25).$$

¹³Figures relating to interest rates refer to simple interest rates over a month. Interest is not compounded from month to month, but rather is simply added to the amount due. Thus, the total payment due on a \$1.00 loan at 25% interest per month at the end of a year is \$3.00 in interest and \$1.00 in principal.

¹⁴In order to test whether size of household working capital is a good indicator of the assets which could be used for security, the linear relationship between value of capital and value of collateral was examined. The relevant figures were:

$$r = .57, r^2 = .33, \text{ and } f = 4.9$$

(significant at the 0.01 level).

¹⁵Information concerning flour prices was obtained from interviews with the Canadian managers of the public flour mill. They indicated that the high price of flour was set by the government in order to counterbalance low prices of animal feed produced at the same mill, and in order to provide stable fixed revenues above and beyond the total costs of production. Some of this wheat is purchased in Canada at commercial prices. Other quantities are provided by USAID under the PL 480 Title I program (USAID: 1977), in order to assist the government in finding counterpart local currency funds to match external assistance grants and loans.

IMPLEMENTATION

Implementation of policy, program and project ideas of the kind outlined in the two preceding chapters depends on three factors. The first is government willingness to deal directly with the problems of the poor. The second is the availability of sufficient material resources with which to finance private and public actions. The third and possibly most critical factor is the availability of qualified personnel who can identify, plan, execute and manage whatever programs are permitted by the first two factors. None of these things can be taken for granted in Haiti, and it is important to understand the constraints and opportunities which they impose, in order to design implementable actions to assist the urban majority (Bruton: 1974; Edwards: 1974; Gotsch, 1974).

Government Policy

A useful way to begin to evaluate whether poverty-related actions are feasible with respect to public policy is to look at the intent of stated national development priorities, and simultaneously to examine whether government practice actually conforms to the statements. For example, the 1970-75 National Development Plan for Haiti stated a desire to achieve "balanced regional growth" and "decentralization" of the population and of economic activity of Port-au-Prince. In contrast, the types of public investment made during the Plan period actually led to concentration of private investment in Port-au-Prince.

The apparent contradiction between intent and action can be related to the difference between what is perceived as socially desirable and what is perceived as politically and economically practical. In Haiti a public official in an influential position is likely to be also an industrial or commercial entrepreneur. Though he may have a personal compassion for the plight of the majority, nevertheless, his view of the world is influenced by his political and economic position, and his practical recommendations often will be biased in favor of investment which will attract more "modern" and efficient private investment. It is easy enough to make a statement about "decentralization", but it is quite another matter to suggest that actual investment decisions conform to it.

At the same time external technical and financial assistance agencies actively promoted growth and industrialization during the period leading to the 1970-75 Plan. The measure of Haiti's poverty at the time was the per capita income statistic, and it logically followed that poverty would be reduced by increasing that statistic - that is, by increasing the GNP figure at a rate faster than population growth and price inflation. Concern with the distribution of that income was not yet in vogue. Thus, beginning in 1968 foreign assistance policy and the perspectives of government officials complemented each other. This led to use of local and foreign funds in capital-in-

tensive public projects and to the establishment of tax incentives to attract and to create the large-scale import-substitution and export enterprises noted in earlier chapters (Gatz, et. al.: 1971).

The concentration of these industrial activities in Port-au-Prince occurred because public agencies, international organizations and private investors regarded it as the most productive and profitable of all available locations. As little public and private expenditure ever had been made outside the city, the infrastructure necessary to attract industry there was virtually non-existent, and projects for other towns usually could not pass rudimentary tests of financial feasibility.

Even if the government had wanted to invest in other places, the long-term benefits would not have been worth the short-term opportunity costs. Foreign aid would have been withheld if projects were not clearly directed toward maximizing GNP, and private investment would have been curtailed if reduced public spending in the city did not keep pace with "modern" entrepreneurial requirements. Interest in "growth at all costs" did not permit evaluation of alternative policies and programs.

It was apparent, however, that the population of the city was increasing rapidly as a result of the policy and that the additional population was composed almost entirely of "slum dwellers" in crowded and unsanitary conditions. Development was not "trickling down" the way it was supposed to. The plight of the majority was becoming very apparent and something had to be said about it. To demonstrate that concern visibly, a "balanced" growth and "decentralization" policy was set forth explicitly in the 1970-75 National Development Plan as the fundamental goal of government. This "statement" resolved the dilemma of public officials by theoretically combining political and economic rationality with social compassion; it also resolved the dilemma of the foreign assistance representatives by theoretically combining efficiency and equity.

It was not until a few years later that more serious attention was paid to the actual redistributive effects of the policy being implemented (IBRD: 1974; IBRD: 1976a). This led to a change in the "stated" goals of the 1976-1981 National Development Plan.

The 1976-1981 Plan explicitly emphasizes agriculture and rural development, decentralization of industrial infrastructure, and educational and vocational training (Haiti: 1976c). Other elements of the stated strategy are directed toward the promotion of labor-intensive techniques and diversification of rural activities. The purpose of these stated goals is a more equitable distribution of income and an increased local demand for goods and services. In principle, this is an attempt to deal more directly with the issues of income and poverty. Therefore, in principle, government policy would permit implementation of at least several of the program ideas put forward in the previous two chapters.

However, whatever the statements of the Plan may be, the budget allocations of the various ministries for the period appear to have nothing to do with the explicit goals. For example, 48% of the investment budget is allocated to the transport sector, primarily for port improvements, air transport improvements, and highways. About 23% is allocated to agriculture, mostly for irrigation projects related to rice production. A new power plant in the capital is expected to draw 8% of the national budget. Education and industry together draw 6% of national allocations. The direct or indirect effects of such an investment program again are not reconciled readily with the policy statements.

One reason for this can be traced to a continuing obsession with the desire to promote large GNP increases and "modern" development. There are, however, several additional reasons for the apparently limited willingness to deal practically with poverty. First, there is poor coordination among different public agencies and among the various foreign agencies which assist them. Most projects and investment decisions were decided upon by various sectoral agencies independent of any national guidelines. Although some foreign technical assistance was provided to help formulate the Plan, other foreign experts working with other agencies proceeded with their various sectoral programs and projects without giving thought to overall "national" policy. Communication among the various groups was negligible.

A second reason is the technical adequacy of local agencies and the appropriateness of external assistance with respect to program planning. Most of the projects identified in the Plan are lists of items which various agencies would "like" to do. Programs and projects are accompanied by cost figures which lack substance and which never are subjected to simple tests of feasibility, not to mention their being examined in the context of national objectives. Many of the expenditures envisioned for the five years are pure conjecture.

A third reason is the almost total absence of information amongst most government and foreign personnel about the majority of the populace. Information such as that contained in earlier chapters which could yield directions toward the identification of specific projects is not being gathered extensively. The historical gap which separates the state, foreigners and the majority of the population has led to a situation where technicians know very little about their "clients."

For the foreseeable future, then, "government policy" is a non-issue. The key to social and economic change will not be the "development plan" or the policy statements and programs listed within it, but rather the implementation of specific, feasible projects which address the issue of poverty regardless of whether they adhere to an overall implicit or explicit strategy (Waterston: 1965; Singer: 1965).

Financial Resources

The fiscal resources which might become available for urban programs of the kind suggested in earlier chapters are difficult to estimate for two reasons.

First, there is no realistic plan which is likely to be adhered to. Second, Haiti's fiscal machinery is complex, spread across a number of autonomous tax-collecting agencies and much of it is unaccounted. It is possible, however, to arrive at some order of magnitude.

In 1975 the total public and quasi-public resources available to improve the country were about \$100 million, or \$20.00 per capita. The National Development Plan for the period 1976-1981 has assumed an average expenditure of national funds for development of \$37.6 million and an annual foreign aid component of \$66.4 million, thus representing a constant per capita public expenditure of \$20.00.¹ In addition, the Plan suggests that private capital investment for the period will average \$56 million a year, or \$11.00 per capita. That level of investment will depend, of course, on how the government and foreign agencies actually spend their monies.

If the National Development Plan were to be implemented with serious attention to shifting expenditure away from the city and towards agricultural areas and smaller towns, then an estimated 20% of all public revenues might be allocated to Port-au-Prince during the planning period. This means total expenditures in Port-au-Prince would be about \$105 million for the plan period and per capita expenditures about \$26.00 per year (or about 30% higher than the national average).

While this figure might require restraint in proposing policy actions, it should be remembered that expenditures outside the city which increase the supply of food have significant beneficial effects upon the urban population. Furthermore, the estimate of per capita expenditure is equivalent to 25% of the average income of people in St. Martin. In principle, the financial resources are more than adequate to bring about significant change. The important question is whether or not a planned level of expenditure can maximize benefits to the majority. The cost of one private water connection is about the same as a public fountain. The cost of a hospital with curative services is the same as the cost of several small clinics with preventive services. The differences in the projects are the distributions of benefits.

Public Management Resources

The conditions of Haiti, Port-au-Prince and St. Martin which have been described exist side by side with public institutions which have mandates to deal with them. The decision that a particular urban or rural condition represents a "problem" is a normative one, and the history of social separation between the state and the population does much to explain why these conditions were not perceived as "problems" and hence why little attention was paid to them.

In recent years the growth of the urban population and the extent of foreign attention upon Haiti have made it difficult for the government to con-

tinue to ignore the existing situation. Therefore, "problems" have been identified and a desire to deal with them has been expressed. However, earlier indications of relatively weak public response suggested that the capabilities of national administration and management were not equal to the challenges which they faced.

This institutional weakness was made most manifest in the inability of sectoral agencies to carry out basic functions, such as planning, identification and evaluation of projects, preparation of budgets, implementation and management and coordination with other agencies. To compensate for this institutional vacuum, almost all major plans, projects and their implementation since 1968 have been ceded by the government to international agencies and to the foreigners whom they employ. This was and is considered necessary in order to accelerate investments which would promote desired economic growth (Fass: 1978). While this undoubtedly has had certain merits, its "total" effectiveness is limited by not providing an effective vehicle for upgrading the capabilities of local agencies and individuals.

Upgrading depends to a great extent on the existence of productive work environments. All too often foreign contractors and employees cannot provide such environments because of the requirements of their clients (international agencies and/or the specific sectoral agencies). Contract performance is evaluated more in terms of "hard" output and, although a training clause will usually find its way into a contract, training is a secondary item. One reason for this is obviously the qualifications of foreign personnel who work in Haiti. Their selection is based on technical competence and not on training capability. Another reason is that counterpart local staff is invariably less well-trained and less experienced with the particular project at hand, and the foreigner is obliged to use these individuals in non-essential "back-up" roles. Consequently local technicians rarely fill functions that ultimately could be institutionalized and form the framework of an ongoing local activity. At the same time non-essential tasks do not provide much of a challenge and little incentive (psychic or monetary) for putting in a full day's work. Public offices are filled with complaints by foreigners about the incompetence of local staff and with complaints by local staff about the insensitivity of foreigners to their needs.

A related issue has to do with the limited number of individuals who could benefit from on-the-job training. Out of approximately 200 upper echelon government workers there are roughly only 35 local persons who can make plans for the city. That number is probably sufficient for purposes of general planning, but unfortunately most of the remaining staff members are less equipped in terms of technical expertise. For the most part they are messengers, chauffeurs, clerks and typists. Middle-level management capability does not exist. One side-effect of having more foreigners than local counterparts is that the few qualified local technicians are assigned to several foreigners and may be split across several ministries and agencies during a single day; this compromises further the ability of public personnel to acquire the skills necessary to make government less dependent on the constant use of foreigners.

The point of the matter is that, after a decade of substantial foreign assistance, the Haitian public service still is extremely weak and incapable of undertaking with confidence any non-routine program and project management responsibilities. This appears to be the principal constraint to implementing any of the program ideas outlined in previous chapters. As suggested in Chapter I, this has been a predominant constraint for over 175 years.

Under the circumstances it is wise to be extremely careful about the assumptions which can be made about the public capacity to act, and in particular about the ability of government to implement programs on behalf of the poor — with and without technical assistance from outside. It serves little purpose, for example, to suggest that government "should" or "should not" do this or that. "Government" is not homogeneous and does not behave like a single organic entity. In order that planning be relevant, program designs and recommendations have to name specific names. We have to know who is responsible for what, how well the responsibility is being carried out and why it is or is not being done properly. The operational capacities of agencies and individuals must be understood in order for them to be assisted.

It is important to recognize that some kinds of assistance from outside are substitutes for work which should be carried out by local personnel. While this is rationalized in several ways — particularly the argument that there are simply no qualified locals available — the problem may not be the apparent absence of competence so much as it is the application of "imported" performance standards which are totally misplaced in Haiti. The standards of wealthy countries seldom have relevance in poor countries.

It is also important to understand that a considerable amount of external assistance continues to be accorded to Haiti with the assumption that public institutions are basically the same as those the world over, and all that is lacking is technical planning capability. Governance means more than technical analysis. It means total public service management. The water authority may need system planners, but without plumbers there is no system. The housing agency may need economists, but without rent collectors there is no need for an agency. There is no justification for the assumption that assistance at the "top" gradually will "filter-down" to take care of the "bottom." To the extent that training continues to take place only at relatively high levels, a body of local managers may be created who have no one and no services to manage.

Theoretically, at least, Haiti is in the process of making up for 175 years of institutional non-development. However weak capabilities may appear to be at present, the government explicitly admits to its own shortcomings and has made institutional development a focus of attention for at least five years. The National Development Plan speaks plainly of human resource inadequacy and notes that public servants are insufficient in number and qualification. While this admission does little by itself, at the very least it opens a door. It

invites more imaginative assistance and more effective means to create functioning public institutions, and eventually a way to deal with poverty in a substantive manner.²

Quasi-Public Management Resources

Discussion of management capability contains the implicit assumption that implementation can be processed only through the personnel and the institutions of government and international agencies. While this may be a necessary political or practical assumption in many countries, it is not an absolute necessity in Haiti.

There are about one hundred non-governmental organizations (NGOs)* with private foreign links throughout the country. These organizations contributed approximately 20% of total external aid to Haiti in 1975. This aid was channelled into areas where other external donors and the government did not have major interest --- education and vocational training, rural public health aid and community development projects.*

A large number are engaged exclusively in distributing cash and in-kind subsidies, but others have explicit economic development objectives. Until recently these objectives were met by promoting community efforts to finance independently various kinds of social and infrastructure projects. More recently they have begun to expand their activities to include marketing of agricultural goods. The NGOs have begun also to provide technical and capital assistance to small-scale urban and rural manufacturing activities in the area of quality-control and have identified national and international markets.³

Although the impact of these projects in Haiti is negligible, the important thing is that the NGOs have capable trained personnel, both foreign and local, who understand the "grass-roots" and the immediate economic environment surrounding the communities in which they operate.

In addition to the NGOs there are many local community and regional councils which were created because of the limited penetration of government institutions into the lives of the population. While most of these self-governing institutions are located in rural areas, several exist in Port-au-Prince and one was evolving in St. Martin in 1976.

*These organizations work with the approval of government and each has been accredited with a "public interest" status by the state, which means that they are responsible to the state and act as an informal arm of the Ministry of Social Affairs.

Conclusions and Recommendations

There are three basic issues which have been discussed. One is the condition of life in St. Martin. The second is the body of research and experience which sets forth various technical ways and means to bring about some positive changes. The third issue has to do with the transformation of that knowledge into meaningful actions.

The desire to bring about change already exists to some extent in Haiti, but even with external technical assistance, it is difficult to implement many of the things which need to be done. The fundamental obstacle to dealing with the quality of life in St. Martin and in similar areas is institutional inadequacy on the part of both local and foreign agencies. Therefore, to be realistic, proposals for feasible actions must be designed recognizing limited financial resources, limited human and institutional resources and also the various politics and agendas of external assistance and government organizations.

What this implies is that one must accept the fact that many current policies, programs and projects simply will continue unchanged into the future. The goal at hand is to identify those programs which can be re-oriented to yield short-term benefits for the population and have long-term effects on managerial capacity simultaneously. The aim of this is "balanced" development. In much the same manner as one thinks of the balance between urban and rural areas or between productive sectors in economic development, one must think also of the balance between economic and institutional development, and the balance between what is possible today and what is possible tomorrow.

Of the ideas put forward in Chapters Three and Four only a very few are feasible today, and their implementation would represent a formidable task. Nevertheless, there are certain things which have to be attempted if ever the environment of the poor can be made to assist rather than hinder their efforts to survive. Three programs appear both possible and essential now, and involve efforts to improve the delivery of public infrastructure services, a basic task of government.*

Distribution of Water

A water project with rapid impact and relatively high visibility has already been proposed for Port-au-Prince by the United Nations Centre for Housing, Building and Planning (UNCHBP) (Haiti: 1976a, Haiti: 1976b). It involved the construction of 100 public fountains a year in certain parts of the city and in other areas expected to undergo urbanization in the near future. The program was expected to cost approximately \$70,000 a year and was designed to minimize the negative effect on the earnings of mobile vendors. Intended effects included 40% to 60% increases in per capita consumption, an aggregate shift of disposable income of about \$2 million a year from families with private connections to families without and a basic method of fire protection.

*The terms, "today" and "now", do not refer to the year 1980. They are used in a generic way to emphasize the need for a "here and now" style of designing assistance at any given moment in time. The three programs described are illustrative of this suggested style.

The proposed program suffered from the fact that it was developed by foreigners in an agency, CONADEP*, which does not have responsibility for water management. There was no assurance that the program would be implemented, monitored or modified by the appropriate agency. More importantly, the effectiveness of the program would be only as good as its day-to-day management. There was need first for more aggressive attention to upgrading current management.

The Municipal Water Authority and the multilateral agencies supporting it must decide that attention shift from capital-intensive expansion to labor-intensive management. This latter includes: repair of leaks, coordination with the Urban Planning Service of the Department of Public Works (to identify the spatial distribution of the population, gathering information on consumption levels and prices across the city), allocation of water through system pipes based on distribution of demand, rigorous supervision of valve-operator activities to assure regular allocation, supervision of employees responsible for making and for cutting-off private connections, training of supervisors, setting performance standards for all levels of workers, setting of pricing policy for private connections in low-income and high-income areas (to facilitate increased suppliers in the former area and still assure cost recovery), coordination with the Department of Public Health to monitor health effects of water quality and water quantity, coordination with the Municipal Engineering Service of the Department of Public Works for the purposes of designing a functional public fountain, evaluation of the cost, employment, income and price effects of alternative densities of public outlets, evaluation of the effectiveness of fountains for reducing fire hazards and evaluation of alternative fire prevention methods.

This was a major and very difficult program. It would take several years of intensive effort and expense to become operational. If it required the presence of ten expatriate and qualified management technicians for a five-year period, the cost would be nearly \$2.5 million, or about 3% of the external aid forecast earlier for the city.

The program implicitly assumed that the Urban Planning Service, the Department of Public Health and the Municipal Engineering Service were capable of picking up their respective roles in required coordination. Such an assumption is not valid. Upgrading was needed and additional resources would have to be expended just to enable them to coordinate, let alone take on their separate responsibilities.

*National Planning Council of the Ministry of Finance

Garbage Collection

A rapid impact project has been proposed also by the UNCHBP for improvement of garbage collection and disposal. The project was intended to assist the Municipality of Port-au-Prince in using current resources of equipment and personnel to maximize the effectiveness of solid waste removal over a five-year period and thereby diminish the health hazards associated with rodents and insects, contaminated domestic animals and contaminated foodstuffs. Since the project proposal was prepared by foreigners in agencies having no direct responsibility for garbage (i.e., CONADEP and the Urban Planning Service), the proposal included upgrading of programming capability in the Municipality, as well as all the kinds of sub-programs listed for the water authority. The cost over a five-year period was estimated at \$1.6 million, or 2% of forecast foreign aid and 25% of the city's current budget (Haiti: 1976b).

In 1976 the Mayor approached several multilateral agencies in search of assistance to carry out the program, but met with no success. However, the Office of the President did support the idea and allocated some funds to the Municipality. In the absence of direct technical assistance which would have helped evaluate its most effective use, the money was used to import trucks and mechanical street-sweepers. Though equipment is highly visible, the proposed UNCHBP program suggested that such use of funds would be highly ineffective and would not reduce the visibility of garbage. This was a case of an inappropriate capital-intensive approach brought about by managerial weakness which precluded the possibility of identifying or evaluating alternatives. Reconsideration of refusals by the multilateral organizations to assist the city is warranted (Fass: 1978).

Stormwater Drainage

Improved stormwater drainage is an effective means of reducing health hazards and also of reducing the risks of flood-related material losses, especially in St. Martin. Improvement of the urban drainage system is a project involving an international financial assistance organization, the Department of Public Health and the Department of Public Works. At a cost of \$20 million during the next five years the capital improvement program would draw 30% of estimated foreign resources (Haiti: 1976a). The cost of reconstructing the ravine through St. Martin is approximately \$3 million (Haiti: 1976b).

Since drainage canals are effective only if garbage is removed from them before the rain, and given the high cost of civil works, the focus on garbage collection mentioned above is all the more important. In addition, one may note

that removal of waste accumulation, in fact, can obviate the need for extensive earthworks. A labor-intensive approach to drainage may be just as effective in reducing health and damage hazards but at a much lower cost. The \$3 million may not be entirely necessary.

Another dimension is that the density of St. Martin and other areas makes it impossible to collect waste everywhere. During rains families sweep garbage onto the mud footpaths in the hope that it will wash into the ravine. The cleansing effect of rain was the prime incentive for community action to pave the earth pathways (Chapter I, note 4). A very specific action to facilitate community action in neighborhood improvement is one of reducing the tax paid for cement and of having the Municipal Engineering Service of the Department of Public Works assign one employee to the part-time task of assisting the community organization in methods of construction. By speeding up the flow of rainwater through the community on paved surfaces, there is less risk of damage to homes, less risk of waste build-up in the neighborhood and assurance that garbage collected regularly from the ravine is, in fact, most of the garbage produced by the community. Interaction between the state and the people which serves their mutual interests deserves more attention and support.

It is necessary to point out that the people of a community often will assist the implementation of state projects when such projects address their perceived needs. The assistance takes the form of labor, materials and even cash. There is a willingness to expend and to cooperate for the common good when it serves individual interest at the same time. For example, the people of St. Martin deposited garbage at a place where the Municipality promised to collect it each day. When collection became irregular, the usual method of depositing in the ravine was resumed. If assured of water the people will participate willingly in the construction of water fountains. If they build some and water does not flow, as in one or two cases noted in other parts of the city, they will not resume the practice. It is important to recognize the advantages to the delivery of public infrastructure services which community interest offers in many places.

To know whether or not such potential exists, it becomes mandatory for public employees and foreign experts to spend time in places like St. Martin. One may speak here of the increase in effectiveness and in productivity which might come from changes in "consciousness" among public and external agency personnel. Such changes will take a long time to evolve, but the process needs to be started.

Notes

¹The Government figures start with a lower base than actual 1975 expenditures, so their figures show a real increase in per capita expenditures of 1% each year (i.e., 3% increase in expenditure less 2% increase in population). Private voluntary organization donations are excluded.

²While there are obvious losses to efficiency and speed in program implementation in taking a less technically sophisticated and softer approach than is currently the case, it may yield considerably more longlasting effects. One positive example is the assistance being provided to the Department of Agriculture by the Interamerican Institute of Agricultural Sciences (IICA).

Most of the assistance package of IICA is oriented explicitly to permanent institutional upgrading, and the evaluation of program output is the evaluation of the rate of improvement of local competence. In one of the major programs foreign technicians work jointly with Haitian agronomists in gathering basic data about agricultural production and marketing, in preparing plans and programs and in identifying very specific projects for the Department of Agriculture. Local staff salaries are supplemented by temporary external grants (which are cancelled if technicians do not perform adequately) and which then are picked up by the Department when the agronomist is transferred fully to a managerial role at the Department.

Responsibility for all analyses, projects and actions rests ultimately on the shoulders of local staff in the Department. By foreign standards outputs of the various sections are totally inadequate to meet the challenges of rural and agricultural development. However, since the outputs of today are vastly superior to what they were two, three and four years ago, the current inadequacy has no importance. Much of the data about agriculture which now are available in Haiti, whatever their shortcomings, were produced by local technicians who gathered and analyzed the data themselves, who spent considerable time with the people in rural areas, and who now are more effective in their day-to-day functions. Their number is small, but it increases as the flow from IICA offices continues and makes possible the identification and execution of continually larger rural development projects financed by other external agencies. Most importantly, it is said that the agronomists take pride in what they do. That seems to be a good thing. This kind of program is not without problems, but its effective aspects deserve replication.

³There are many interrelated motives behind these recent actions. In discussion with the members of a number of NGOs, most were dissatisfied with the practice of allocating subsidies because it made them and the populace permanently dependent on external donors, it did not really address the fundamental issue of independent income "growth" and bore no relationship to the inherent productive capabilities of the population. They were dissatisfied also with the community-centered projects because, although they addressed the supply and productivity problems of local agricultural production, they did nothing to stimulate external demand for produce. Moreover, their focus on

agriculture neglected the non-agricultural production capacity of the population. Finally, since the government was more or less inactive in the area of stimulating demand and creating marketing mechanisms for national and international markets, these actions had to be undertaken by the NGOs.

POSTSCRIPT

The conditions of life of the 100,000 poor families in Port-au-Prince lead to an understandable desire for quick and large-scale action providing rapid and dramatic effects. However, it is essential to understand that very dramatic changes in the structure of governance in Haiti and in the nature of foreign assistance are required just to implement the simplest of programs. The kinds of massive changes necessary to put larger programs into practice are beyond imagination.

Rather than bemoan such a circumstance, it is wiser to retain a historical perspective on the current situation. The people of Haiti have been "poor" for a long time and long since have learned how to deal with it. They will continue to deal with it as long as the environment of their lives remains unchanged.

There are a number of reasons why things have not changed. In the chronology of historical events were brief periods of political stability, international integration, development-oriented public investment, external assistance and attempts at institutional improvement continually destroyed by instability, isolation, corruption and institutional degradation. A step "forward" was followed by a step "backward."

Notwithstanding all the upheavals, the social structure which was inherited from the early colonial period has remained virtually unchanged. The social, political, economic and cultural gap which separates the "haves" and "have-nots" has not closed. It has yielded among the "haves" a set of ideas about the "have-nots" which continually have compromised whatever sincere and serious efforts have been made to deal with "poverty."

Given the lessons which should have been learned from the past, foreign aid continues to contribute to this situation. External agencies and technicians almost invariably forget that the condition of life of the poor is really a secondary object of concern. To think of "them" as "our" primary concern, instead of a concern of government, implies a neocolonial relationship, and whether one defines such a relationship as being good or bad, it currently is politically unacceptable. In any case, it never worked in Haiti in the past and is not working well now. The immediate, direct and primary concern of foreign technical assistance is the government institution which requests it, and the purpose of such assistance is to help local personnel develop a capacity to deal positively with their "client" population, the poor.

Such a mandate cannot be fulfilled if spurious concepts and ideas continue to be passed along. This is important because there is an inherent social, economic and cultural difference which separates foreigners from both local public servants and the majority population. In its most irresponsible manifestation, the difference gives rise to such comfortable armchair conceptions as the "masses," "traditional," "underemployed," and "informal sector." These concepts and generalities have less to do with rigorous theory and practice than with personal opinions that are made to sound objective by their inclusion as parts of social "science."

Planning is a very difficult art to master. It is highly subjective. As such there is little justification for retaining a social concept when it serves to cloud rather than to clarify an issue or when it serves to compromise actions leading to social change rather than to assist them. To the extent that these same ideas are transferred to the personnel of government so that they eventually can proceed with their own independent misconceptions and illusions, another wedge is driven between the governed and the governors.

Even if the ideas of external technicians do become more reasonable, their responsibilities cannot be fulfilled if one assumes that government is capable of implementing everything that is suggested. Glossy reports containing eloquent policies, sophisticated programs and comprehensive projects, which are destined to gather dust on shelves and in files, are not the most useful way of utilizing scarce external resources. There is no justification for proposing solutions when a government is not yet capable of identifying the problem being addressed.

At the opposite extreme, the responsibilities of external technicians and agencies cannot be fulfilled by assuming that government is incapable of anything and hence must be substituted for by foreign agencies and workers.

While it is possible to draw from this study a stream of ideas which possibly could alleviate some of the problems of poverty, it must be recognized that the problem does not lie in the conditions of life of the poor, but rather in the scarcity of adequate social, institutional and intellectual mechanisms for understanding those conditions and acting upon that understanding.

We the "rich," foreign academic and professional "experts," have rarely had to deal with poverty directly. We have dealt and continue to deal with it through our assumptions, our theories, our models and our social indicator statistics. These are not the same as experience. We must remain conscious of this, because we cannot afford to persist in confusing our preconceptions of "poverty" with its reality (Peattie: 1975). However concerned we may be and however much we may desire to bring about change, we never will have to absorb personally the consequences of errors in the same way as the families of St. Martin. We never will have to answer to them for the consequences which our actions may cause. We are part of the environment of poverty, not independent of it, and we properly may focus attention upon ourselves as parts of the problem rather than as parts of the solution.

APPENDICES

Appendix A

The Survey Method

The original information which this study is based upon was obtained by means of informal interviews in St. Martin with the adult members of 88 households containing a total of 464 individuals. The households interviewed were selected at random and the interviews were carried out during the first three months of 1976.

In 1974 and 1975 a number of field survey teams were created to gather basic information on urban phenomena, and this included repeated passes through St. Martin. Survey information was obtained on housing characteristics, water consumption, electricity consumption, garbage production, human waste production, vehicle and pedestrian traffic flows, school enrollment, health services, employment and operating characteristics of large-scale commercial, service and manufacturing establishments, land values and residential rents. By mid-1975 St. Martin had been targeted by government as a priority zone for a public upgrading demonstration program.

Between July and December 1975 pre-tests for the household economic survey were carried out in St. Martin and in other areas with different types of questions, different ways of posing the same questions, different sequences for questions, and so forth. After six months of trial and error a survey document and a survey method had been finalized.

The families which were interviewed were selected at random. Aerial photographs were used to mark off eleven districts with roughly equal population in each. Within each district eight equidistant reference points were selected on the photograph. Upon entering a district the reference point was found and, facing north, the structure closest to the left was selected for an interview. One household in each of the dwelling units of the structure was chosen. This somewhat complicated method had to be adopted because, in spite of considerable time spent in the community, it still was difficult to pinpoint a location or area without the help of an aerial map.

The first series of questions established the fact that families made expenditures, so the next questions were predictable and logical: Who brings in money to pay for housing, water, food and school? How is it obtained? In earlier experiments it was found that such questions as "Do you work?" and "How often do you work?" invariably led nowhere since "work" meant full-time, salaried employment. Most respondents answered that they were not working even though they were earning money constantly. Therefore, the income issue was addressed first and then the means of getting it.

Each individual identified as an earner was questioned regarding the accounts of the income-production process. Salaried workers were queried about their wages, and traders and manufacturers were asked to give accounts of their operations. While one member of the survey team posed the questions, the other jotted the answers down and made rapid calculations of earnings, profits and income for each and all individuals in a given household. These figures were compared on the spot to stated expenditures and to other household goods that could be seen in the house. If there was a severe inconsistency between revenues and outlays, clarification was requested.*

Some of the most useful information gathered did not end up in the response spaces of the questionnaire, but rather on the margins or on the backs of the sheets. Although there were some survey models to work with, a questionnaire could not serve as the sole instrument for data gathering since almost every case had unique properties that only would be homogenized by large classification response tables. Analysis of the family economy required the use of initiative in pursuing new directions whenever they cropped up. Other than documenting simple information, the questionnaire served mainly to maintain some rigor during the interviews.

The data gathered in this manner were accumulated in two forms. The first form was the usual one of responses to questions identified in the appropriate spaces of the questionnaire and subsequently transferred to computer cards (Appendix B). The second form was a diary prepared from information jotted in the margins of the questionnaire.

However limited the proportion of the population surveyed, the data are considered reasonably good and provide a valid facsimile of family economic life in St. Martin. At this early stage of inquiry into the determinants and uses of income it seems inappropriate to seek out absolute accuracy. What really is necessary is that data stay within the bounds of reason and provide interpretations and results that are meaningful.

*Because of the informal nature of the survey, each interview could last from 1 to 2½ hours, depending on the complexity of the situation.

Appendix B

St. Martin Survey Codebook

Person Data - 464 Cases (Cards)

Var 01 Household Number

Var 02 Person Number

Var 03 Number of Persons in the Household

Var 04 Residential Status

- 1 Permanent Resident
- 2 Temporary Resident

Var 05 Sex

- 1 Male
- 2 Female

Var 06 Age Group

- 1 5 Years old or Less - 0.5 Adult Equivalent Units
- 2 6 to 11 Years - 0.7 Adult Equivalent Units
- 3 12 to 16 Years - 0.9 Adult Equivalent Units
- 4 17 Years Old or Greater - 1.0 Adult Equivalent Units

Var 07 Relationship to Head of Household

- 1 Household Head
- 2 Spouse
- 3 Child
- 4 Grandchild
- 5 Sibling
- 6 Other Family
- 7 Friend
- 8 Servant

Var 08 Civil Status

- 0 Not Applicable
- 1 Married (Legal or Common Law) and Living with Spouse

- 2 Married (Legal or Common Law) and Not Living with Spouse
- 4 Single with Children
- 5 Single without Children
- 6 Widowed or Widowered (and Not Remarried)
- 7 Divorced or Separated (and Not Remarried)

Var 09 Length of Residence in Port-au-Prince

- 00 Not Applicable or No Response
- 01 1 Month or Less
- 99 10 Years or More

Var 10 Region of Origin

- 0 Not Applicable or No Response
- 1 Jeremie
- 2 Cayes
- 3 Barradere
- 4 Jacmel
- 5 St. Marc-Gonaives
- 6 Petit Goave-Fond Des Negres
- 7 Croix Des Bouquets
- 8 Port De Paix-Cap Haitien
- 9 Leogane

Var 11 Usual Daily Activity

- 1 Income Earner Only
- 2 Income Earner and Household Manager
- 3 Income Earner and School Student
- 4 Household Manager Only
- 5 School Student Only
- 6 Too Young for Work, School, or Household Management
- 7 Retired, Pensioned, or Permanently Handicapped
- 8 Other
- 9 Apprentice

Var 12 Work Status

- 0 Not Applicable
- 1 Working Today
- 2 Not Working Today
- 3 Other
- 9 No Response

Var 13 Reason for Not Working Today

- 0 Not Applicable
- 1 Cannot Find Work
- 2 Cannot Find Sufficient Funds
- 3 Temporarily Ill
- 4 Temporarily Nursing A Child, (or About To)
- 5 Temporarily Laid-Off
- 6 Other
- 9 No Response

Var 14 Length of Time at Current Work, If Working Or: Since Last Work, If Not Working

- 00 Not Applicable
- 01 1 Week or Less
- :
- 52 52 Weeks or More
- 99 No Response

Var 15 Standard Occupational Classification in Current or Last Work

- 0 Not Applicable
- 1 Professional, Technical, Managerial
- 2 Clerical and Sales
- 3 Service
- 4 Farming, Fishing, and Related
- 5 Processing
- 6 Machine Trades and Benchwork
- 7 Structural Work
- 8 Miscellaneous
- 9 Other

Var 16 Occupational Classification Change During Past Year

- 0 Not Applicable
- 1 Changed
- 2 Did Not Change
- 3 Other

Var 17 Standard Industrial Classification in Current or Last Work

- 0 Not Applicable
- 1 Agriculture, Fishing, and Mining
- 2 Construction
- 3 Manufacturing
- 4 Transport, Communications, Electricity, Gas and Sanitary Services
- 5 Wholesale Trade
- 6 Retail Trade
- 7 Services
- 8 Public Administration
- 9 Other

Var 18 Industrial Classification Change During Past Year

- 0 Not Applicable
- 1 Changed
- 2 Did Not Change
- 3 Other

Var 19 Type of Employer in Current or Last Work

- 0 N.A.
- 1 Self-Employed, Work Alone
- 2 Self-Employed, Works with Another Household Member
- 3 Self-Employed, Employs Others Not in the Household
- 4 Employed, But Not By Another Member of the Household
- 5 Employed, By Another Member of the Household
- 9 Other or No Response

Var 20 Social Insurance Status

- 0 N.A.
- 1 Covered
- 2 Not Covered

Var 21 Form of Monetary Payment for Work

- 0 N.A.
- 1 Monthly, Bi-Monthly or Weekly Salary; With No Minimum Production Requirements
- 2 Monthly, Bi-Monthly or Weekly Salary; With Minimum Production Requirements
- 3 Fixed Amount Per Unit Produced or Sold
- 4 Day Wage
- 5 Lump Sum Negotiated Contract
- 6 Variable Bartered Payment Throughout the Day
- 7 Other

Var 22 Primary Market for Product of Work

- 0 N.A.
- 1 Urban, Lower Income
- 2 Urban, Higher Income
- 3 Urban, All Income
- 4 Urban Higher Income and Export
- 5 Export
- 6 Urban and Rural (National)
- 7 Rural
- 8 Other

Var 23 Economic Base Classification for Product of Work

- 0 N.A.
- 1 Local
- 2 Export
- 3 Import Substitution
- 4 Other

Var 24 Type of Product Sold in Current or Last Work

- 0 N.A.
- 1 A Service
- 2 A Good Not Transformed in the Household
- 3 A Good Transformed in the Household
- 4 Other

Var 25 Type of Product Purchaser in Current or Last Work

- 0 N.A.
- 1 Industrial Enterprise, Large-Scale (Formal)
- 2 Industrial Enterprise, Small-Scale (Informal)
- 3 Commercial Enterprise, Large-Scale (Formal)
- 4 Commercial Enterprise, Small-Scale (Informal)
- 5 Government
- 6 Broad Market
- 7 Private Household
- 8 Other

Var 26 Place of Sale of Product

- 0 N.A.
- 1 At Home
- 2 St. Martin Area
- 3 Croix Des Bossales/Vallieres Area
- 4 Other Central Area
- 5 Northside Industrial Area
- 6 Southside Commercial/Residential Area
- 7 Other Urban and General Urban Area
- 8 Rural Areas
- 9 Urban and Rural Areas

Var 27 Place of Storage or Transformation of Goods

- 0 N.A.
- 1 At Home
- 2 St. Martin Area
- 3 Croix Des Bossales/Vallieres Area

- 4 Other Central Area
- 5 Northside Industrial Area
- 6 Southside Commerical Area
- 7 Other Urban and General Urban Area

Var 28 Place Where Input Goods are Obtained

- 0 N.A.
- 1 At Home
- 2 St. Martin Area
- 3 Croix Des Bossales/Vallieres Area
- 4 Other Central Area
- 5 Northside Industrial Area
- 6 Southside Commerical Area
- 7 Other Urban and General Urban Area
- 8 Rural Areas

Var 29 Type of Input Goods Supplier

- 0 N.A.
- 1 Industrial Enterprise, Large-Scale (Formal)
- 2 Industrial Enterprise, Small-Scale (Informal)
- 3 Commercial Enterprise, Large-Scale (Formal)
- 4 Commercial Enterprise, Small-Scale (Informal)
- 5 Government
- 6 Broad Market
- 7 Other

Var 30 Current Replacement Value of Operating Capital (Tools, Stocks, Cash, etc.)

- 000 N.A.
- 001 \$0.10 or Less
- : :
- 998 \$100 or More
- 999 Not Reported

Var 31 Average Number of Days Worked Per Month - Low Period

- 00 N.A.
- 01 1 Day or Less
- : :
- 30 30 Days
- 99 Not Reported

Var 32 Average Daily Earnings (Net) - Low Period

- 00 N.A.
- 01 \$0.10 or Less
- : :
- 98 \$10.00 or More
- 99 Not Reported

Var 33 Average Number of Days Worked Per Month - High Period

00 N.A.
01 1 Day or Less
:
30 30 Days
99 Not Reported

Var 34 Average Daily Earnings (Net) - High Period

00 N.A.
01 \$0.10 or Less
:
98 \$10.00 or More
99 Not Reported

Var 35 Average Monthly Earnings From Secondary Occupation

00 N.A.
01 \$1.00 or Less
:
98 \$100 or More
99 Not Reported

Var 36 Proportion of Earnings Contributed to Household

0 N.A.
1 0%
2 25%
3 50%
4 75%
5 100%
8 Not Earning Income
9 Not Reported

Var 37 Type of Non-Labor Income

0 N.A.
1 Rent From Residential Property
2 Income From Regular Household Visitor
3 Income From Family Elsewhere in the City
4 Income From Family Outside the City
5 Income From Family Outside the Country
6 Government Pension
7 Generosity
8 Other

Var 38 Form of Non-Labor Income

- 0 N.A.
- 1 Money
- 2 Goods
- 3 School Fees
- 4 School Fees and Meals
- 5 Meals
- 6 Both Money and Goods
- 9 Not Reported

Var 39 Monthly Amount (or Equivalent Value) of Non-Labor Income

- 00 N.A.
- 01 \$1.00 or Less
- : :
- 98 \$100 or More
- 99 Not Reported

Var 40 Type of School Attended

- 0 N.A.
- 1 Public
- 2 Private
- 3 Private Lessons at Home
- 4 Other
- 9 Not Reported

Var 41 Location of School

- 0 N.A.
- 1 St. Martin
- 2 Cites 1 and 2
- 3 Post Marchand
- 4 Bel Air-Sans Fil
- 5 Centre City
- 6 Portail St. Joseph-La Saline
- 7 Champ De Mars-Turgeon
- 8 Other City
- 9 Not Reported

Var 42 Monthly School Fees

- 00 N.A.
- 01 \$0.10 or Less
- : :
- 98 \$10.00 or More
- 99 Not Reported

Var 43 Average Number of Hours of Work Per Day

00 N.A.
01 1 Hour
:
24 24 Hours
99 Not Reported

St. Martin Survey

Household Data 88 Cases (Cards)

Var 44 Household Number

Var 45 Person Number (Blank)

Var 46 Number of Persons in Household

Var 47 House Zone Number

Var 48 Number of Months of Residence in House

Var 49 Location of Previous Residence

1 St Martin
2 Cites 1 and 2
3 Post Marchand
4 Bel Air-Sans Fil
5 Centre City
6 Portail St. Joseph-La Saline
7 Martissant
8 Other Area in City
9 Outside City

Var 50 Type of Occupancy

1 Weekly Rental - Structure
2 Monthly Rental - Structure
3 Annual or 6 Month Rental - Structure
4 Annual or 6 Month Rental - Land
5 Owner - House and Land
6 Other

Var 51 Type of Floor

1 Earth
2 Concrete
3 Plank

Var 52 Condition of Dwelling

- 1 Below Average
- 2 Average
- 3 Above Average

Var 53 Area Occupied by Household (Land and Structures - Gross) Square Metres

- 001 0.1 Square Metres
- : :
- 999 99.9 Square Metres

Var 54 Distance to Nearest Water Pipe Outlet (Cartographic Units - Straight Line)

Var 55 Monthly Rent or Equivalent

- 000 N.A.
- 001 \$0.10 or Less
- : :
- 998 \$100 or More
- 999 Not Reported

Var 56 Source of Drinking Water

- 1 Mobile Water Vendor
- 2 Fixed Water Vendor
- 3 Tap in House or Nearby - "Free"
- 4 Other

Var 57 Daily Purchase of Water - No Laundry (Buckets: 1 Bucket = 18 Litres)

- 1 1 Bucket
- : :
- 8 8 Buckets
- 9 Not Reported

Var 58 Daily Purchase of Water - With Laundry

- 01 1 Bucket
- : :
- 98 98 Buckets
- 99 Not Reported

Var 59 Price Paid Per Bucket of Water

- 00 N.A.
- 01 \$0.10
- : :
- 98 \$0.98
- 99 Not Reported

Var 60 Presence of Water Storage Drum

- 1 Yes
- 2 No

Var 61 Place Where Grain is Purchased

- 1 St. Martin - Street Seller (Mobile)
- 2 St. Martin Market
- 3 Croix Des Bossales/Vallieres Market
- 4 Other

Var 62 Type of Grain Purchased

- 1 Corn, Fine, Superior
- 2 Corn, Fine, Intermediate
- 3 Corn, Fine, Inferior
- 4 Corn, Coarse
- 5 Rice - Imported
- 6 Rice - Local
- 7 Millet
- 9 Not Reported

Var 63 Price Per Unit for Grain (Ti-Marmite)

- 01 \$0.01
- :
- 98 \$0.98
- 99 Not Reported

Var 64 Type of Creditor Last Encountered

- 0 N.A.
- 1 Family
- 2 Friend
- 3 Business House (Pawnshop)
- 4 Professional Lender ("Usurer")

Var 65 Type of Loan Last Obtained

- 0 N.A.
- 1 Secured Loan
- 2 Unsecured Loan

Var 66 Amount of Last Loan

- 00 N.A.
- 01 \$1.00 or Less
- :
- 98 \$98 or More
- 99 Not Reported

Var 67 Rate of Monthly Interest

00 N.A.
01 No Interest
02 2%
:
98 100%
99 Not Reported

Var 68 Replacement Value of Goods Placed in Collateral

00 N.A.
01 \$1.00 or Less
:
98 \$98 or More
99 Not Reported

Var 69 Area Lived in By Household (Structure - Net) - Square Metres

000 N.A.
001 0.1 Square Metres or Less
:
990 99.0 Square Metres or More

Var 70 Function of Structure

1 Residence of Household
2 Not the Residence of the Household

Var 71 Gross Household Income, This Month

000
999 Not Reported

Var 72 Gross Household Income, Low Period

000
999 Not Reported

Var 73 Gross Household Income, High Period

000
999 Not Reported

Var 74 Net Household Income, This Month

000
999 Not Reported

Var 75 Net Household Income, Low Period

000
999 Not Reported

Var 76 Net Household Income, High Period

000
999 Not Reported

Var 77 Replacement Value of Operating Capital in the Household

00 N.A.
01 \$1.00 or Less
:
98 \$100 or More
99 Not Reported

Var 78 Amount of Non-Labor Income Included in Total Monthly Income (Var 71 to Var 76)

00 N.A.
01 \$1.00 or Less
98 \$1.00 or More
99 Not Reported

Var 79 Number of Income Earners in the Household (Adult-Equivalent Units)

01 0.1 Earners
:
99 9.9 Earners

Var 80 Size of Household in Adult-Equivalent Units

001 0.1 Units
:
999 99.9 Units

Var 81 Monthly Household School Expenditures

000 Not Applicable
001 \$0.10 or Less
:
998 \$100 or More
999 Not Reported

Appendix C

A Sisal Cooperative

The purpose of this note is to provide empirical substance to some of the recommendations presented at the end of Chapter III. While it is inappropriate to suggest that government take on the responsibilities of private sector entrepreneurship, the discussion here does point in a number of directions in which public cooperation and delivery of certain services would facilitate the development of new markets and the organization of methods to supply the demand through a small-scale production system.

In the spring of 1976 a Dutch importer and distributor of natural fiber products arrived in Haiti on vacation. On the streets of the city he noticed the sale of sisal carpets of the types described in Chapter III, and decided that similar products possibly could be marketed in Europe.

The importer's choice of supplier was limited to one existing large-scale firm (employing 25 workers) at the time. However, on recommendation, he made contact with the Haiti-Netherlands Cooperation Agency (COHAN), a nongovernmental organization recognized by the government, which carries out social projects in Haiti with funds amounting to about \$300,000 a year channeled directly from the Government of the Netherlands. The staff of COHAN arranged to find the starting capital, management staff, locale and technical expertise necessary to begin production. Trial and error experiments were carried out until a set of acceptable products and methods was established and then an export contract for shipments worth \$10,000 a month for one year was signed in 1976. This value represented a 16% increase in total national exports of articles made from sisal for that year.

The first organizational problem had to do with finding the necessary start-up capital. Commercial bank loans and public credit institutions involved too long a negotiation period, and so a rapid loan of about \$12,000 was made from the COHAN fund after approval of the Netherlands Government. This was used to rent a large house in the city (\$2,800 for two years with a purchase option), to construct covered space additions to the house in order to protect workers and materials from the sun and rain, and to finance the period between production and revenues from the first sales. The rent payment was about one-tenth of the unit prices charged in the industrial park, which has the further disadvantage of being located on periphery of the city, away from the homes of workers.

The next step required purchase of raw material of high quality and low price. COHAN found that the quality of sisal available in the city from speculators was

inconsistent, since most of it was destined for rope factories whose quality restrictions were not high. The price of 60 cents a kilogram also seemed excessive. The organization's ties with rural areas, in which it conducts a number of development projects, made it easy to discover sources of high-grade sisal. It paid farmers 26 cents a kilogram (about 30% higher than speculator prices to farmers), and it added the consignment transport cost of 4 cents a kilo. About one hundred of the rural producers were asked also to braid some inferior quality sisal into high quality twine used in the assembly of the carpets. The decision to carry out this part of the transformation process in the rural area was predicated on a number of factors. First, twine-making was a highly developed skill in the area and yielded better quality output than machine-made twine, or hand-made twine in the city at equivalent cost. Second, extension agents of COHAN were in the rural areas already and could provide quality control and meet rigid supply schedules, thereby making rural areas more attractive. Third, the area was indeed part of a small rural development project which COHAN wished to integrate with its efforts in the city. These farmers were paid by piecework and their revenues averaged about one dollar a day, twenty cents for the sisal which they used and eighty cents for the addition of their labor. Their average monthly labor earnings represented an income increase of roughly 60%. Coupled with the higher prices for their raw sisal, the COHAN project provided rural family income increases of between 90% and 120% over what had been the average.

The third stage involved finding workers who could braid the raw sisal into long ribbons which, when spiraled into foot square tiles, would form the basic material of the carpets. Enough women of rural origin could be found in the city to do this. Although it required less than 100 individuals working full time to produce sufficient quantities, it was decided that the best way to spread the direct benefits of the project to as many people as possible was to contract this work out to women who already were working as traders or sellers of prepared food. While sub-contracting to friends and family was a common occurrence, most of this work was done by about 250 women producing on a part-time piecework basis at home or during intermission in their primary work activities. Their average monthly incomes averaged about \$7.00 from this activity and it represented an average earnings increase of between 25% and 50%, and an average family income increase of nearly 20%.

These skilled women were supplemented by another 50 or more young girls who were trained in the art of braiding during an intensive six-week program at two locations in the city, one of which was adjacent to St. Martin. Effort was made also to train the girls in twine-making, but the learning of this skill required more than six weeks and so was abandoned because COHAN could not spare teachers for longer than that period.

The fourth stage required finding men, the most skilled of the manual workers, to put together the one foot square sisal tiles in the rented plant. Although

carpet makers abound in the city, there are relatively few "top of the line" workers who can produce high quality assemblies consistently and rapidly. One "boss" or independent master craftsman was found and hired at a salary of \$80.00 a month. He was the production supervisor. His first assignment was to separate out the most suitable workers from the large number of applicants to the project. He could find only eleven workers. Therefore, COHAN had to offer piecework at rates 20% higher, in order to entice workers away from the only other firm in the city which makes carpets in large-scale operation. The project was able to draw four workers away before the other firm increased its wages in order to retain those who remained. COHAN was in a position to increase rates even further and continue to compete with the firm, but this involved high political risks and was not carried out. Each of the fifteen highly skilled workers was paired with another with less skill and at the end of two months everybody was producing consistently and well. The average earnings of these workers is about \$40.00 a month. For men drawn from the other factory, this earnings level represented a 20% increase; for men who previously worked as independent manufacturers, the earnings were 150% to 200% higher; and employees of small-scale manufacturers earned 500% to 600% more than before.

The increases in earnings do not result from any basic change in the quality of output or in the method of producing it. They stem from a new form of larger-scale production organization which permits a division of labor between individuals, as opposed to the allocation of one person's time across many activities. Instead of spending, say, one-third of the day buying material, the next third transforming it and the final third selling it, as was the case for the manufacturers in St. Martin, project workers spent all day at one specific task.*

Additional workers consist of a master dyer (\$40 per month), ten female carpet assemblers who put the squares together (\$30 per month), two washers (\$40 per month), a driver-shipping manager (\$80 per month), and four administrators, including an accountant, two managers and a project coordinator (at \$80 per month). Two foreign staff members of COHAN also spend some time with the project, but since their time is much more expensive, their responsibilities cover a much broader number of programs. In total, then, there are about 450 workers directly involved

*In this context it is essential to point out that all manual workers consider themselves self-employed (hence the use of the term "cooperative") and bring their own tools to work. They do have the option of taking materials home and then returning with finished products; however, since this involves a loss of production time, a higher quality control and management cost, and the foregoing of a cool, dry and comfortable place to work, they all work at the plant.

It should be noted also that all workers in the city and in the rural area receive supplements to their earnings in the form of a one-month earnings bonus at Christmas (a traditional part of employer-employee relationships in Haiti), medical care and drugs for family members, school fee payments for children, and emergency welfare assistance and loans in times of adversity. The funds for these additional services are drawn from the revenues of the project.

in the project in urban and rural settings which spread income benefits to about 2,300 people in the associated families. The number extends to over 5,000 if the rural suppliers of sisal who do not make twine also are included.

In the spring of 1977 a United Nations expert from the International Trade Center (UNCTAD) in Geneva arrived in Haiti on a short-term mission. He was contacted by COHAN (after the latter accidentally heard of his presence) and privately provided some names and addresses of people to write to in Europe. Because multilateral assistance is offered to governments and not to private concerns, he could not place the full resources of his office at the disposal of COHAN. Nonetheless, the addresses he provided were pursued and useful information was obtained, especially regarding new designs and uses for sisal, new methods of production, new imported-factor suppliers (e.g., dyes) and new markets and distribution mechanisms.

The government's role in all of this has been limited to taxing the rent paid for the plant (a sort of corporation tax), and permitting the carpets to be exported free of any charges.*

Unfortunately the future expansion of this particular type of operation appears limited for three reasons. First, competition with similar carpets made in Pakistan, the Philippines, India, China, Tanzania, Angola, Mexico, and elsewhere (where there is a further price advantage resulting from the use of simple machines) limits severely the size of the export market. Second, the carpet is a decorative household commodity whose demand will shift with changes in taste. A more stable market for natural fiber carpeting does exist for institutional, acoustical and industrial office applications, but these products are made in Holland and Switzerland on modern weaving machines that are specially designed, require relatively little high-skilled labor, and cost tens of thousands of dollars. Third, the cost of sisal fluctuates with the price of oil because sisal rope and twine are substitutes in many applications for polymer cords. Since 1973 the price of sisal has increased rapidly because of the three- or four-year lag time in supply response. This makes natural fiber commodities relatively expensive. The most serious obstacle, however, is the cost of obtaining information on markets and production techniques for the full range of possibilities - information which, at the very least, would permit evaluation of whether or not COHAN's operation should be expanded, modified or shifted to other goods.

*Permission to carry out tax-free exports was granted by the Department of Commerce and Industry on the basis of the "public interest" status of COHAN, and by the Haitian Institute for the Promotion of Coffee and Export Commodities on the basis of the project's conformity to national policy concerning exports of manufactured goods made of indigenous raw materials.

As was shown above, many of the circumstances leading to the formation of the cooperative and the location of technical assistance were accidental. There are no public or private institutions in Haiti that actively or seriously seek out names, addresses, or documents on outside markets, outside factor suppliers or potential outside investors. By the same token, information on internal markets and suppliers, internal techniques of production and internal investment potential also is lacking. Luckily COHAN does have resources and information to deal with internal factors, but it does not have the thousands of dollars necessary to mount a large promotional and information gathering campaign abroad.

Thus, long before the availability of capital or technology becomes an issue worth evaluating, industrial development is constrained by the high costs of information which do not even permit enterprises to find markets, obtain loans, buy a machine or train workers in new techniques. This is one of the situations which would have been assisted greatly had there been some sort of publicly available marketing service of the kind outlined in Chapter III.

Notwithstanding the constraints identified, the fact remains that the sisal cooperative is a rather remarkable achievement. The high salary and piecework payments, the social services provided and the information expenses made still permit a net profit of 10% which is reinvested in other COHAN projects.*

It is interesting at this point to compare the investment-employment relation of the COHAN project with preliminary proposals made by external assistance agencies in recent years. In one case a joint mission of the Interamerican Development Bank and Israeli entrepreneurs proposed to operate five types of urban and rural enterprises in the areas of fashion, hand-weaving, rugs, jewelery-making and ceramics (IDB: 1976). The total employment created was expected to reach about 300 individuals. The project cost was estimated at \$2.1 million, of which \$1.3 million was to take the form of expatriate technical assistance salaries. The capital outlay, including a payroll revolving fund, amounted to \$800,000, or an investment of \$2,700 per worker.

In another case the U.S. Agency for International Development tentatively proposed a rural enterprise development project designed to create about 45 enterprises employing 10 to 15 workers each, or a total of nearly 700. The projected cost of \$5.2 million or \$7,100 per worker included undifferentiated costs for technical assistance and experimentation, as well as capital outlays (USAID: 1977).

*It is worth mentioning that the low capital cost was made possible because of prior knowledge of organizational and production processes in Haiti. High-cost importation of external technical assistance was not necessary at the outset. Since the project originated within the country, there was little need for extensive experimentation with "appropriateness." The cooperative was appropriate by definition.

Since both proposals were first steps in a longer process of evaluation they cannot be criticized at length. However, the COHAN project has demonstrated successfully that programs of this scale and sophistication are not needed, so much as is care and sensitivity to the characteristics of Haiti and a more low-keyed approach to enterprise development. While there is room to import and adapt external resources and methods, there also is room for looking at Haiti more closely and trying to adapt internal methods and resources as well (Pluta and Kontak: 1976).

REFERENCES

This report has undergone several editorial transformations, as was noted in the Foreword, all in the direction of condensation. Therefore, the reader may discover several documents herein which are not referenced in the current text. It was decided to retain the "References" section of the original draft because it provides a rich inventory of useful background information.

REFERENCES

Alchian, A.A. and Allen, W.R. Exchange and Production: Theory in Use. Belmont, California: Wadsworth Publishing Co., 1969.

Banco de Nordeste do Brasil (BNB). Aspectos Economicos do Artesenato Nordestino. Fortaleza-Ceara, 1958.

Baran, A. "On the Political Economy of Backwardness," in Agarwala, A.N. and Singh, S.P. (eds.), The Economics of Underdevelopment. New York: Oxford University Press, 1971.

Barnett, U.M. "Implementation of Policies for Fuller Employment in Less Developed Countries," in Edwards, E.O. (ed.), Employment in Developing Nations. New York: Columbia University Press, 1974.

Bastien, R. "Haitian Rural Family Organization," Social and Economic Studies, 10 (1961), 478-510.

Bauer, P. "UNCTAD and Africa," Afrika Spectrum (1967), 26-31.

Becker, G.S. Human Capital. New York: National Bureau of Economic Research, 1964.

Becker, G.S. "A Theory of the Allocation of Time," Economic Journal 75 (1965), 493-517.

Becker, G.S. The Economic Approach to Human Behavior. Chicago: University of Chicago Press, 1976.

Bellegarde, D. La Nation Haitienne. Paris: J. de Gigord, 1938.

Berg, A. The Nutrition Factor: Its Role in National Development. Washington, D.C.: The Brookings Institution, 1973.

Bienefeld, M. "The Informal Sector and Peripheral Capitalism: The Case of Tanzania," in Oxenham, J. (ed.), Human Resources Research. Sussex, England: University of Sussex, Institute of Development Studies, Bulletin 6:3, 1975.

Bourgignon, E. "Class Structure and Acculturation in Haiti," The Ohio Journal of Science 52 (1952), 317-320.

Bruton, H.J. "Economic Development and Labor Use: A Review," in Edwards, E.O. (ed.), Employment in Developing Nations. New York: Columbia University Press, 1974.

- Burns, L.S. and Tijoe, B.K. "Housing and Human Resource Development," Journal of the American Institute of Planners XXXIV:6 (1968), 396-401.
- Burns, L.S. and Grebler, L. The Housing of Nations. London: MacMillan Press, 1977.
- Chenery, H.B. "Development Policies and Programmes," Economic Bulletin for Latin America III:1 (1958), 55-60.
- Chenery, H.B. Redistribution with Growth. New York: Oxford University Press, 1974.
- Cleaver, E. Soul on Ice. New York: McGraw-Hill, 1968.
- Comhaire-Sylvain, S. "The Household in Kenscoff, Haiti," Social and Economic Studies X (1961), 192-222.
- Courlander, H. The Drum and the Hoe: Life and Lore of the Haitian People. Berkeley, California, 1960.
- Dasgupta, B. Calcutta's Informal Sector. Sussex, England: University of Sussex, Institute of Development Studies, Bulletin 5:2/3 (1973), 53-75.
- Demas, W.G. The Economics of Development in Small Countries, with Special Reference to the Caribbean. Montreal, 1965.
- DEWIT, Inc. Informal Small-Scale Enterprise Sector of the Urban Economy: Problems and Suggested Approaches. Report prepared for the Office of Urban Development, Bureau for Technical Assistance, Agency for International Development, Washington, D.C., 1976.
- Diegues, H. "Urban Employment in Brazil," International Labour Review 93:6 (1966), 643-657.
- Dijk, M.P. Van. "Etude de la Litterature Servant de base pour les Recherches a Entreprendre a Dakar et Ouagadougou." Unofficial working paper of the Jobs and Skills Programme for Africa, International Labour Organization. Dakar, 1976.
- Dorsinville, M.H. "Haiti and Its Institutions: From Colonial Times to 1957," in Rubin, V. and Schaedel, R.P. (eds.), The Haitian Potential: Research and Resources of Haiti. New York: Teachers College Press, 1975.
- Duplan, V. and Lagra, J.L. Analyse du Systeme de Taxation des Produits Agricoles dan les Marches Haitiens. Port-au-Prince, Haiti: Institut Inter-americaain des Sciences Agricoles, 1974.
- Duplan, V. and Lagra, J.L. Transport des Produits Agricoles vers Port-au-Prince. Port-au-Prince, Haiti: Institut Interamericaain des Sciences Agricoles, 1975.

Edwards, E.O. "Employment in Developing Countries," in Edwards, E.O. (ed.), Employment in Developing Nations. New York: Columbia University Press, 1974.

Elkan, W. "Criteria for Industrial Development in Uganda," East African Economic Review 5 (1959), 52-57.

Etheard, B. "Developpement Communautaire: un Bilan," Conjonction: Revue Franco-Haitienne 129 (1976), 28-64.

Fass, S. "Port-au-Prince: Awakening to the Urban Crisis," in Cornelius, W.A. and Kemper, R.V. (eds.), Metropolitan Latin America: The Challenge and the Response. Latin American Urban Research 6. Beverly Hills, California: Sage Publications, 1978.

Fatton, B. Elements d'Information sur la Production et la Commercialisation du Sisal en Haiti. Port-au-Prince, Haiti: Institut Interamericain des Sciences Agricoles, 1975.

Francisque, Edouard. Perspectives du Developpement Economique en Haiti. Port-au-Prince, Haiti: Imprimerie Henri Deschamps, 1968.

Friedman, M. "A Method for Comparing Income of Families Differing in Composition." Conference on Research in Income and Wealth. In Studies in Income and Wealth 15 (1952), 9-24.

Friedman, M. "The Supply Factors of Production," in Burton, J.F., Benham, L.K., Vaughn, W.M. and Flanagan, R.J. (eds.), Readings in Labor Market Analysis. Chicago, Ill.: Holt, Rinehart and Winston, Inc., 1971.

Friedmann, J. Retracking America: A Theory of Transactive Planning. Garden City, N.J.: Anchor Books, 1973.

Friedmann, J. and Sullivan, F., The Absorption of Labor in the Urban Economy: The Case of Developing Countries. Los Angeles, California: University of California, School of Architecture and Urban Planning, 1972.

Gatz, W., Godet, J.L. and Petrou, L. Rapport d'Une Mission des Services Industriels Speciaux de l'Organisation des Nations Unies pour le Developpement Industriel. UNIDO/TCD 63. Port-au-Prince, Haiti, 1971.

Ghez, G.R. and Becker, G.S. The Allocation of Time and Goods Over the Life Cycle. Report 7217. Chicago, Ill.: University of Chicago, Center for Mathematical Studies in Business and Economics, 1972.

Gilles, A. Evaluation des Resultats Obtenus par l'IDAI au Point de Vue de Credit Agricole: Programme de Credit Agricole pour la Periode 1973/74. Port-au-Prince, Haiti: Institut Interamericain des Sciences Agricoles, 1974.

Girault, C. and Lagra, J.L. Caracteristiques Structurelles de la Commercialisation Interne des Produits Agricoles in Haiti. Port-au-Prince, Haiti: Institut Interamericain des Sciences Agricoles, 1975.

Gotsch, C. "Economics, Institutions and Employment Generation in Rural Areas," in Edwards, E.O. (ed.), Employment in Developing Nations. New York: Columbia University Press, 1974.

Grimes, O.F., Jr. Housing for Low-Income Urban Families. Published for the World Bank. Baltimore; Maryland: The Johns Hopkins University Press, 1976.

Haiti. Institut Haitien de Statistique (IHS). Resultats Preliminaires du Recensement General, 1971. Port-au-Prince, Haiti, 1973.

Haiti. Institut Haitien de Statistique (IHS). Bulletin Trimestriel de Statistique 96. Port-au-Prince, Haiti, 1974(a).

Haiti. Plan de Developpement de Port-au-Prince et de Sa Zone Metropolitaine, Phase I. Report prepared jointly by the United Nations Centre for Housing, Building and Planning (project no. HAI/SD 0970), the National Planning Council (CONADEP), the Department of Public Works, Transport, and Communications and with the assistance of PADCO, Inc. Port-au-Prince, Haiti, 1974(b).

Haiti. Institut Haitien de Statistique (IHS). Enquete Socio-Economique: Premiere Resultats, 1970. Port-au-Prince, Haiti, 1975(a).

Haiti. Institut Haitien de Statistique (IHS). Donnees Chiffres pour le XVIIIeme Seminaire de la Nutrition, de l'Enfant et de la Famille. Port-au-Prince, Haiti, 1975(b).

Haiti. Plan de Developpement de Port-au-Prince et de Sa Zone Metropolitaine, Phase III, Les Etudes Sectorielles, 6 volumes. Report prepared jointly by the United Nations Centre for Housing, Building and Planning (project no. HAI/74 R40), the National Planning Council (CONADEP), the Department of Public Works, Transport and Communications and with the assistance of PADCO, Inc. Port-au-Prince, Haiti, 1976(a).

Haiti. Plan de Developpement de Port-au-Prince et de Sa Zone Metropolitaine, Phase III, Le Projet d'Actions Immediates, 6 volumes. Report prepared jointly by the United Nations Centre for Housing, Building and Planning (project no. HAI/74 R40), The National Planning Council (CONADEP), the Department of Public Works, Transport and Communications and with the assistance of PADCO, Inc. Port-au-Prince, Haiti, 1976(b).

Haiti. Conseil National de Developpement et de Planification (CONADEP). Plan Quinquennal, 1976-1981, 2 volumes. Port-au-Prince, Haiti, 1976(c).

Hart, K. "Small Scale Entrepreneurs in Ghana and Development Planning," Journal of Development Studies 6:4 (1970), 104-120.

Hart, K. "Informal Income Opportunities and Urban Employment in Ghana," Journal of Modern African Studies II:1 (1973), 61-89.

Herbert, J.H. "The Urban Avalanche, Urban Development Problems and Prospects and an Approach to Urban Planning in the Developing Countries." Paper presented at the 141st Annual Meeting of the American Association for the Advancement of Science, New York, January 1975.

Herman, T. "The Role of Cottage and Small-Scale Industries in Asian Economic Development," Economic Development and Cultural Change (1956), 356-365.

Herrick, Bruce. Urban Self-Employment and Changing Expectations as Influences on Urban Migration. Discussion Paper 46. Los Angeles, California: University of California, Department of Economics, 1974.

Herskovits, M.J. Life in a Haitian Valley. New York: Alfred A. Knopf, 1971 (1937).

Ho, Y.M. and Huddle, D.L. The Contribution of Traditional and Small-Scale Culture Goods in International Trade and in Employment. Houston, Texas: Rice University, 1973.

Hoover, E.M. The Location of Economic Activity. New York: McGraw-Hill, 1948.

Hoselitz, B., ed. The Role of Small Industry in the Process of Economic Growth. The Hague, Netherlands: Mouton, 1968.

Hunter, G. "The Transfer of Institutions from Developed to Developing Countries," African Affairs 67:266 (1968), 3-10.

India. Planning Commission, Programme Evaluation Organization. Study of Village Artisans. New Delhi, India, 1956.

India. Development Commissioner for Small-Scale Industries. Agricultural Implements. Small-Scale Industry Analysis and Planning Report 14. New Delhi, India, 1958.

India. Ministry of Community Development and Cooperation. Report of the Syllabus Committee on the Training of Rural Artisans in the Community Development Blocks. New Delhi, India, 1960.

Interamerican Development Bank (IDB). Draft Report of the IDB Mission to Haiti, headed by Mrs. Ruth Dayan. Port-au-Prince, Haiti, July 1976.

International Bank for Reconstruction and Development (IBRD). Current Economic Position and Prospects of Haiti. Report no. 410-HA. Washington, D.C., 1974.

International Bank for Reconstruction and Development (IBRD). Current Economic Position and Prospects for Haiti, 2 volumes. Report no. 1243-HA. Washington, D.C., 1976(a).

International Bank for Reconstruction and Development (IBRD). Income Distribution and the Economy of the Urban Household: The Case of Belo Horizonte. World Bank Staff Working Paper no. 237. Washington, D.C., 1976(b).

International Labour Office (ILO). "Industrial Homework," International Labour Review (1948), 735-740.

International Labour Office (ILO). Report on Handicrafts and Small-Scale Industries in Iraq. Geneva, 1952.

International Labour Office (ILO). Small-Scale and Handicraft Industries in African Countries and ILO Activities in This Field. Geneva, 1962 (mimeo.).

International Labour Office (ILO). Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya. Geneva, 1972.

International Labour Office (ILO). Problemes de Main d'Oeuvre et d'Emploi: Haiti. Rapport Technique no. 1, HAI/74/014. Geneva, 1976(a).

International Labour Office (ILO). World Employment Programme: Research in Retrospect and Prospect. Geneva, 1976(b).

International Labour Office (ILO). Regional Employment Programme for Latin America and the Caribbean (PREALC). The Employment Problem in Latin America: Facts, Outlooks and Policies. Santiago, Chile, 1976(c).

Isenman, P.J. and Singer, H.W. "Food Aid: Disincentive Effects and Their Policy Implications," Economic Development and Cultural Change 25:2 (1977), 205-238.

Jarvis, L.S. "The Limited Value of Employment Policies for Income Inequality," in Edwards, E.O. (ed.), Employment in Developing Nations. New York: Columbia University Press, 1974.

Keliman, E. "Age Composition, Size of Household and the Interpretation of Per Capita Income," Economic Development and Cultural Change 15 (1966), 37-58.

Kennedy, P. "Cultural Factors Affecting Entrepreneurship and Development in the Informal Economy in Ghana," Bulletin (of the Institute of Development Studies, University of Sussex) 8:2 (1976), 17-21.

Khan, A.V. "Appropriate Technologies: Do We Transfer, Adapt, or Develop?" in Edwards, E.O. (ed.), Employment in Developing Nations. New York: Columbia University Press, 1974.

King, K.W. "Nutrition Research in Haiti," in Rubin, V. and Schaedel, R.P. (eds.), The Haitian Potential: Research and Resources of Haiti. New York: Teachers College Press, 1975.

Lagra, J.L., Charleston, W. and Fanfan, G. Agricultural Product Prices in Haitian Marketplaces. Port-au-Prince, Haiti: Institut Interamericain des Sciences Agricoles, 1975.

Laguerre, M.S. "The Impact of Migration on Haitian Family and Household Organization." Paper read at the XIVth Seminar on Family and Kinship in Middle American and the Caribbean, organized by the Committee on Family Research of the International Sociological Association, Curacao, Netherlands Antilles, September 1-6, 1975(a).

Laguerre, M.S. Les Associations Traditionnelles de Travail dans la Paysannerie Haitienne. Port-au-Prince, Haiti: Institut Interamericain des Sciences Agricoles, 1975(b).

Laguerre, M.S. "Ticouloute and Kinsfolk: The Study of a Haitian Extended Family," in Shimkin, D. (ed.), The Extended Family in Black Societies. The Hague, Netherlands: Mouton, 1975(c).

Laguerre, M.S. Organisation Structurelle des Conseils Communautaires en Haiti. Unpublished manuscript prepared for the Interamerican Development Bank and the Interamerican Institute of Agricultural Sciences. Port-au-Prince, Haiti, 1976(a).

Laguerre, M.S. "Bel Air, Port-au-Prince: From Slave and a Maroon Settlement to a Black Ghetto," in Whitten, N.E. (ed.), Afro-American Ethnohistory in Latin America and the Caribbean. Proceedings of the Latin American Anthropology Group of the American Anthropological Association 1 (1976b), 26-38.

Laguerre, M.S. "Le Sangue Haitien: Un Systeme de Credit Rotatoire." Unpublished manuscript prepared for the Interamerican Development Bank and the Interamerican Institute of Agricultural Sciences. Port-au-Prince, 1976(c).

Lancaster, K.J. "A New Approach to Consumer Theory," Journal of Political Economy 74 (1966), 132-157.

Latortue, F. "Haiti et Sa Main d'Oeuvre: Perspectives d'Avenir," in Douyon, R. (ed.), Culture et Developpement en Haiti. Lemeac, Ottawa, 1972.

Legerman, C.J. "Observations on Family and Kinship Organization in Haiti," Rubin, V. and Schaedel, R.P. (eds.), The Haitian Potential: Research and Resources of Haiti. New York: Teachers College Press, 1975.

Lele, U. "Designing Rural Development Programs: Lessons from Past Experience in Africa," Economic Development and Cultural Change 24:2 (1976), 287-308.

- Lewis, H.G. "Hours of Work and Hours of Leisure," in Tripp, L.R. (ed.), Proceedings of the Ninth Annual Meeting, Industrial Relations Research Association, 1957, 46-73.
- Lewis, W.A. "Employment Policy in an Underdeveloped Area," Social and Economic Studies (1958), 46-73.
- Leyburn, J.G. The Haitian People. New Haven, Connecticut: Yale University Press, 1941.
- Liggett, D.R. Small Industry Development Organizations: A Worldwide Directory. International Development Center, Stanford Research Institute. New York: Free Press, 1959.
- Lobb, J. "Caste and Class in Haiti," American Journal of Sociology 46 (1940), 23-34.
- Locher, U. "The Market System of Port-au-Prince," in Mintz, S.W. (ed.), Working Papers in Haitian Society and Culture. New Haven, Conn.: Yale University Press, 1975.
- Lundahl, M. Peasants and Poverty: A Study of Haiti. London: Croom Helm, 1979.
- Marsden, K. "The Role of Small-Scale Industry in Development: Opportunities and Constraints." Paper presented at the Colloquium on Urban Poverty: A Comparison of the Latin American and the United States Experience, School of Architecture and Urban Planning, University of California, Los Angeles, 1975.
- McGee, T.G. The Persistence of the Proto-Proletariat: Occupational Structures and Planning for the Future of Third World Cities. Los Angeles, California: University of California, School of Architecture and Urban Planning, 1974.
- Meier, G.M. Leading Issues in Economic Development. New York: Oxford University Press, 1970.
- Metraux, A. L'Homme et la Terre dans la Vallee de Marbial, Haiti. UNESCO/ED/OCC/10. Paris, 1951.
- Mintz, S.W. "The Role of the Middleman in the Internal Distribution System of a Caribbean Peasant Economy," Human Organization 15 (1957), 256-286.

Mintz, S.W. "Pratik: Haitian Personal and Economic Relationships," Proceedings of the Annual Spring Meeting, 1961, American Ethnological Society, 54-63.

Mintz, S.W. "The Employment of Capital by Market Women in Haiti," in Firth, R. and Yamey, B.S. (eds.), Capital, Saving and Credit in Peasant Societies. Chicago, Ill.: Aldine Publishing Co., 1964.

Mintz, S.W. "Men, Women and Trade," Comparative Studies in Society and History 13:2 (1971), 248.

Mintz, S.W. Caribbean Transformations. Chicago, Ill.: Aldine Publishing Co., 1974.

Miracle, H.P. "Interpretation of Backward-Sloping Labor Supply Curves in Africa," Economic Development and Social Change 24:2 (1976), 399-406.

Mitchell, W.C. "The Backward Art of Spending Money," American Economic Review 2 (1912), 269-281.

Moore, O.E. Haiti: Its Stagnant Society and Shackled Economy. New York: Exposition Press, 1972.

Moral, P. Le Paysan Haitien. Paris: Maisonneuve et Larose, 1961.

Moreau de St. Mery, L. Description Topographique, Physique, Civile, Politique, et Histoire de la Partie Francaise de l'Isle Saint-Domingue, 3 volumes. Paris: Societe de l'Histoire des Colonies Francaises et Librairie Larose, 1958 (1797).

Murray, G.F. and Alvarez, A.D. The Marketing of Beans in Haiti: An Exploratory Study. Port-au-Prince, Haiti: Institut Interamericain des Sciences Agricoles, 1973.

Muth, R.F. "Household Production and Consumer Demand Functions," Econometrica 34 (1966), 699-708.

Myint, H. "Economic Theory and Development Policy," Economica XXXIV:134 (1961), 119-127.

Myint, H. "An Interpretation of Economic Backwardness," in Agarwala, A.N. and Singh, S.P. (eds.), The Economics of Underdevelopment. New York: Oxford University Press, 1971.

Nerlove, M. "Household and Economy: Toward a New Theory of Population and Economic Growth," Journal of Political Economy 82:2 (1974), 200-218.

Nihan, G. Projet de Recherches sur l'Education et l'Emploi: Formation, Emploi et Productivite dans le Secteur Non-Structure Urbain. World Employment Programme Research Working Papers. Geneva: International Labour Office, 1976.

Norwood, H.C. "Informal Industry in Developing Countries," Town Planning Review 46:1 (1975), 83-94.

Oldham, G.H.G. Science, Technology and Development, Mimeograph no. 2. Sussex, England: University of Sussex, Institute of Development Studies, 1968.

PADCO, Inc. Guidelines for Formulating Projects to Benefit the Urban Poor in the Developing Countries, 2 volumes. Report prepared for the Office of Urban Development, Bureau for Technical Assistance, Agency for International Development. Washington, D.C., 1976.

Papanek, G.F. "The Poor of Jakarta," Economic Development and Cultural Change 24:1 (1975), 1-28.

Peattie, L.R. "Living Poor: A View from the Bottom," Proceedings of the Colloquium on Urban Poverty: A Comparison of the Latin American and the United States Experience, Volume IV. Los Angeles, California: University of California, School of Architecture and Urban Planning, 1975.

Perlman, J.E. The Myth of Marginality: Urban Poverty and Politics in Rio de Janeiro. Berkeley, California: University of California Press, 1976.

Pickett, J., Forsyth, D.J.C. and McBain, N.S. "The Choice of Technology, Economic Efficiency and Employment in Developing Countries," in Edwards, E.O. (ed.), Employment in Developing Nations. New York: Columbia University Press, 1974.

Pierre, Yves F. Les Liens de Parente Ruraux du Migrant. Unpublished Master's thesis, Universite d'Etat d'Haiti, 1975.

Pluta, L.A. and Kontak, W.J. "Transfer of a Development Program to Africa: The Case of the Antigonish Movement," International Development Review 1 (1976), 12-16.

Portes, A. and Ferguson, D.F. "Comparative Ideologies of Poverty: Latin America and the United States," Volume I, Proceedings of the Colloquium on Urban Poverty: A Comparison of the Latin American and the United States Experience. Los Angeles, California: University of California, School of Architecture and Urban Planning, 1975.

Power, J.H. "Import Substitution as an Industrialization Strategy," The Philippines Economic Journal V:2 (1966), 191-199.

- Price-Mars, J. "Class ou Caste?" Revue de la Societe Haitienne d'Histoire de Geographie et de Geologie 13 (1942).
- Pritchard, H.H. Where Black Rules White: A Journey Across and About Hayti. London, 1910.
- Reid, M.G. Economics of Household Production. New York: Wiley, 1934.
- Rothberg, R. and Clague, C. Haiti: The Politics of Squalor. Boston, Mass.: Houghton Mifflin, 1971.
- Schaedel, R.P. "The Concept of Community Development in Haiti and Venezuela," in Rubin, V. and Schaedel, R.P. (eds.), The Haitian Potential Research and Resources of Haiti. New York: Teachers College Press, 1975.
- Schmidt, H. The United States Occupation of Haiti, 1915-1934. New Brunswick, N.J.: Rutgers University Press, 1971.
- Schultz, T.W. Economics of the Family: Marriage, Children and Human Capital. Chicago: University of Chicago Press, 1974.
- Schumacher, E.F. "Industrialization Through 'Intermediate Technology,'" in Robinson, R. (ed.), Industrialization in Developing Countries. Cambridge, England: Cambridge University Press, 1965.
- Scitovsky, T. Welfare and Competition. Homewood, Ill.: Richard D. Irwin, Inc., 1971.
- Shetty, M.C. Small-Scale and Household Industries in a Developing Economy: A Study of Their Rationale, Structure and Operative Conditions. Bombay, India: Asia Publishing House, 1963.
- Simpson, G.E. "Haiti's Social Structure," American Sociological Review 6 (1941), 640-649.
- Singer, H.W. "External Aid: For Plans or Projects?" Economic Journal (1965), 539-545.
- Singer, H.W. "Five Wasted Years," International Development Review 1 (1976), 3-5.
- Singh, B. The Economics of Small-Scale Industries: A Case Study of Small-Scale Industrial Establishments of Moradabad. Bombay, India: Asia Publishing House, 1961.
- Sjaastad, L.A. "The Costs and Returns of Human Migration," Journal of Political Economy (Supplement 1962), 80-93.
- Smith, H.V. American Market Possibilities for Asian Handicrafts. New York: United Nations Technical Assistance Administration, 1952.

- Smith, R.T. "American Credit Institutions of the Yoruba Type," Man 53 (1953), 32 ff.
- Sousa, P.R. and Tokman, V.K. "The Informal Sector in Latin America," International Labour Review 114:3 (1976), 355-365.
- Staley, E. and Morse, R. Modern Small Industry for Developing Countries, New York: McGraw-Hill, 1965.
- Stanford Research Institute (SRI), Notes on Small Industry and Handicraft Development in Mainland China. Miscellaneous Paper no. 2 of the Research Program on Small Industry Development, 1958 (mimeo.).
- Stepanek, J.E. Small Industry Advisory Services: An International Study. International Development Center of the Stanford Research Institute. New York: Free Press, 1960.
- Stewart, F. "Technology and Employment in LDC's," in Edwards, E.O. (ed.), Employment in Developing Nations. New York: Columbia University Press, 1974.
- Streeten, P. "Balanced Versus Unbalanced Growth," The Economic Weekly (1963), 669-671.
- Streeten, P. "The Use and Abuse of Models in Development Planning," in Martin, K. and Knapp, J. (eds.), The Teaching of Development Economics. London: Frank Cass and Co., 1966.
- Svennilson, I. "Technical Assistance," in Berrill, K (ed.), Economic Development with Special Reference to East Asia. New York: St Martin's Press, 1964.
- Tax, S. Penny Capitalism: A Guatemalan Indian Economy. Washington, D.C.: U.S. Government Printing Office, 1973.
- Tyler, W.G. "Manufactured Exports and Employment Creation in Developing Countries: Some Empirical Evidence," Economic Development and Cultural Change 24:2 (1976), 355-374.
- Tun Wai, U. "Interest Rates Outside the Organized Money Markets in Underdeveloped Countries," International Monetary Fund Staff Papers VI:1 (1957), 80-125.
- Turnham, David. The Employment Problem in Less Developed Countries. Employment Series no. 1, Development Centre Studies. Paris: OECD, 1971.
- United Nations Technical Assistance Administration Survey of Uttar Pradesh Handicrafts: Production and Export Market Possibilities. New York, 1955.
- United Nations Statistical Yearbook, 1971. New York, 1971.

United Nations Development Programme (UNDP) Deuxieme Programme par Pays, 1977-1981, Haiti: Note du Representant Resident. Port-au-Prince, Haiti, 1975(a).

United Nations Development Programme (UNDP) Rapport Sur l'Assistance Externe en Haiti: 1975. Port-au-Prince, Haiti, 1976(a).

United Nations Development Programme (UNDP) Programmation par Pays: Haiti 1977-1981. Unofficial working document. Port-au-Prince, Haiti, 1976(b).

United Nations Conference for Trade and Development (UNCTAD) Le Secteur Externe d'Haiti: Analyse et Recommendations. Mission Report UNCTAD/RD/103. Geneva, 1976(c).

United States. Agency for International Development "Helping Honduran Industry," International Development Review 4:2 (1962).

United States. Agency for International Development Annual Budget Submission FY 1979. Port-au-Prince, Haiti, June 1977.

Vickery, C. "The Time Poor," Journal of Human Resources XII:1 (1977), 27-48.

Vietorisz, T., Goldsmith, W. and Meier, R. "Urban Poverty Strategies: A Comparison of Latin America and the United States," Proceedings of the Colloquium on Urban Poverty: A Comparison of the Latin American and the United States Experience, Volume III. Los Angeles, California: University of California, School of Architecture and Urban Planning, 1975.

Vieux, S. "Research Problems and Perspectives of the Haitian Civil Service," in Rubin V. and Schaedel, R.P. (eds.), The Haitian Potential: Research and Resources of Haiti. New York: Teachers College Press, 1975.

Viner, J. "Some Reflections on the Concept of 'Disguised Unemployment,'" Contribuicoes a Analise do Desenvolvimento Economico. Rio de Janeiro, Brazil: Livraria Agir Editora, 1957.

Waterston, A. "What Do We Know About Planning?" International Development Review VII:4 (1965), 3-10.

Weddell, K. Aiding Small Industry Through Government Purchases. Menlo Park, California: Stanford Research Institute, 1960.

Weisner, T. "Kariobangi: The Case History of a Squatter Resettlement Scheme in Kenya," in Arens, W. (ed.), A Century of Change in East and Central Africa. The Hague, Netherlands: Mouton, 1976.

Willis, E.B. Production and Export Market Possibilities for Taiwan Handicrafts. New York: United Nations Technical Assistance Administration, 1955.

Winfield, R. and Parenton, V.J. "Class Structure and Class Conflict in Haitian Society," Social Forces 43:3 (1965), 338-347.

